

NHDC DECARBONISATION PROJECT- ROYSTON LEISURE CENTRE

Preliminary Ecological Appraisal



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REPORT

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Hannah Knight

26 February 2025

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Prepared for:

Willmott Dixon Construction Ltd on Behalf of North Hertfordshire District Council

EXECUTIVE SUMMARY

- RPS was commissioned by Willmott Dixon Construction Ltd on Behalf of North Hertfordshire District Council to undertake a Preliminary Ecological Appraisal of a parcel of land, located at Royston Leisure Centre, 29 Woodcock Road, Royston SG8 7XT, as part of the NHDC Decarbonisation Project. This comprised a desk study, UK Habitat Survey and an ecological scoping survey, which assessed the potential of the site to support species of conservation concern or other species which could present a constraint to the development of the site.
- The proposal is for a building extension and decarbonisation works, comprising the introduction of external rendering, a new air source heat pump, substation, photovoltaic panels and hard and soft landscaping.
- The site is approximately 0.63 ha in size and is comprised predominantly of buildings and hardstanding with grassland, trees and landscaping.
- There are two statutory and four non-statutory designated sites within 2 km of the site. No designated sites are expected to be negatively impacted by the proposal owing to their distance from the site and the small-scale nature of the works. The nearest statutory site is Holland Hall (Melbourn) Railway Cutting SSSI, located approximately 0.76 km from the site. The nearest non-statutory site is Shaftesbury Green LWS, located 1.09 km from the site.
- The proposals will see the removal of modified grassland, vegetated garden and trees to facilitate the construction of the proposed cycle parking, substation, air source heat pump compound and building extension.
- The mown modified grasslands and vegetated gardens are unlikely to support reptiles and amphibians. Moreover, the scope of works is limited in scale, therefore, reptiles and amphibians will not be affected by the works.
- As common species of bird may use the building and trees which are to be removed for nesting and Schedule 1 WCA species could be disturbed if nesting in vegetation, in order to prevent any legislative offences during construction, mitigation measure have been recommended.
- The site offers moderate suitability commuting and foraging habitat for bats, the site also provides some connectivity to nearby greenspaces. If lighting is required during construction, a construction sensitive lighting strategy will be implemented to ensure no adverse impacts are experienced by the local bat population.
- The site offers potential roosting habitat for bats within the buildings present on site. A Preliminary Bat Roost Assessment has been recommended (and completed, RPS, 2024) to identify whether the building is being used by roosting bats and whether further surveys are required.
- Records of badger were returned with 2 km of the site, while they are unlikely to be affected by the scope of works, mitigation has been recommended to ensure no impacts to badgers are experienced.
- Habitat for hedgehog and other mammals was identified surrounding the site. Due to the nature of the works, other mammals will not be impacted; furthermore, mitigation measure proposed to protect badgers will also protect these species.
- A biodiversity net gain (BNG) assessment has been prepared (RPS, 2025a) to be submitted with the development application and will ensure a 10% net gain is delivered in line with legislative requirements.

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Appendices

- Appendix A Relevant Legislation
- Appendix B Site Photos

1 INTRODUCTION

1.1 Purpose and scope of this report

- 1.1.1 RPS was commissioned by Willmott Dixon Construction Ltd on Behalf of North Hertfordshire District Council (NHDC) to undertake a Preliminary Ecological Appraisal (PEA) of a parcel of land, located at Royston Leisure Centre, 29 Woodcock Road, Royston SG8 7XT, as part of the NHDC Decarbonisation Project.
- 1.1.2 To undertake an initial assessment of the potential ecological impact of the proposals, a desk study, UK Habitat Survey, and a preliminary protected species assessment were carried out. This is termed as a Preliminary Ecological Appraisal Report (PEAR) in accordance with CIEEM (2017). This assessment is considered 'preliminary' until any required protected species, habitat or invasive species surveys are completed, and the results incorporated into a final Ecological Appraisal or Ecological Impact Assessment (EclA) which supports the planning application.
- 1.1.3 The PEA aims to:
- Undertake a desk-based review of designated sites and records of protected species and other species that could present a constraint;
 - Map and assess the habitats present on site;
 - Assess the site for potential to support protected species or other species that could present a constraint, and make appropriate recommendations for further survey work if necessary;
 - Provide outline options for mitigation measures as appropriate; and
 - Make recommendations for appropriate biodiversity enhancements in line with national and local planning policy.
- 1.1.4 This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RPS. The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Appraisal Notes are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

