

Ecological Impact Assessment

Damask Way, Warminster

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1.0 Introduction

- 1.1 Nicholas Pearson Associates (NPA) has been instructed to undertake an Ecological Impact Assessment (EcIA) of an area of land to the east of Damask Way, Warminster (OS Grid Reference: ST 87743 44146), hereafter referred to as the 'Site'.
- 1.2 The Site is located at the southern edge of Warminster and comprises an extensive area of grassland habitat bounded by broadleaved woodland and scrub.
- 1.3 Backhouse Housing have submitted an outline planning application for up to 49 dwellings on the Site, with associated soft and hard landscaping, including a new access road via Upper Marsh Road.
- 1.4 To inform the above proposals, NPA undertook a desk study, extended habitat, Badger *Meles meles*, bat, Hazel Dormice *Muscardinus avellanarius* and reptile surveys.
- 1.5 This report presents the results of the surveys and desk study, identifies potential impacts and sets out the proposals to mitigate those potential impacts and provide biodiversity enhancement.

2.0 Legislation

- 2.1 In carrying out this appraisal relevant legislation, planning policies, development plans and best practice guidelines were consulted.

Legislation

- 2.2 Species and habitats receive legal protection in the UK under various pieces of legislation, including:
 - The Conservation of Habitats and Species Regulation 2017 (as amended);
 - The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Environment Act 2021;
 - The Countryside Rights of Way (CROW) Act 2000;
 - The Natural Environment and Rural Communities (NERC) Act 2006 (as amended);
 - National Planning Policy Framework 2024 (NPPF); and
 - The Protection of Badgers Act 1992.

Planning Policy

National Planning Policy Framework

- 2.3 The NPPF requires Local Planning Authorities to set out a strategic approach to make sufficient provision for “conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measure to address climate change mitigation and adaptation (Para 20)”. Section 15 of The NPPF includes guidance outlining that policies and decisions should contribute to and enhance the natural local environment by protecting and enhancing sites of biodiversity value, minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs. When determining planning applications “if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused (para 193a)”; “Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists” (para 193c); and Opportunities “to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate” (para 193d).
- 2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

- 2.5 The Wiltshire Core Strategy (adopted January 2015) sets out the local planning policies which are relevant to the Site and strategic objective 5 sets out the core policies for ‘protecting and enhancing the natural, historic and built environment’.
- 2.6 The policies that relate to Nature Conservation include:
- Core Policy 50: Biodiversity and Geodiversity; and
 - Core Policy 52: Green Infrastructure.

3.0 Methods

Desk Study

- 3.1 Statutory Designated Sites within 5km of the Site were searched for using DEFRA's MAGIC website¹. Records of Statutory Designated Sites includes those of international importance (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar Sites) and of national importance or below (Local Nature Reserve (LNRs), National Nature Reserves (NNRs) and Sites of Special Scientific Interest (SSSI)). The SSSI Impact Risk Zone (IRZ) layer was also searched to determine if the proposals fall within the IRZ of a terrestrial SSSI and are of a type which would give rise to likely impacts on SSIs.
- 3.2 Records of Non-statutory Designated Sites (Sites of Nature Conservation Interest (SNCIs)) within 2km of the Site were obtained from Wiltshire & Swindon Biological Records Centre.
- 3.3 Ponds that have the potential to support breeding populations of Great Crested Newt (GCN) *Triturus cristatus* within 250m of the Site were searched for using online mapping (OS mapping, MAGIC, Bing Maps, Google Maps).
- 3.4 Froglife's Toad Patrol Map² was used to search for active toad patrol sites within the area.
- 3.5 Online mapping (OS mapping, MAGIC, Bing Maps, Google Maps) was used to place the Site into local and regional context, including connectivity to the wider landscape.
- 3.6 The reports for two previous planning applications on the Site were reviewed (17/12348/OUT & 20/07214/REM).
- 3.7 It should be noted that a lack of records does not necessarily indicate the absence of a particular species or habitat.

Extended Habitat Survey

- 3.8 A habitat survey of the Site was undertaken by two NPA ecologists between 13 – 19 May 2025. All habitats and features of ecological value/interest were mapped using the habitat types required for Biodiversity Net Gain³, informed by Version 2.0 of the UK Habitat Classification system⁴ at a minimum

¹ MAGIC (n.d.) MAGIC [Online]. Available at: <https://magic.defra.gov.uk/> (Accessed: 12 November 2025).

² Froglife (n.d.) *Find your nearest toad crossing*. Available at: <https://www.froglife.org/what-we-do/toads-on-roads/tormap/> (Accessed: 12 November 2025).

³ Statutory biodiversity metric tools and guides - GOV.UK. [Online] Available at: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.

⁴ UKHab (2023) *UK Habitat Classification Version 2.0* [Online]. Available at: <https://ukhab.org/> (Accessed: 12 November 2025).

mapping scale (Minimum Mappable Unit or MMU) of 25m². The scope of the survey was extended to include an assessment of the Site to support protected species.

Biodiversity Net Gain Baseline Assessment

- 3.9 All habitats identified during the habitat survey were subject to a condition assessment in accordance with the Statutory Biodiversity Metric condition assessment methodology³.
- 3.10 The Statutory Biodiversity Metric – Calculation Tool was used to calculate biodiversity baseline for the Site.
- 3.11 The extent for the baseline habitat areas was determined using the Baseline Habitats Plan.

Badger Survey

- 3.12 [REDACTED]
- 3.13 [REDACTED]
- 3.14 [REDACTED]

Limitations

- 3.15 [REDACTED]

Bat Surveys

- 3.16 A series of bat activity surveys were undertaken in 2025. These included Night-time Bat Walkover (NBW) surveys, automated/static detector surveys and Ground-level Tree Assessments (GLTAs).

Night-time Bat Walkover Surveys

- 3.17 Bat activity transect surveys were undertaken on a monthly basis from April – October 2025 in accordance with Good Practice Guidelines⁵.
- 3.18 Experienced bat surveyors using handheld bat detectors (Anabat Walkabout) stood at fixed listening points (*i.e.* near potential flight lines/roosting features, at the boundaries of suitable commuting/foraging habitat) for up to 1 hour after sunset; recording all bat activity within range. After 1 hour, surveyors would then follow a pre-determined transect (see Figure 3 for listening points and transect route). To better determine the bat activity within the centre of the field, a 2nd surveyor was positioned at/near listening point 6 for the duration of the survey.
- 3.19 Where species identification could not be determined during the NBW, acoustic recordings were analysed using bat sound analysis software (Anabat Insight). As the calls of *Myotis* bat species are very similar, with most of the variation between their calls attributable to the habitat in which they occur⁶, the *Myotis* recordings have not been attributed to a particular species.
- 3.20 Surveys were undertaken in suitable weather conditions (temperature $\geq 10^{\circ}\text{C}$ at start of survey, little or no rain and no strong winds over Beaufort 3). The surveys commenced at sunset and continued for 2hrs thereafter (see Table 3.1 below for survey details).