1.2 Study area and Zone of Influence

- 1.2.1 The site is located north-east of the centre of Royston and has a site area of approximately 0.63 ha (**Figure 3-3**). The National Grid coordinates for the centre of the site are TL 36467 41565.
- 1.2.2 The site is bounded by sports pitches to the east and west. King James Academy Royston borders the site to the south. While residential dwellings can be found north of the site. Beyond the sports pitches east of the site are farmland and crop fields.
- 1.2.3 The site is predominantly buildings and hardstanding with grassland, trees and landscaping.
- 1.2.4 The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. The Zone of Influence is determined by the nature of the development and also in relation to designated sites, habitats or species which might be affected by the proposals.
- 1.2.5 For this site, the Zone of Influence is considered to be the site and 500 m from the site.

1.3 Development proposals

- 1.3.1 The proposal is for a building extension and decarbonisation works, comprising the introduction of external rendering, a new Air Source Heat Pump (ASHP), substation, photovoltaic panels and hard and soft landscaping.
- 1.3.2 The assessment is based on the Royston Leisure Centre-Sketch Site Plan (P03) (Saunders Boston Architects, 2025).

1.4 Legislation and policy

- 1.4.1 Relevant legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to throughout this report where appropriate. Their context and application are explained in the relevant sections of this report.
- 1.4.2 The relevant articles of legislation are:
- The National Planning Policy Framework (NPPF, December 2024);
 - The North Hertfordshire Local Plan 2011-2031;
 - The Conservation of Habitats and Species Regulations 2019 (EU Exit Amendment);
 - The Wildlife and Countryside Act 1981 (as amended);
 - The Protection of Badgers Act 1992;
 - The Countryside and Rights of Way Act 2000;
 - The Hedgerow Regulations 1997;
 - The Natural Environment and Rural Communities Act 2006; and
 - The Environment Act 2021.
- 1.4.3 A summary of legislation relevant to protected or other species identified as potential constraints in this report is provided in Appendix A.

2 METHODS

2.1 Desk Study

- 2.1.1 Ecological records within a 2 km radius of the site were requested from Herts Environmental Records Centre (HERC; 2024) and Cambridgeshire & Peterborough Environmental Records Centre (CPERC, 2024). Data requests were limited to records for protected species recorded within the last ten years and sites of nature conservation interest within 2 km of the site. This included a review of existing statutory sites of nature conservation interest, such as Sites of Special Scientific Interest (SSSIs), Special Protection Areas (SPAs), Special Area of Conservation (SACs) and National Nature Reserves (NNRs), and non-statutory sites, such as Sites of Importance for Nature Conservation (SINCs) and Local Wildlife Sites (LWSs).
- 2.1.2 Locations of statutory designated sites were accessed via the government 'MAGIC' website (MagicMap, 2024).
- 2.1.3 A 1:25,000 OS map was used to identify nearby features such as ponds or green corridors that could provide habitat or connectivity to other areas.

2.2 Ecological Appraisal

- 2.2.1 The Ecological Appraisal was undertaken on the 24th September 2024, by RPS suitably qualified Consultant Ecologist, Toni Winbourne.
- 2.2.2 The Ecological Appraisal consisted of two components: a UKHab Survey and a scoping survey for protected species and other species of conservation concern which could present a constraint to development.
- 2.2.3 Broad habitat types within the site were identified in accordance with UK Habitat Classification v2.0 (UKHab, 2023). This includes applying The UK Habitat Classification Primary Habitat Hierarchy and where necessary, Secondary Code Groupings. In summary, this comprised walking over the survey area and recording the habitat types and boundary features present. The survey was also undertaken as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2017).
- 2.2.4 A protected species scoping survey was carried out in conjunction with the UKHabs survey. The site was assessed for its suitability to support protected species, in particular great crested newts *Triturus cristatus*, reptiles, birds, badgers *Meles meles*, bats, and other species of conservation importance that could pose a planning constraint.
- 2.2.5 The surveyor looked for evidence of use including signs such as burrows, droppings, footprints, paths, hairs, refugia and particular habitat types known to be used by certain groups such as ponds. Any mammal paths were also noted down and where possible followed. Fence boundaries were walked to establish any entry points or animals' signs such as latrines. Areas of bare earth were inspected for mammal prints. Areas of habitat considered suitable for protected species or those of conservation interest were recorded.

2.3 Impact Appraisal

- 2.3.1 The overall ecological appraisal is based on the standard best practice methodology provided by the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). The assessment identifies sites, habitats, species and other ecological features that are of value based on factors such as legal protection, statutory or local site designations such as Sites of Special Scientific Interest (SSSI) or Local Wildlife Sites (LWS) or inclusion on Red Data Book Lists or Biodiversity Action Plans.

- 2.3.2 The assessment also refers to planning policy guidance (e.g. NPPF) where relevant to relate the value of the site and potential impacts of development to the planning process, identifying constraints and opportunities for ecological enhancement in line with both national and local policy.
- 2.3.3 The methodology for evaluation of the nature conservation value of ecological features affected by development (ecological receptors) is adapted from the current Chartered Institute of Ecology & Environmental Management guidelines for Ecological Impact Assessment (CIEEM, 2016). These guidelines recommend assignment of value (or potential value) to ecological receptors in accordance with the following scale:
1. International;
 2. UK;
 3. National (i.e., England/Northern Ireland/Scotland/Wales);
 4. Regional;
 5. County (or Metropolitan – e.g., in London);
 6. District (or Unitary Authority, City, or Borough);
 7. Local or Parish; and/or
 8. within immediate zone of influence only.
- 2.3.4 Following on from the above, potential constraints to development are identified on that basis, with recommendations for further, more detailed surveys made as appropriate, for example to fully investigate botanical value or to confirm presence / likely absence of a protected species.
- 2.3.5 In appraising any impacts, the review considers the client's site proposals and any subsequent recommendations made are proportionate and appropriate to the site and have considered the Mitigation Hierarchy as identified below:
- **Avoid:** Provide advice on how the development may proceed by avoiding impacts to any species or sites by either consideration of site design or identification of an alternative option.
 - **Mitigate:** Where avoidance cannot be implemented mitigation proposals are put forward to minimise impacts to species or sites as a result of the proposals. Mitigation put forward is proportionate to the site.
 - **Compensate:** Where avoidance cannot be achieved any mitigation strategy will consider the requirements for site compensatory measures.
 - **Enhance:** The assessment refers to planning policy guidance (e.g. NPPF) to relate the ecological value of the site and identify appropriate and proportionate ecological enhancement in line with both national and local policy.
- 2.3.6 When describing impacts on ecosystem structure and function, reference is made to the following aspects where appropriate:
1. extent;
 2. magnitude;
 3. duration;
 4. reversibility;
 5. timing and frequency; and
 6. Understanding the nature of the impact enables determination of the effect on the ecological integrity of the ecological receptor. This in turn is assessed against the importance of the receptor to determine the significance of the effect on nature conservation interests as being (i) not significant, or (ii) a significant positive or adverse impact.

2.4 Limitations

Desk Based Assessment

- 2.4.1 The desk study data is third party controlled data, purchased for the purposes of this report only. RPS cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.

Survey

- 2.4.2 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.
- 2.4.3 The protected/notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected/notable species group.

Accurate Lifespan of Ecological Data

- 2.4.4 The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for two years, assuming no significant considerable changes to the site conditions.