Table 3.1: Night-time Bat Walkover Survey Details and Weather Conditions

Survey No.	Date	Sunset (start/finish)	No. of surveyors	Weather Conditions			
				Temp. (°C)	Beaufort	Rain	Cloud Cover (%)
1	28/04/2025	20:27 (20:27 – 22:27)	2	14 – 9	0 – 1	None	0
2	20/05/2025	21:00 (21:00 – 23:00)	2	17 – 14	0 – 1	None	90 – 100
3	24/06/2025	21:28 (21:28 – 23:28)	2	17 – 15	0 – 1	None	0 – 50
4	23/07/2025	21:09 (21:09 – 23:09)	2	18 – 17	0 – 1	None	90 – 100
5	20/08/2025	20:19 (20:19 – 22:19)	2	13 – 12	0 – 1	None	0 – 10
6	25/09/2025	18:59 (18:59 – 20:59)	2	11 – 10	0	None	0
7	21/10/2025	18:03 (18:03 – 20:03)	2	11 – 10	1 – 2	None	0 – 10

⁵ Collins, J (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 4th Edition. London: The Bat Conservation Trust.

⁶ Russ, J. (ed.) (2021) *Bat Calls of Britain and Europe: A Guide to Species Identification (Bat Biology and Conservation)*. Pelagic Publishing, Exeter.

Automated/Static Detector Surveys

- 3.21 3 automated/static bat detectors (Anabat Express) were deployed on a monthly basis from April – October 2025 for at least 5 nights in each month during periods of suitable weather and programmed to come on at 30 minutes before sunset and turn off 30 minutes after sunrise. The automated detectors were deployed on the northern and southern boundaries of the Site (See Figure 3 for detector locations). 5 nights of suitable weather were then selected to be analysed (see Table 3.2 below).

Table 3.2: Automated Detector Analysis Dates

Nights analysed	Number of nights analysed
25-29 April	5
16-20 May	5
19-23 June	5
17-21 July	5
14-18 August	5
17-19, 26-27 September	5
15 –18, 20 October	5
Total Number of Nights	35

- 3.22 Identification of bat species was gained through use of the automated species identification feature within Kaleidoscope Pro (Version 5.6.6). Based on a review of historic data collected on other projects using the AnaBat Expresses, the automated species identification in Kaleidoscope Pro works well for certain species (*e.g.* Pipistrelles) but is less accurate for others (*e.g.* identification of a particular Myotis species). As such the following protocols were followed:

- Myotis bats were grouped together;
- The larger bat species; Noctule *Nyctalus noctula*, Leisler's Bat *Nyctalus leisleri* and Serotine *Cnephaeus serotinus* (NLS) were grouped together;
- Pipistrelle species were grouped together;
- Files labelled as Barbastelle *Barbastella barbastellus* and Long-eared bats *Plecotus sp.* were analysed manually;
- Files labelled as No ID (*i.e.* what Kaleidoscope identifies as a bat but is unsure of what species) were analysed manually;

- Files labelled as Noise (*i.e.* what Kaleidoscope does not identify as a bat) that passed a scan for bat calls within AnaLookW, based on the two filter parameters shown in Table 3.3 below, were analysed manually;
- Where a call was of insufficient quality to determine a particular bat species/group, but it was clear it was not a horseshoe species it was labelled as Vespertilionidae/Vesper, and
- Files that were labelled as Noctule, Leisler's or Serotine (which Kaleidoscope can mistakenly identify insect noise as) for the hours around dusk and dawn (when insects are most active/ within the time periods 0-2 and 12-14 identified in Table 3.4 below) were manually analysed.

Table 3.3: Higher & Lower Frequency Filter Parameters for Files Identified as Noise

	HF20	LF (Fc Max 35)
Characteristic Frequency (KHz)	29-150	16-35
Call Duration (ms)	1-100	3-70
Smoothness	20	20
Body Over (microseconds)	1,000	1,000

- 3.23 Recorded echolocation calls were run through filters for both horseshoe bat species within AnaLookW to help ensure all horseshoe bat calls were identified (see Table 3.4 below for filter parameters). Files which passed the filters were then analysed manually to verify if they were attributable to either Lesser *Rhinolophus hipposideros* (LHS) or Greater *Rhinolophus ferrumequinum* Horseshoe bats (GHS).

Table 3.4: Horseshoe Filter Parameters

	GHS	LHS
Characteristic Frequency (KHz)	75-90	95-120
Call Duration (ms)	0.2-100	0.2-100
Smoothness	100	100
Body Over (microseconds)	1,000	1,000

- 3.24 To help understand the likely presence of roosts on/adjacent to Site and when in the night bat activity occurred the data were split into 15 different time periods as shown in Table 3.5 below.

Table 3.5: Timecode Periods

	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Timecode	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Ground-level Tree Assessment

- 3.25 In accordance with Good Practice Guidelines⁵, a ground-based assessment of on-site trees which could be negatively impacted was undertaken by an NPA ecologist on the 14 August 2025 (see Figure 3 for trees subject to assessment).
- 3.26 This survey involved a detailed assessment of the tree from the ground to search for Potential Roost Features (PRF; *e.g.* cavities, loose bark, splits/cracks) and evidence of bats (*e.g.* droppings, bark staining).
- 3.27 All trees with PRFs were assigned a preliminary rating based on their potential to support roosting bats, as outlined below:
- Negligible: not suitable for roosting bats; however, a small element of uncertainty remains;
 - PRF-I: suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat; and
 - PRF-M: suitable for multiple bats and may therefore be used by a maternity colony.
- 3.28 Any features that were assigned PRF-M status were endoscoped by a licenced bat worker on the 24 September 2025.

Reptile Survey

- 3.29 To determine the presence/likely absence of reptiles on Site, 55 artificial refugia (bitumen felt and onduline corrugated mats) were deployed on Site in accordance with best practice guidelines⁷. Reptile refugia were deployed in suitable locations (sunny positions at edge habitat) across the Site in July 2025 and left to bed down for a minimum of 2 weeks prior to inspection (see Figure 4 for refugia locations).

⁷ Froglife (2016) *surveying for reptiles*. Available at: <https://www.froglife.org/wp-content/uploads/2013/06/Reptile-survey-booklet-3mm-bleed.pdf> (Accessed: 10 November 2025).

- 3.30 Reptile refugia were then checked on seven subsequent surveys in suitable weather between July – October 2025 (see Table 3.6 below for survey details). This involved walking a pre-determined transect route across the Site to search for evidence of reptiles (*e.g.* live reptiles, remains of shed skin), focusing on potential basking habitat and stopping intermittently to inspect the reptile refugia along the route.

Table 3.6: Reptile Survey Details and Weather Conditions

Survey No.	Date	Time start/finish	Temperature (°C) start/finish	Description of weather
1	30/07/2025	08:09 – 09:34	20 – 21	Overcast/Sunny
2	14/08/2025	07:38 – 09:06	18 – 21	No data
3	27/08/2025	09:30 – 11:30	17	Overcast ahead of heavy rain/humid
4	16/09/2025	09:22 – 10:40	14 – 17	No data
5	24/09/2025	17.31 – 18.30	15 – 12	Sunny/Cloudy. Beaufort 1
6	01/20/2025	09:35 – 10:44	13 – 17	Overcast
7	10/10/2025	09:48 – 10:56	13 – 15	Overcast

Dormouse Nest Tube Surveys

- 3.31 In accordance with current survey guidance^{8,9}, 55 artificial nest tubes were deployed in suitable nesting habitat (*i.e.* woody/dense vegetation) in July 2025 by an NPA ecologist. Nest tubes were deployed in accordance with recommended methods (*i.e.* at chest height, on firm, horizontal branches, inwards facing, and slightly angled downwards) and spaced at least 15m apart (see Figure 7 for nest tube locations).
- 3.32 Nest tubes were systematically checked in suitable weather conditions (little or no rain) between August – November 2025 by a licenced ecologist or an accredited agent (see Table 3.7 for survey dates).