3 RESULTS

3.1 Designated Sites

- 3.1.1 There are two statutory designated sites for nature conservation value within 2 km of the site. The closest of these is Holland Hall (Melbourn) Railway Cutting Site of Special Scientific interest (SSSI), located 0.76 km north of the site.
- 3.1.2 Four non-statutory sites are located within the 2 km search radius of the site. The closest of these is Shaftesbury Green Local Wildlife Site (LWS), located 1.09 km south-west of the site.
- 3.1.2 A summary of these sites is provided in **Table 3-1** below and the location of each site is detailed in **Figure 3-1** and **Figure 3-2**.

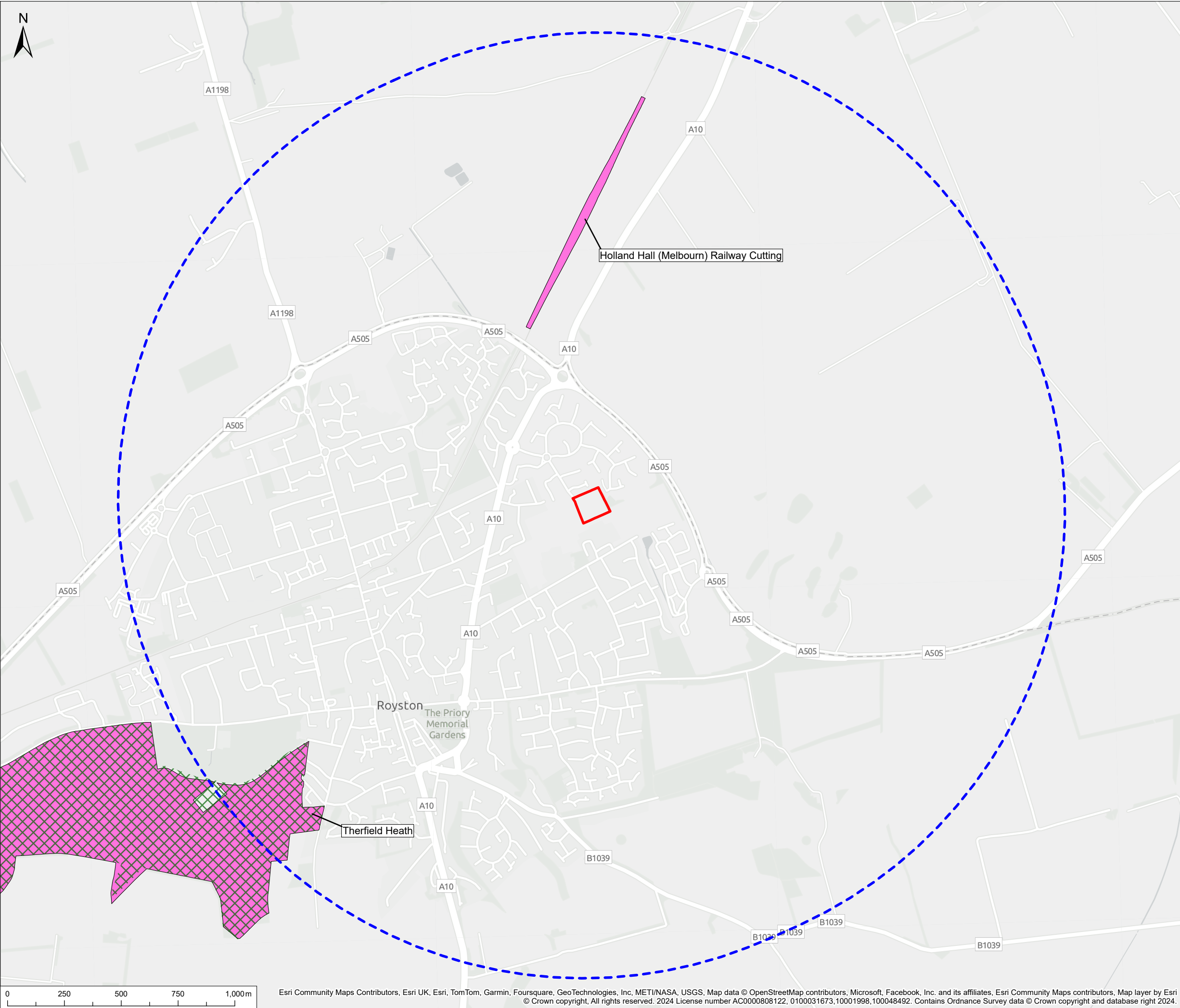
Table 3-1 Designated sites within 2 km of the study area (HERC, 2024 & CPERC, 2024)

Site name	Type	Approx. area (ha)	Interest Features	Distance from site (m)
Statutory Sites				
Holland Hall (Melbourn) Railway Cutting	SSSI	3.33	The chalk grassland plant community CG3 (<i>Bromus erectus</i> grassland) was assessed. Although passing on a number of criteria including the proportion of herbs to grass, frequency of desirable broad-leaved plants, cover of weedy species, cover of plant litter and cover of tor grass (<i>Brachypodium pinnatum</i>), it failed on cover of scrub and frequency of weedy species as well as cover of bare ground. The management planned for the site will help to enable this plant community to flourish over the next 5 years by reducing scrub and other rampant vegetation and controlling rabbits.	760
Therfield Heath	SSSI	147.31	Some sections of this unit were extremely herb-rich which is positive, although in other areas the sward was higher than is desirable, which means herbs can begin to struggle due to competition from more vigorous species. Within the south of the unit, young scrub (particularly bramble) was extensive in places where it was spreading out from more established scrub patches. Where this unit borders the woodland edge the scrub border features both young, open scrub-grassland as well as dense established scrub sections. A range of scrub ages should be maintained by rotational management of this border zone.	1540
Non-statutory Sites				
Shaftesbury Green	LWS	0.27	A remnant area of semi-improved calcareous grassland supporting an upright brome (<i>Bromus erecta</i>) NVC community type with a fairly variable sward. Plants recorded include agrimony (<i>Agrimonia eupatoria</i>), common knapweed (<i>Centaurea nigra</i>), bird's-foot-trefoil (<i>Lotus corniculatus</i>), quaking-grass (<i>Briza media</i>) and small scabious (<i>Scabiosa columbaria</i>).	1090
Royston Chalk Pit	LWS; RIGS; HMWT NR	0.73	Chalk pit with a former lime kiln dominated by mature stand of deciduous scrub, mainly beech (<i>Fagus sylvatica</i>), sycamore (<i>Acer pseudoplatanus</i>), ash (<i>Fraxinus excelsior</i>) and hybrid elm (<i>Ulmus glabra x minor</i>). A chalky woodland flora is present, including wood false-brome (<i>Brachypodium sylvaticum</i>), yellow archangel (<i>Lamium galeobdolon</i>) and sanicle (<i>Sanicula europaea</i>). Yew (<i>Taxus baccata</i>) is well established in places. Remnant chalk grassland flora survives on an overgrown plateau at the top of the pit face. The site is important for protected species.	1110
Royston Erratic	RIGS	N/s	N/s	1150

Green Lane S. of Royston	LWS	2.02	Green Lane and adjoining field margins supporting calcareous grassland with a rich diversity of species including common knapweed (<i>Centaurea nigra</i>), greater knapweed (<i>C. scabiosa</i>), agrimony (<i>Agrimonia eupatoria</i>), dwarf (or stemless) thistle (<i>Cirsium acaule</i>), field Scabious (<i>Knautia arvensis</i>), common rest-harrow (<i>Ononis repens</i>) and knapweed broomrape (<i>Orobanche elatior</i>).	1600
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Abbreviations used in Table 3.1: LNR: Local Nature Reserve; LWS: Local Wildlife Site; SSSI: Site of Special Scientific Interest; ha: hectare; RIGS: Regionally Important Geological/Geomorphological Site; HMWTNR: Herts and Middlesex Wildlife Trust Nature Reserve; N/s: Not supplied..