Table 3.7: Dormouse Survey Dates

Survey No.	Date	Survey No.	Date
1	27/08/2025	3	31/10/2025
2	24/09/2025	4	26/11/2025

⁸ Bullion, Wolton, and White, 2025. The Dormouse Conservation Handbook, 3rd ed. The Mammal Society.

⁹ Wells, Chanin, and Gubert, 2025. Hazel Dormouse Mitigation Handbook. The Mammal Society.

Assessment

- 3.33 The assessment of the importance of ecological features and the significance of impacts was made in accordance with the Guidelines for Ecological Impact Assessment (CIEEM, 2024)¹⁰, based on the Ecology Parameters Plan (Ecological Parameters Plan NPA 30142 1201 P01). A 'significant effect' was defined as an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general.

4.0 Results

Designated Sites

Statutory Designated Sites

- 4.1 The desk study returned 8 statutory nature conservation designations within 5km of the Site, details of which are provided in Table 4.1 below.

Table 4.1: Statutory Designated Sites within 5km

Site Name	Reason for designation	Distance from Site
Smallbrook Meadows LNR	The reserve comprises a mosaic of habitats including six small water meadows, wet woodland, marsh, ponds, chalk rivers, hedgerows and ditches. The wetlands are of particular importance and are a rarity in Wiltshire. The habitats support a diversity of flora, including the cuckooflower <i>Cardamine pratensis</i> , the primary food source for the caterpillar of the Orange-tip butterfly <i>Anthocharis cardamines</i> . Water Vole <i>Arvicola amphibius</i> have also been recorded using the reserve.	45m north
River Avon SAC / River Avon System SSSI	The river is known to supports a diverse community of aquatic flora, fish fauna and aquatic invertebrates. Over 180 species of aquatic plants have been recorded within the river, with species of <i>Ranunculus</i> being of particular importance. Other important species known to be present include the Sea Lamprey <i>Petromyzon marinus</i> , Brook Lamprey <i>Lampetra planeri</i> , Atlantic salmon <i>Salmo salar</i> , Bullhead <i>Cotto gobius</i> , and Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i> . The river system and riparian zones provide suitable habitat for breeding, wintering and migrating birds. The river is well used by Water Voles and evidence of Otter <i>Lutra lutra</i> have also been recorded.	80m south-east
River Wylye LNR	Area of grassland, scrub and trees, partly adjacent to the River Wylye.	450m east
Salisbury Plain SAC / SPA / SSSI	Supports the largest expanse of unimproved chalk downland in north-west Europe and represents 41% of Britain's remaining chalk downland habitat. The site supports 13 species of nationally rare and scarce plants, 67 species of rare and scarce invertebrates and is a site of international importance for birds. The site is known to support a number of protected species including Great Crested	2090m north-east

¹⁰ CIEEM (2024), Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3 Chartered Institute of Ecology and Environmental Management, Winchester.

	Newt, Grass Snake <i>Natrix natrix</i> , Slow Worm <i>Anguis fragilis</i> , and Adder <i>Vipera berus</i> .	
Scratchbury & Cotley Hill SSSI	An area of chalk grassland known to support a diverse range of invertebrate fauna, including 29 species of breeding butterfly. The chalk grassland supports a rich plant community, including the nationally restricted Early Gentian <i>Gentianella anglica</i> , Bastard-toadflax <i>Comandra umbellata</i> , and Field Fleawort <i>Tephrosieris integrifolia</i> .	2910m east
Cley Hill SSSI	An area of botanically rich chalk grassland with small areas of dense scrub. The site supports two plants that are restricted in distribution; Early Gentian and Bastard-toadflax. The site supports assemblages of invertebrate and bird fauna, and an active badger sett is present on the site.	3410m west
Upton Cow Down SSSI	An area of species-rich chalk grassland, with areas of scattered scrub and woodland. The chalk grassland supports a rich community of flora, including a large population of Bastard-toadflax, which is restricted in Britain. The uncommon Adonis Blue <i>Polyommatus bellargus</i> and Marsh Fritillary <i>Euphydryas aurinia</i> butterfly are known to use the site. The site supports an assemblage of bird species including Skylark <i>Alauda arvensis</i> and an active Badger sett is present on the site.	4240m north

- 4.2 The Site falls within the Impact Risk Zone for the River Avon System SSSI and Salisbury Plain SSSI and identifies any rural residential development with 10 or more units that are outside of existing settlements to have a potential harmful impact on the SSSIs.

Non-statutory Designated Sites

- 4.3 The data search returned 9 Sites of Nature Conservation Interest within 2km of the Site, details of which are provided in Table 4.2 below.

Table 4.2: Sites of Nature Conservation Interest within 2km

Site Name	Reason for designation	Distance from Site
Smallbrook Meadows	A complex site which includes two LNRs and a WWT reserve and supports neutral grassland, wet and dry woodland, swamp and fen vegetation within the southern part of Warminster. See also statutory designation description in Table 4.1 above.	46m north / immediately adjacent to Site
Eastleigh Farm Meadow	A complex of abandoned water meadows dominated by sedges and reeds.	246m south-east
Woodcroft Wood	Ancient semi-natural broadleaved woodland and plantation on an ancient site.	634m south-east
Southleigh Wood	A large ancient woodland site mainly coniferised, but with semi-natural Oak woodland in the west.	800m south
Eastleigh Wood	An ancient woodland site with some semi-natural areas and substantial conifer plantation.	951m south-east

Cop Heap	Calcareous and neutral grassland, broadleaved woodland and scrub on a low chalk hill on the northern edge of Warminster.	1301m north
Coldharbour Meadows	Species-rich grassland and swamp vegetation in a flood storage basin along with areas of reedbed, wet-woodland and associated habitats.	1433m north-west
Arn Hill	Unimproved grassland (Mainly calcareous grassland) and woodland on the fringes of a golf course.	1602m north
Cannimore Farm Meadow	Lowland meadow and valley fen with a stream running through it, with species-rich boundary hedgerows with mature trees.	1708m west

Habitats

- 4.4 The approximate 3.5 ha Site comprises an extensive area of grassland habitat with an individual tree, with areas of tall forb, scrub, a hedgerow and woodland at the boundaries. Habitat descriptions and Target Notes should be read in conjunction with Figure 1: Habitat Plan.
- 4.5 The following UK Habitat Classifications were recorded during the survey:
- Lowland dry acid grassland;
 - Other neutral grassland;
 - Modified grassland;
 - Mixed scrub;
 - Bramble scrub;
 - Bracken;
 - Tall forbs;
 - Individual trees; and
 - Lowland mixed deciduous woodland
 - Non-native and ornamental hedgerow

Lowland dry acid grassland

- 4.6 An area of species-rich acid grassland with 10 – 14 species per m² was present on a south-facing slope to the south of the Site (Appendix 1; Photos 1 and 2). The sward of this habitat was short grazed by rabbit and comprised multiple characteristic acid indicator species. These included Broom *Cytisus scoparius*, Sheep's Sorrel *Rumex acetosella*, and Bird's Foot Trefoil *Lotus corniculatus*, however, the sward lacked a high diversity of calcifuge species that is typical of good examples of this habitat. Of the grasses, Sweet Vernal Grass *Anthoxanthum odoratum*, Common Bent *Agrostis capillaris*, and Yorkshire Fog *Holcus lanatus* were abundant within the sward, with Red Fescue *Festuca rubra* and

Cock's-foot Grass *Dactylis glomerata* occasional. Cover of forbs (and bryophytes) remained consistently high across this habitat, and included Field Wood Rush *Luzula campestris*, Lesser Trefoil *Trifolium dubium*, Yarrow *Achillea millefolium*, Self-heal *Prunella vulgaris*, Common Mouse-ear *Cerastium fontanum*, Autumn Hawkbit *Scorzoneroidea autumnalis*, Common Catsear *Hypochaeris radicata*, and Common Ragwort *Jacobaea vulgaris*.

- 4.7 This habitat meets the definition of Priority Habitat Lowland Dry Acid Grassland.

Other neutral grassland

- 4.8 The majority of the Site comprised an area of moderately species-rich grassland habitat with 4 – 10 species per m² (Appendix 1; Photo 3). The sward of this habitat was open and short grazed by rabbit. This habitat was split into two sections and comprised the sloped areas and a flat/level section to the centre of the Site.
- 4.9 The flat/level section of this habitat had a lower diversity of species, and the cover of forbs remained consistently low throughout. Common Bent and Yorkshire Fog were abundant within the sward, with Red Fescue and False Oat-Grass *Arthenatherum elatius* also present in lower numbers. Forb species were limited to Common Ragwort, Common Mouse-ear, Meadow Buttercup, Germander Speedwell, and Creeping Buttercup.
- 4.10 Within the sloped areas, the sward was more species-rich and comprised a higher cover of forbs. Common Bent and Yorkshire Fog were abundant within the sward, with Sweet Vernal Grass occasional. Of the forb species, Common Ragwort and Field Wood Rush were frequent, with Common Mouse-ear, Meadow Buttercup *Ranunculus acris*, Germander Speedwell *Veronica chamaedrys*, Creeping Buttercup *Ranunculus repens*, and Lesser Stitchwort *Stellaria graminea* occasional. Patches of Sheep's Sorrel were recorded in localised areas across this habitat, which is suggestive of a base-poor substrate.

Modified grassland

- 4.11 Areas of rough grassland with 4 – 9 species per m² were present to the west and centre of the Site (Appendix 1; Photo 4). This habitat was characterised by a taller, less managed sward. This habitat was dominated by grasses, with Yorkshire Fog and False Oat-Grass abundant within the sward. Other grass species included Creeping Bent, Cock's-foot, Red Fescue, and Timothy *Phleum pratense*. Forb species included Creeping Buttercup, Broadleaved Dock *Rumex obtusifolius*, Dandelion *Taraxacum officinale*, Common Ragwort, Common Nettle *Urtica dioica*, Common Mouse-ear, and Cut-leaved Crane's-bill

Geranium dissectum. Parts of this habitat, particular to the centre of the Site, appeared to have been subject to previous disturbance and had a higher cover of bare ground.

Mixed scrub

- 4.12 Patches of scrub dominated by Broom were present to the south of the Site and below the area of lowland dry acid grassland (Appendix 1; Photo 5). Other species present within this habitat included Elder *Sambucus nigra* and Oak Sp. *Quercus sp.*
- 4.13 A stand of mixed scrub was present along Upper Marsh Road to the south-west of the Site (Appendix 1; Photo 6). Species comprised of Hazel, Ash, Cherry Laurel, Pedunculate Oak *Quercus robur*, Sycamore *Acer pseudoplatanus*, Holly *Ilex aquifolium*, and Plum Sp. *Prunus Sp.*, over a dense understory of Bramble *Rubus sp.*

Bramble scrub

- 4.14 Patches of Bramble scrub were present along the southern and western boundaries of the Site (Appendix 1; Photo 7).

Bracken

- 4.15 Dense stands of Bracken *Pteridium aquilinum* were present along the field boundaries to the east of the Site (Appendix 1; Photo 8).

Tall forbs

- 4.16 Stands of tall vegetation dominated by Common Nettle and Creeping Thistle *Cirsium arvense* were present along the boundaries to the west of the Site (Appendix 1; Photo 9). Other species present included Bramble Sp., Cleavers *Galium aparine*, Creeping Buttercup, and Meadow Buttercup.

Individual trees

- 4.17 An individual Hawthorn *Crataegus monogyna* tree was present within the area of Other neutral grassland to the north of the Site (Appendix 1; Photo 10).

Lowland mixed deciduous woodland

- 4.18 A stand of semi-natural broadleaved woodland characterised by Pedunculate Oak and Sycamore was present along Upper Marsh Road to the south-west of the Site (Appendix 1; Photo 11). Lower numbers of Birch Sp. *Betula sp.*, and Ash *Fraxinus excelsior* were also present within the canopy. Within the understory, Holly was the dominant scrub species, with Elder, Hazel *Corylus avellana*, Hawthorn, and

Cherry Laurel *Prunus laurocerasus* also present. The ground layer was sparsely vegetated with Common Nettle, and Ivy *Hedera helix* being the most common occurrences.

- 4.19 This habitat meets the definition of Priority Habitat Lowland Mixed Deciduous Woodland.

Non-native and ornamental hedgerow

- 4.20 A Bay Laurel *Laurus nobilis* hedgerow was planted along the boundary to the residential area to the west of the Site, it was approximately 1-1.5m wide and 1.5-2m tall.

Species

Desk Study

- 4.21 The most significant protected species records from Wiltshire & Swindon Biological Records Centre are provided in Table 4.3 below.

Table 4.3: Summary of Species Records

Species/ Species Group	Record Summary
Bats	Within the last 20 years, bat field records for Barbastelle, Bechstein's <i>Myotis bechsteinii</i>, Brown Long-eared <i>Plecotus auritus</i>, Common Pipistrelle <i>Pipistrellus pipistrellus</i>, Daubenton's <i>Myotis daubentonii</i>, Greater Horseshoe <i>Rhinolophus ferrumequinum</i>, Leisler's, Lesser Horseshoe <i>Rhinolophus hipposideros</i>, Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>, Natterer's <i>Myotis nattereri</i>, Noctule, Serotine, Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>, Whiskered <i>Myotis mystacinus</i> and Brandt's <i>Myotis brandtii</i> have been recorded immediately adjacent to the Site at Smallbrook Meadows WWT Reserve and nr Smallbrook Road (<i>i.e.</i> Turnpike Cottage, 60m south of the Site and along River Wylye). Within the last 20 years, 48 roosts records for Brown Long-eared, Common Pipistrelle, Greater Horseshoe, Lesser Horseshoe, Serotine, Soprano Pipistrelle, and Whiskered Bat have been recorded within 2km of the Site, of which 2 were Common Pipistrelle maternity roosts (from 2010 and 2020) and 2 were hibernaculum for Lesser and Greater Horseshoe Bats (from 2024). 3 roosts records (from 2013) returned within the same 1km grid square as the Site. One European Protected Species (EPS) Licence was granted for a Common Pipistrelle roost approximately 939m north-east of the Site. The Site is outside any Core Areas identified by Wiltshire Council <i>i.e.</i> areas of habitat which are considered to support Core Roosts identified with SACs.
Birds	Within the last 20 years, records of White-tailed Eagle <i>Haliaeetus albicilla</i>, Redwing <i>Turdus iliacus</i>, Red Kite <i>Milvus milvus</i>, Quail <i>Coturnix coturnix</i>, Peregrine <i>Falco peregrinus</i>, Kingfisher <i>Alcedo atthis</i>, House Sparrow <i>Passer domesticus</i>, Fieldfare <i>Turdus pilaris</i>, Cuckoo <i>Cuculus canorus</i>, and Brambling <i>Fringilla montifringilla</i> returned within the same 1km grid square as the Site. Breeding records of Cuckoo and House Sparrow returned in close proximity to the Site at Smallbrook Meadows WWT Reserve and along Lower Marsh Road. Since 2005, records of Barn Owl <i>Tyto alba</i>, Skylark, Crossbill <i>Loxia curvirostra</i>, Green Sandpiper <i>Tringa ochropus</i>, Greylag Goose <i>Anser anser</i>, Hobby <i>Falco subbuteo</i>, and Osprey <i>Pandion haliaetus</i> returned within 2km of the Site.