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Legend

- Site
- Search Area (2km)
- LNR
- SSSI



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Title Statutory sites

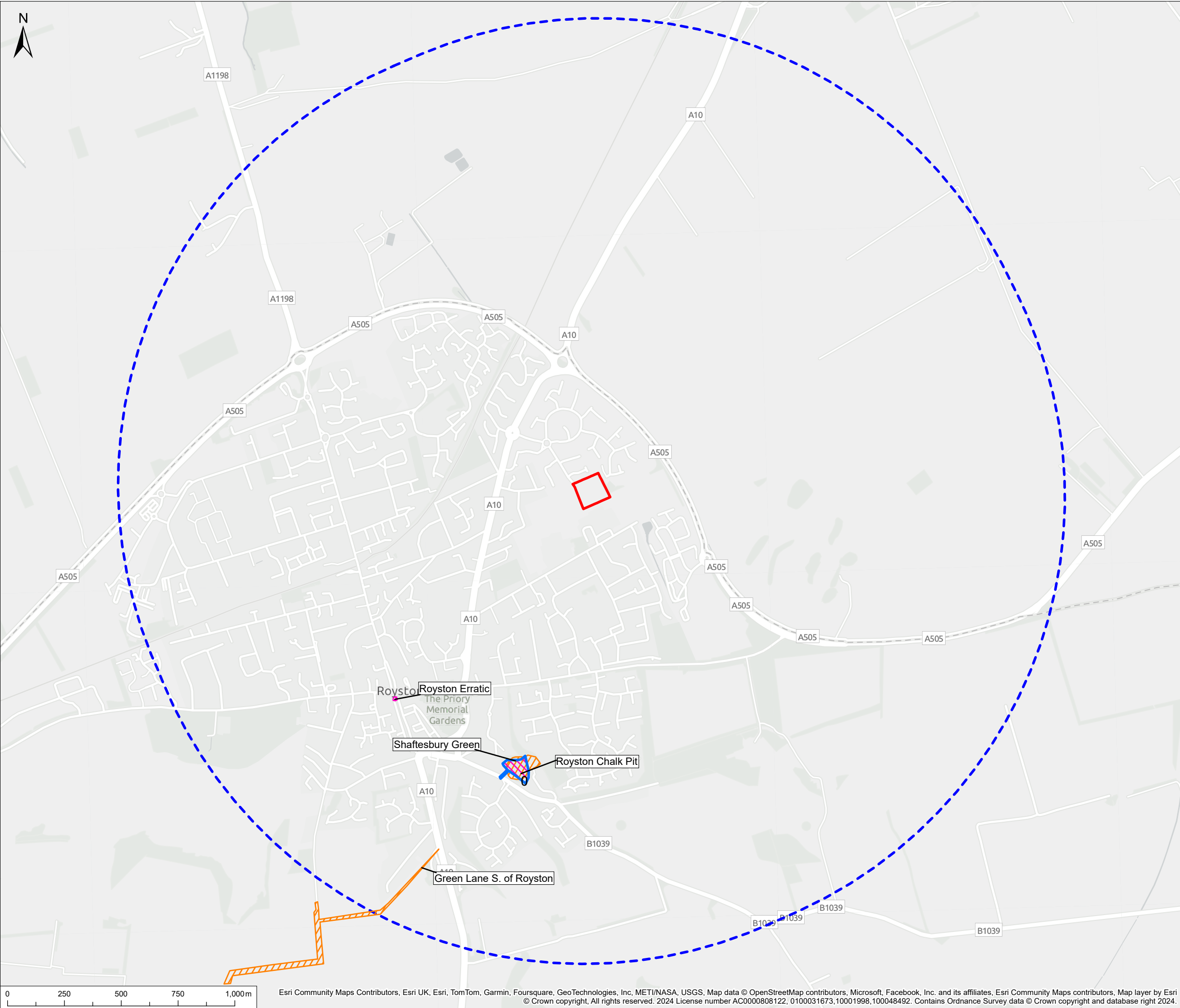
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Legend

- Site
- Search Area (2km)
- RIGS
- LWS
- HMWT



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3.2 Species

- 3.2.1 Records of protected species were obtained from HERC and CPERC. A number of species of conservation importance or otherwise notable species were recorded within the 2 km search radius of the site. A summary of these records is provided in **Table 3-2**.
- 3.2.2 In order to simplify the results, only records of species from the last 10 years are shown. In addition, only data with a 6-figure grid reference resolution or higher are provided since locations given at a lower resolution do not allow accurate calculation of distance to the site boundary.