Badgers	Within the last 20 years, the data search returned 43 field records for Badger, of which 12 were recorded within the same 1km grid square as the Site (closest record (from 2019) approximately 80m south of the Site). Within the last 20 years, 12 sett records returned within 2km, 7 of which were recorded within the same 1km grid square as the Site (most recent record from 2021).
Hazel Dormice	The data search returned 3 records (including 1 nest record) of Hazel Dormice within 2km of the Site, the closest/earliest recorded approximately 1570m west of the Site in 2017. There have been no EPS licences granted for Hazel Dormice within 2km of the Site.
Amphibians	Within the last 20 years, 2 records of Great Crested Newt have been recorded within 2km of the Site, the closest/earliest record (from 2019) approximately 150m north of the Site at Smallbrook Meadows WWT Reserve. Other record from Southleigh Wood / approximately 1790m south. Within the last 20 years, 351 records of Common Frog <i>Rana temporaria</i> and 1648 records of Common Toad <i>Bufo bufo</i> returned within 2km of the Site.
Reptiles	51 records of Grass Snake returned within 2km of the Site within the last 20 years, of which 5 (from 2022 / 2023) were recorded on the Site. Within the last 20 years, 14 records of Slow Worm returned within 2km of the Site, 1 of which was recorded (near Gipsy Lane) within the same 1km grid square as the Site. 14 records of Common Lizard <i>Zootoca vivipara</i> returned within 2km of the Site.
Invertebrates	Since 2005, records for Rugged Oil-beetle <i>Meloe rugosus</i> and Small Heath Butterfly <i>Coenonympha pamphilus</i> have been recorded on the Site. Other species records for Hornet Robberfly <i>Asilus crabroniformis</i>, the Moths; Blood-vein <i>Timandra comae</i>, Shoulder-striped Wainscot <i>Leucania comma</i> and Deep-brown Dart <i>Aporophyla lutulenta</i>, and Wall <i>Lasiommata megera</i> Butterfly have been recorded at Smallbrook Meadows WWT Reserve adjacent to the Site. Species of local importance include the beetles; <i>Elodes elongatus</i> and <i>Paracorymbia fulva</i>, recorded at Smallbrook Meadows WWT Reserve and Henfords Marsh. The LEMP submitted for the 20/07214/REM planning application, notes a range of other scarce invertebrates have been recorded on site associated with the acid grassland.
Other mammals	The data search returned 2 records of Brown Hare <i>Lepus europaeus</i> within 2km of the Site, 1 of which was recorded on the Site in 2019. Within the last 20 years, 55 records of Hedgehog <i>Erinaceus europaeus</i> returned within the same 1km grid square as the Site.

4.22 There are 7 ponds with the potential to support GCN within 250m of the Site (both to the north and south), the closest being 145m north of the Site. The local Toad patrol have noted that Toads have been recorded migrating between suitable habitats to the south of the Site to a pond within the Small Brook Nature Reserve north of the Site.

Bats

Ground-level Tree Assessment

- 4.23 A total of 12 trees on Site which could be impacted by the proposals (through felling or being subject to light spill) were subject to a ground-based inspection, the results of which are provided in Table 4.4 below.

Table 4.4: Ground-level Tree Assessment Results

Tree No.*	Description/Evidence	Maximum Suitability
T1 Sycamore	Multistem. No features identified.	Negligible
T2 Sycamore	Weld feature approx. 12m high/north- and south-facing.	PRF-I
T3 Sycamore	No features identified.	Negligible
T4 Conifer	No features identified.	Negligible
T5 Sycamore	Multistem. 1 no. large (~2m high) crack at base (to 3.5m high) with a depth of ~15cm. Appears to extend far up into tree. Feature endoscoped on 24/09/2025. Smaller crack on separate stem to 2.5m high (negligible for bats).	PRF-M
T6 Pedunculate Oak	2 no. knot holes on main stem. North- and east-facing. Cobwebbed around entrance.	PRF-I
T7 Sycamore	Tear-out on limb (north-east facing/8m high). Potential knot hole feature on limb (north-west facing/7m high). Butt rot feature at base with a depth of ~30cm (south-facing). Feature endoscoped on 24/09/2025.	PRF-M
T8 Elder (Deceased)	Multistem. No features identified.	Negligible
T9 <i>Prunus sp.</i>	Low-level crack (south-east facing/2m high).	Negligible
T10 Sycamore	Potential knot hole feature (South-facing/7m high).	PRF-I
T11 Pedunculate Oak	View obscured by dense vegetation so potential for features of no more than PRF-I to be present. Hazard beam on limb (north-west facing/8m high).	PRF-I
T12 Hawthorn	No features identified. Dense Ivy cover.	Negligible

* See Figure 3 Bat Survey Plan for Locations

Bat Activity Surveys

- 4.24 The NBW surveys recorded at least 6 species of bat foraging and commuting across the Site. These being Common Pipistrelle, Soprano Pipistrelle, Myotis *Myotis sp.*, Long-eared bat, Noctule and Serotine.
- 4.25 The automated detectors recorded an additional 3 species, with Lesser Horseshoe Bat, Greater Horseshoe Bat and Barbastelle also recorded. As shown in Table 4.5, the majority of bat passes were associated with Pipistrelle species (>80%), and NLS (>8%), with all other species/species groups accounting for a small proportion of activity.

Table 4.5: Bat Passes Recorded by the Automated Detectors

Species / Species group	% Total of Passes
Pipistrelle Species	85.68
NLS	8.10
Myotis Species	5.22
Vesper	0.44
LHS	0.23
GHS	0.13
Barbastelle	0.11
Long-eared	0.007

Pipistrelle species

- 4.26 A total of 20,044 Pipistrelle species passes were recorded on the automated detectors. Table 4.6 below shows records within the early and late periods (periods 1, 2, 12 and 13) which suggests there are roosts for Pipistrelle bats within the vicinity of the Site.

Table 4.6: Pipistrelle species Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	165	562	1028	1255	977	991	12321	526	529	605	647	404	30	0

- 4.27 Table 4.7 below shows the average number of Pipistrelle passes by month/location. It shows that on average activity was highest at location A3 (372 passes / night) and in September (619 passes /night). This was largely due to the higher activity recorded at A3 in September, on which there was near constant activity throughout the night over three consecutive nights (17th, 18th and 19th), many of which contained social calls (which was also recorded on the April and September NBW at listening points 1 & 2 i.e. near A3). Both foraging and commuting activity by Common and Soprano Pipistrelle was recorded during the NBW surveys along and within the woodlands but rarely recorded within the field.

Table 4.7: Average Pipistrelle Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	23.8	130.0	42.0	66.2	343.0	28.2	25.4	94.1

A2	31.8	22.6	22.6	70.0	51.2	525.2	17.4	105.8
A3	139.2	30.4	337.8	189.0	98.8	1,304.6	509.6	372.8
Average	64.9	61.0	134.1	108.4	164.3	619.3	184.1	190.9

NLS

- 4.28 A total of 1,896 NLS species passes were recorded on the automated detectors. Table 4.8 below shows records within the early and late periods (periods 0, 1, 13 and 14) which suggests there are roosts for NLS bats within the vicinity of the Site.

Table 4.8: NLS species Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	7	218	154	88	134	169	124	783	23	12	11	30	82	58	3

- 4.29 Table 4.9 below shows the average number of NLS species passes by month/location. It shows that the highest average activity was recorded in August (45.8 average passes / night) and the highest average activity was recorded at location A1. This is in part due higher activity at A1 in August (90.4 average passes / night) and in May (47.8 average passes / night). These are due in part to a concentration of records suggestive of foraging behaviour. Noctules were frequently recorded commuting on the NBWs but rarely foraging. Serotines were only occasionally recorded but not foraging. Faint calls of both were rarely recorded from the within field listening points.

Table 4.9: Average NLS species Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	14.2	47.8	3.6	19.4	90.4	8.0	1.6	26.4
A2	5.2	9.2	5.2	15.4	37.2	26.8	0.6	14.2
A3	5.6	17.4	18.2	39.0	9.8	4.2	0.4	13.5
Average	8.3	24.8	9.0	24.6	45.8	13.0	0.9	18.1

Myotis sp.

- 4.30 A total of 1,222 *Myotis* species bat passes were recorded on the automated detectors. Table 4.10 below shows some records within the early and late periods (periods 1, 2, 3, 11, 12 and 13) which suggests there is a roost for *Myotis* bats within the vicinity of the Site.

Table 4.10: Myotis sp. Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	1	19	51	48	34	37	790	45	61	59	56	14	7	0

4.31 Table 4.11 below shows the average number of Myotis species passes by month/location. It shows that on average activity was highest at location A3 (134.8 passes / night) and in September (55.1 passes /night). This was largely due to the higher activity recorded at A3 in September, on which there was higher activity recorded on the 17th (397 records) and the 18th (131 records).

4.32 During the NBW surveys Myotis species were occasionally recorded (<20 occasions), only recorded foraging twice (both times at listening point 8) and never seen within the field.

Table 4.11: Average Myotis sp. Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	1.6	2.0	1.2	2.8	14.4	3.8	7.8	4.8
A2	1.4	0.6	0.0	1.4	2.6	26.6	3.4	5.1
A3	4.6	2.0	10.6	8.8	6.2	134.8	7.8	25.0
Average	2.5	1.5	3.9	4.3	7.7	55.1	6.3	11.6

LHS

4.33 A total of 54 LHS bat passes were recorded on the automated detectors. Table 4.12 below shows 4 records within the early and late periods (periods 2, 3 and 11). These were recorded in September and October, which suggests there is a transitional roost for LHS within the vicinity of the Site.

Table 4.12: LHS Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	1	2	0	2	2	43	3	0	0	1	0	0	0

4.34 Table 4.13 below shows the average number of LHS passes by month/location. It shows that on average, LHS activity was similar at all three locations, with the highest activity recorded at A1 in October (3.4 passes / night) and at A3 in September (2.4 passes / night). The records are suggestive of commuting behaviour *i.e.* no concentrate bouts. No LHS were recorded in July. No LHS were recorded on the NBWs.

Table 4.13: Average LHS Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.2	0.0	0.2	0.0	0.6	0.0	3.4	0.6
A2	0.0	0.4	0.0	0.0	0.0	1.4	1.0	0.4
A3	0.2	0.6	0.2	0.0	0.0	2.4	0.2	0.5
Average	0.1	0.3	0.1	0.0	0.2	1.3	1.5	0.5

GHS

4.35 A total of 31 GHS bat passes were recorded on the automated detectors. Table 4.14 below shows 4 records within the early and late periods (periods 2, 3 and 11) which suggests there is a roost for GHS within the vicinity of the Site. These were recorded in July, August and September.

Table 4.14: GHS Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	1	2	1	1	1	22	0	1	1	1	0	0	0

4.36 Table 4.15 below shows the average number of GHS passes by month/location. It shows on average very low activity but with a higher activity recorded in September at A1 (2.8 passes / night). This is due to 13 records recorded between 03:43 and 04:04 on the 18th which is suggestive of foraging activity. No GHS were recorded on the NBWs.

Table 4.15: Average GHS Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.0	0.4	0.2	0.2	0.4	2.8	0.0	0.6
A2	0.2	0.4	0.0	0.2	0.6	0.6	0.0	0.3
A3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

Average	0.1	0.3	0.1	0.1	0.3	1.1	0.0	0.3
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Barbastelle

- 4.37 A total of 26 Barbastelle passes were recorded on the automated detectors. Table 4.16 below shows 2 records within time code 3 (one in April and one in September) which suggests there might be a Barbastelle roost within the vicinity of the Site.

Table 4.16: Barbastelle Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	0	2	4	2	0	17	1	0	0	0	0	0	0

- 4.38 Table 4.17 below shows the average number of Barbastelle passes by month/location. It shows that on average activity was similarly low at all three locations. The highest average activity was recorded at A3 in September (1.2 passes / night) and at A1 in August 0.6 passes / night). None of these records are suggestive of foraging. No Barbastelle were recorded on the NBWs.

Table 4.17: Average Barbastelle Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.0	0.4	0.0	0.4	0.6	0.2	0.2	0.3
A2	0.6	0.0	0.0	0.2	0.2	0.2	0.2	0.2
A3	0.0	0.2	0.0	0.2	0.2	1.2	0.2	0.3
Average	0.2	0.2	0.0	0.3	0.3	0.5	0.2	0.2

Long-eared

- 4.39 A total of 16 Long-eared passes were recorded on the automated detectors. Table 4.18 below shows 2 records within the early and late periods (periods 2 and 11) which suggests there might be a roost within the vicinity of the Site.

Table 4.18: Long-eared Passes / Time Code

Time Code	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	1	0	2	0	1	9	0	1	1	1	0	0	0

4.40 Table 4.19 below shows the average number of Long-eared passes by month/location. It shows that on average activity was similarly low at all three locations. The highest average activity was recorded at A3 in June (0.6 passes / night) and at A1 in September (0.6 passes / night). None of these records are suggestive of foraging.

4.41 During the NBW surveys Myotis species were rarely recorded (<5 occasions), never recorded foraging and only once recorded within the field.

Table 4.19: Average Long-eared Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.2	0.0	0.2	0.2	0.0	0.6	0.2	0.2
A2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
A3	0.0	0.4	0.6	0.2	0.2	0.2	0.0	0.2
Average	0.1	0.1	0.3	0.1	0.1	0.3	0.1	0.2

Birds

4.42 The mixed scrub, Bramble scrub, individual trees and woodland on Site provides suitable habitat for nesting and foraging birds.

4.43 The Sites suitability for ground nesting birds is reduced by the proximity to the surrounding woodland and the short sward.

Badgers

4.44 Whilst a main sett was previously recorded within the broadleaved woodland to the south east of the Site (Badger Mitigation Report 2021; Ethos Environmental Planning), the 2025 surveys did not record any definitive active setts on/adjacent to Site (see Table 4.20 for a summary of the survey results).