Table 3-2 Species records from the last 10 years within 2 km of the site (HERC, 2024 & CPERC, 2024)

Common name	Scientific name	Nearest distance from site (km)	Year of most recent record	Conservation Status
Amphibians & Reptiles				
Common Lizard	<i>Zootoca vivipara</i>	1.73	2020	WCA5/9.1k/I; Sect.41; UKBAP
Common Toad	<i>Bufo bufo</i>	1.73	2020	Sect.41; UKBAP
Birds				
Barn Owl	<i>Tyto alba</i>	0.52	2018	WCA1i; Bern2; Herts HR; Herts LD1; WCA9
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	0.37	2019	BAmb
Black-tailed Godwit	<i>Limosa limosa</i>	0.52	2015	WCA1i; Bred; CMS_A2
Blue Tit	<i>Cyanistes caeruleus</i>	0.53	2020	Bern2
Brambling	<i>Fringilla montifringilla</i>	0.52	2018	WCA1i
Bullfinch	<i>Pyrrhula pyrrhula</i>	0.66	2018	BAmb
Buzzard	<i>Buteo buteo</i>	0.52	2020	CMS_A2
Canada Goose	<i>Branta canadensis</i>	1.51	2018	CMS_A2; WCA9
Coal Tit	<i>Parus ater</i>	1.50	2018	Bern2
Common Gull	<i>Larus canus</i>	0.53	2018	BAmb
Corn Bunting	<i>Emberiza calandra</i>	0.66	2018	Bred; HSCC.RT; Herts LD3
Crossbill	<i>Loxia curvirostra</i>	0.52	2014	WCA1i; Bern2
Cuckoo	<i>Cuculus canorus</i>	1.50	2017	Sect.41; UKBAP; Bred; HSCC.RT; Herts LD3
Curlew	<i>Numenius arquata</i>	<0.10	2017	Sect.41; UKBAP; Bred; CMS_A2
Dotterel	<i>Charadrius morinellus</i>	1.50	2014	WCA1i; Bred; BD1; CMS_A2
Dunnock	<i>Prunella modularis</i>	0.37	2020	BAmb; Bern2
Egyptian Goose	<i>Alopochen aegyptiaca</i>	0.52	2016	WCA9
Fieldfare	<i>Turdus pilaris</i>	0.53	2019	WCA1i; BRed
Firecrest	<i>Regulus ignicapilla</i>	1.50	2017	WCA1i; Bern2
Goldcrest	<i>Regulus regulus</i>	1.50	2019	Bern2
Goldfinch	<i>Carduelis carduelis</i>	0.37	2020	Bern2