Table 4.20: Summary of Survey Results

Hole No.	Description/Evidence
1	Sticks checked periodically. No evidence of Badger use.
2	Sticks checked periodically. No evidence of Badger use.
3	Sticks checked periodically. No evidence of Badger use.
4	Sticks checked periodically. No evidence of Badger use.
5	Sticks checked periodically. No evidence of Badger use.
6	Sticks checked periodically and had moved.
7	Sticks checked periodically and had moved. Trap camera deployed on hole. No evidence of Badger use, but high levels of rabbit activity recorded around entrance.
8	Sticks checked periodically. No evidence of Badger use.
9	Sticks checked periodically. No evidence of Badger use.
10	Sticks checked periodically. No evidence of Badger use.
11	Sticks had moved and trap camera deployed on hole from 31 Oct – 05 Nov 2025. No evidence of Badger use, but high levels of rabbit activity recorded around entrance.
12	Sticks checked periodically. Sticks had moved slightly.
13	Trap cam deployed on hole from 05 – 17 Nov 2025, then re-deployed until 26 Nov 2025. No evidence of Badger use recorded on trap camera/sticks had not moved on second deployment.
14	Trap camera deployed on hole from 05 – 17 Nov 2025. Trap cam confirmed hole in use by rabbit.
15	Sticks checked periodically and trap camera deployed from 17 – 26 Nov 2025. No evidence of Badger use, but some rabbit activity around entrance.
16	Sticks checked periodically and had moved.
17	Sticks checked periodically and had moved slightly.
18	Sticks checked periodically and had moved. Trap camera deployed on hole from 26 Nov – 17 Dec 2025. No evidence of Badger use but high-levels of rabbit activity around entrance. On the 27/11/2025, a Polecat/Ferret was recorded around/travelling east away from the hole.
19	Sticks checked periodically and had moved slightly.
20	Sticks checked periodically. No evidence of Badger use.

Hazel Dormice

- 4.45 The broadleaved woodland, mixed scrub and Bramble scrub on and adjacent to the Site provides suitable nesting/foraging habitat.
- 4.46 No signs/evidence of Dormice were recorded during the nest tube surveys.

Amphibians

- 4.47 The desk study identified 7 ponds with the potential to support GCN within 250m of the Site.

4.48 There is suitable terrestrial habitat on Site (scrub, grassland, woodland and tall forbs), and between the off-site ponds and the Site.

4.49 There is a toad crossing and active patrol along Smallbrook Road to the south of the Site.

Reptiles

4.50 The mixed scrub, Bramble scrub and rough grassland provides suitable edge habitat for basking reptiles. Evidence of reptiles (snake skin found in sward) has been recorded on Site.

Reptile Walkover/Refugia Surveys

4.51 The reptile surveys confirmed that the Site is used by low numbers of Grass Snake, with a total of 8 recorded over the course of the surveys. The reptile activity was evenly distributed across the Site. See Table 4.21 for details and Figure 6 for locations.

Table 4.21: Reptile Survey Results

Survey No.	Results
1 (30/07/2025)	Grass Snake: 2 (J)
2 (14/08/2025)	Snake skin under onduline mat 14
3 (27/08/2025)	Grass Snake: 1 (A)
4 (16/09/2025)	Grass Snake: 2 (J); Snake skin at side of onduline mat 1
5 (24/09/2025)	Grass Snake: 1 (J); Snake skin under refugia 5.
6 (01/10/2025)	Grass Snake: 1 (J)
7 (10/10/2025)	Grass Snake: 1 (J)

Hedgehogs

4.52 The grassland, scrub, bracken, woodland and tall forbs provide suitable foraging/resting habitat for hedgehogs.

4.53 The Site is open to the wider landscape allowing hedgehogs to move freely across the Site.

Invertebrates

4.54 The Lowland dry acid grassland is likely to support an assemblage of less common invertebrate species. All other habitats are likely to support a typical range of invertebrate species.

5.0 Biodiversity Net Gain

- 5.1 The Metric baseline habitat score for the Site is 22.24 area-based habitat units and 0.18 hedgerow units. The baseline Metric calculation and baseline condition assessment sheets are provided separately as Excel spreadsheets (NPA 30142 0401 and NPA 30142 0402).

6.0 Impacts and Mitigation

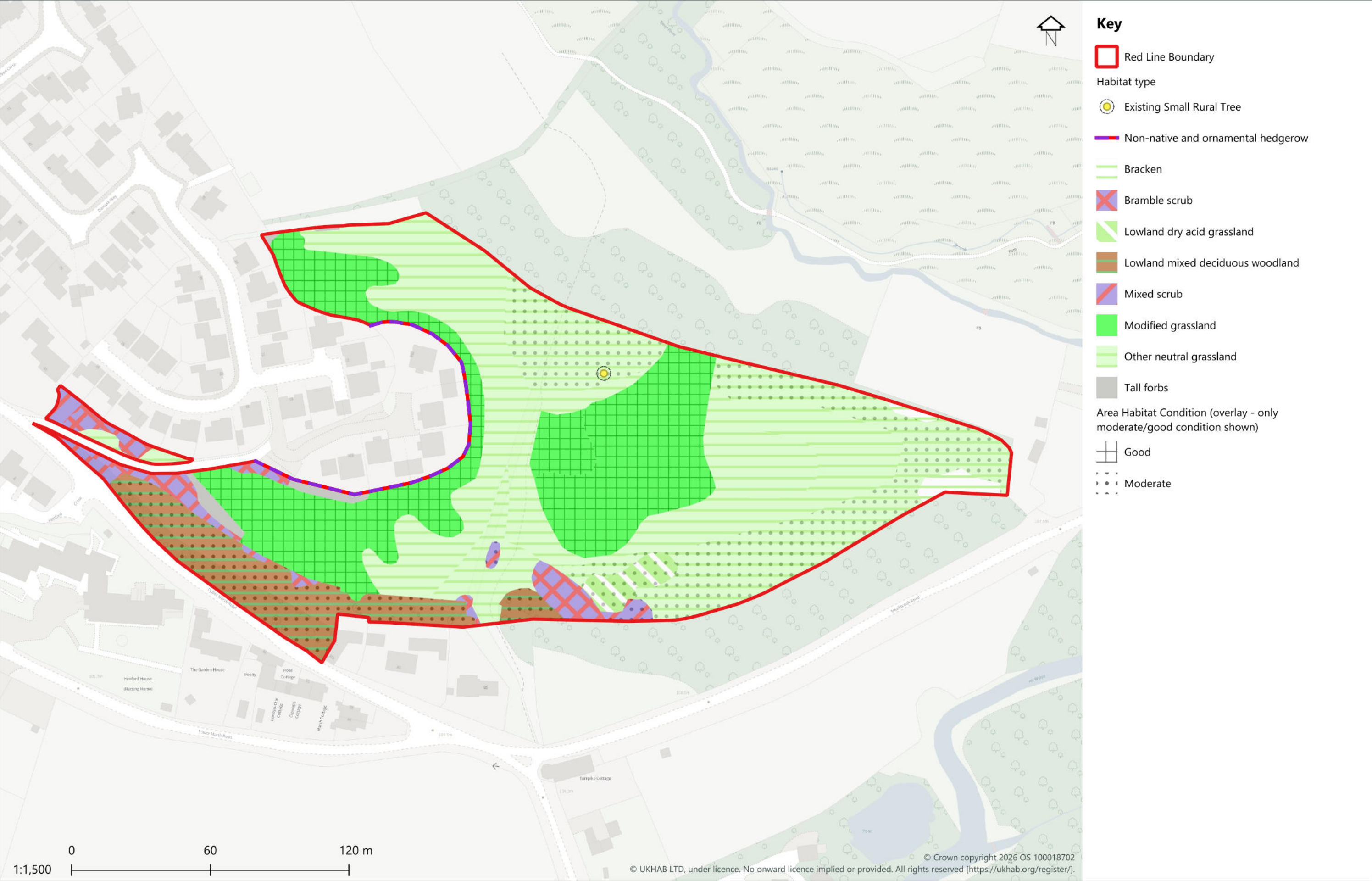
- 6.1 A number of ecological receptors have been identified. Table 6.1 below identifies the potential impacts for each of these receptors and incorporates mitigation measures to avoid and reduce these impacts. In addition, it sets out additional ecological enhancements.

Table 6.1: Potential Impacts and Mitigation

Ecological Receptor	Potential Impact	Design response/ Mitigation / Enhancement Measures	Residual Effects
River Avon SAC / River Avon System SSSI	- Adverse effect on the integrity of the SAC by adding to the concentration of phosphates present. - Risk of other pollutants entering the watercourse during both construction and operation. - Increased recreational pressure <i>e.g.</i> dogs	- A Nutrient Neutrality Assessment and Mitigation Strategy (SLR 402.0661106.00001 Rev 02) sets out how the proposals can be phosphate neutral. - Construction Environmental Management Plan (CEMP) to set out best working practices which will be adhered to avoid pollution during construction. - Drainage strategy to set out measures to avoid increased pollution entering the off-site watercourses. - Provision of POS on site, including a network of managed paths and a play area. Public Right of Way to the north leads to the town park. Nearest accessible points of the SAC/SSSI is a managed wildlife reserve.	Not significant
Salisbury Plain SAC / SPA / SSSI	Recreational pressure on/disturbance of SPA Stone Curlew populations.	Contribution to Wiltshire Council strategic fund to implement strategic measures to reduce recreational impacts of housing growth.	Not significant
Smallbrook Meadows and River Wylfe LNR	- Increased pollution - Increased recreational pressure	See measures for River Avon above.	Not significant
Habitats	Loss of habitat value, including loss /deterioration of Priority Habitat Lowland Dry Acid Grassland and Lowland Mixed Deciduous Woodland.	- Protection fencing to in place throughout construction period to physically protect acid grassland and woodland. - CEMP to set out best working practices which will be adhered to avoid pollution during construction. - Acid grassland and woodland to be protected from recreational impacts (inc. trampling and dog fouling) throughout operation through use of fencing, signage and provision managed areas for recreation. - Habitat management plan to include management measures to retain and increase area of acid grassland inc. cutting regime, management of encroaching scrub). - Creation of other habitats of biodiversity value <i>e.g.</i> orchard, tree and hedgerow planting.	Not significant

Ecological Receptor	Potential Impact	Design response/ Mitigation / Enhancement Measures	Residual Effects
		BNG Assessment will demonstrate how 10% biodiversity net gains would be achieved.	
Amphibians/ Reptiles	- Killing, injury and/disturbance including of GCN (if present). - Habitat fragmentation - Deterioration of terrestrial habitat value.	- CEMP: Biodiversity to set out sensitive working practices. - Payment in the District Level Licence Scheme. - Proposals allow for amphibian movement around and through the development proposals. Within the development a permeable route would be provided through the middle of the Site through provision of swale/ditches, culverts, drop kerbs and area/lengths of habitat cover. - Built development areas to include wildlife kerbs (adjacent to gulley pots) and amphibian ladders. - Signage and education to be provided to residents regarding Toad migration, patrol and mitigation measures. - Proposals minimise loss of suitable terrestrial habitat and will include habitat creation inc. log piles.	Not significant
Bats	- Damage, disturbance and/or destruction of a bat roost. - Deterioration in habitat, including through increased lighting.	- Protection of trees with potential to support roosting bats (from felling and/or increased light spill). - Update tree assessment surveys to be undertaken ahead of construction. - If artificial night-time lighting is required during the construction period, then a sensitive and targeted approach to lighting will be used to avoid light spill at the woodland edges, which would be detailed in the CEMP: Biodiversity. - Coherent network of dark bat habitat connected to the wider landscape maintained through: - buffers between built development and woodland edge, - these buffers to be kept dark (<0.2 horizontal /0.4 Lux vertical) – see Lighting Impact Assessment to see how this can be achieved. - tree and hedge/scrub planting at the Site entrance to provide for continued connectivity. - planting species-rich native hedgerows (e.g. to rear of northern gardens) - Creation of orchard, diverse grassland and tree planting. - Providing bat boxes, including at least 50 no. integrated to the new builds.	Not significant

Ecological Receptor	Potential Impact	Design response/ Mitigation / Enhancement Measures	Residual Effects
Badger	• Damage to or loss of a Badger sett. • Deterioration/fragmentation of foraging habitat	• Minimum 20m buffer to south eastern woodland edge. • Update survey(s) ahead of construction to determine status of any active Badger sett. If a sett is present which could be damaged, disturbed and/or destroyed, the proposals or working methods could be adjusted or a licence be obtained from Natural England to close the sett. • Proposals allow for a coherent network of foraging/commuting habitat connected to the wider landscape.	Not significant
Birds	• Destruction/damage to an active bird's nest. • Deterioration in habitat.	• Removal of nesting habitat will be avoided during the nesting bird season (March-August). Where small amounts of clearance are required then clearance may be carried out during the nesting season as long as checks for nesting birds are undertaken immediately before works. If nesting birds are found, they will be protected. • Landscape proposals will include enhanced/diversified habitat including orchard, diverse grassland and tree planting. • Providing bird boxes, including at least 100 no. Swift bricks integrated to the new builds.	Not significant
Hedgehogs	• Potential killing/injury through construction. • Potential fragmentation of habitat	• Sensitive working methods for construction, which would be detailed in the CEMP: Biodiversity. • Any new fencing will allow for hedgehog access, including providing gaps (min 13 x 13cm) where required.	Not significant
Invertebrates	• Deterioration in habitat.	• Protection and enhancement of acid grassland and woodland habitat (to be set out within CEMP:B and habitat management plan). • Landscape proposals will include enhanced/diversified habitat including orchard, diverse grassland, tree planting and plants of known value to pollinators. • Providing additional refuge features inc. habitat piles and bee bricks.	Not significant





Key

- Badger Survey Extent (in addition to onsite area)
- Potential Badger Setts

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Client: Backhouse Housing Ltd

Date: 11 November 2025

Figure Title: Fig. 2 Badger Survey Plan

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Key

- NBW Survey Listening Points
- NBW Survey Transect Route
- ◆ Automated Detector Locations
- Trees subject to GLTA

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Date: 31 March 2025

Figure Title: Fig. 3 Bat Survey Plan

Project No.: NPA 30142

Page Size: A3

Status: Planning



Key

- Reptile Refugia (Bitumen)
- Reptile Refugia (Onduline)
- Reptile Activity
- Site Boundary

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Figure Title: Fig. 4 Reptile Survey Plan

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Key

● Nest Tube Locations

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Figure Title: Fig. 5 Dormouse Survey Plan

Project No.: NPA 30142

Page Size: A3

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Appendix 1: Site Photographs

Photo No.	
1.	 Area of Lowland dry acid grassland to south of Site.
2.	 Area of Lowland dry acid grassland to south of Site (close-up).

3.	 Area of Other neutral grassland to centre/east of Site.
4.	 Modified grassland with rough/tall vegetation to north-west of Site.

5.



Patch of Broom scrub to south of Site.

6.



Area of mixed scrub along Upper Marsh road to south-west of Site.

7.	 Dense stand of Bramble scrub to south of Site/adjacent to area of Lowland dry acid grassland.
8.	 Dense stands of Bracken to east of Site.

9.		
10.		

Stand of tall vegetation dominated by Common Nettle to south-west of Site.

Individual Hawthorn tree to centre/north of Site.

11.



Lowland mixed deciduous woodland along Upper Marsh Road to south-west of Site.

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