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Great Black-backed Gull	<i>Larus marinus</i>	1.57	2018	BAmb
Great Spotted Woodpecker	<i>Dendrocopos major</i>	0.52	2020	Bern2
Great Tit	<i>Parus major</i>	0.66	2020	Bern2
Great White Egret	<i>Ardea alba</i>	0.52	2016	BAmb; Bern2
Green Woodpecker	<i>Picus viridis</i>	0.66	2020	Bern2
Greenfinch	<i>Chloris chloris</i>	0.37	2020	Bred; Bern2
Grey Heron	<i>Ardea cinerea</i>	1.50	2020	Herts HL
Grey Partridge	<i>Perdix perdix</i>	0.66	2018	Sect.41; UKBAP; Bred; HSCC.RT; Herts LD3
Grey Plover	<i>Pluvialis squatarola</i>	0.52	2018	BAmb; CMS_A2
Grey Wagtail	<i>Motacilla cinerea</i>	0.53	2018	BAmb; Bern2; HSCC.RT
Greylag Goose	<i>Anser anser</i>	1.73	2020	WCA1ii; BAmb; CMS_A2
Hen Harrier	<i>Circus cyaneus</i>	0.52	2018	WCA1i; Sect.41; Bred; BD1; CMS_A2
Herring Gull	<i>Larus argentatus</i>	0.53	2018	BRed
Hobby	<i>Falco subbuteo</i>	0.52	2018	WCA1i; Bern2; CMS_A2; HSCC.Resp; HSCC.RT
House Martin	<i>Delichon urbicum</i>	0.66	2018	Bred; Bern2; HSCC.RT
House Sparrow	<i>Passer domesticus</i>	0.37	2020	Sect.41; UKBAP; Bred; HSCC.RT
Kestrel	<i>Falco tinnunculus</i>	0.53	2020	BAmb; Bern2; CMS_A2
Lapwing	<i>Vanellus vanellus</i>	0.52	2020	Sect.41; UKBAP; Bred; CMS_A2; HSCC.RT; Herts LD2
Lesser Black-backed Gull	<i>Larus fuscus</i>	0.53	2019	BAmb
Lesser Redpoll	<i>Acanthis cabaret</i>	1.50	2015	Sect.41; UKBAP; HSCC.RT
Linnet	<i>Linaria cannabina</i>	0.66	2020	Bred; Bern2
Little Egret	<i>Egretta garzetta</i>	0.82	2015	BD1; Bern2; HSCC.RT
Little Owl	<i>Athene noctua</i>	0.52	2016	Bern2
Long-eared Owl	<i>Asio otus</i>	1.50	2017	Bern2; Herts HL; Herts HR; HSCC.Ex; Herts LD1
Mallard	<i>Anas platyrhynchos</i>	0.53	2018	WCA1i; BAmb; BD1; Bern2; CMS_A2
Marsh Harrier	<i>Circus aeruginosus</i>	0.66	2018	WCA1i; BAmb; BD1; CMS_A2
Meadow Pipit	<i>Anthus pratensis</i>	0.53	2020	BAmb; Bern2
Merlin	<i>Falco columbarius</i>	0.53	2019	WCA1i; Bred; BD1; Bern2; CMS_A2
Mistle Thrush	<i>Turdus viscivorus</i>	0.52	2020	BRed
Moorhen	<i>Gallinula chloropus</i>	0.53	2018	BAmb; CMS_A2
Nightingale	<i>Luscinia megarhynchos</i>	0.52	2016	Bred; Bern2; Herts HR; HSCC.Ex; Herts LD1
Nuthatch	<i>Sitta europaea</i>	0.66	2018	Bern2
Pallid Harrier	<i>Circus macrourus</i>	0.66	2018	WCA1i; BD1; CMS_A2
Peregrine	<i>Falco peregrinus</i>	1.50	2018	WCA1i; BD1; Bern2; CMS_A2; HSCC.RT
Pied Wagtail	<i>Motacilla alba yarrellii</i>	0.53	2018	Bern2
Quail	<i>Coturnix coturnix</i>	<0.10	2017	WCA1i; BAmb; Herts HR
Red Kite	<i>Milvus milvus</i>	0.52	2020	WCA1i; BD1; CMS_A2; WCA9

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Redstart	<i>Phoenicurus phoenicurus</i>	1.50	2017	BAmb; Bern2; Herts HL; Herts HR; HSCC.Ex; Herts LD1
Redwing	<i>Turdus iliacus</i>	0.53	2018	WCA1i; BAmb
Reed Bunting	<i>Emberiza schoeniclus</i>	0.52	2018	Sect.41; UKBAP; BAmb; Bern2
Ring Ouzel	<i>Turdus torquatus</i>	0.52	2018	Sect.41; UKBAP; BRed; Bern2
Robin	<i>Erithacus rubecula</i>	0.37	2020	Bern2
Rook	<i>Corvus frugilegus</i>	0.52	2020	BAmb
Sand Martin	<i>Riparia riparia</i>	<0.10	2017	Bern2; HSCC.RT; Herts LD1
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	<0.10	2014	BAmb
Shelduck	<i>Tadorna tadorna</i>	0.52	2016	BAmb; Bern2; CMS_A2; Herts HL; Herts HR
Short-eared Owl	<i>Asio flammeus</i>	1.50	2018	BAmb; BD1; Bern2
Siskin	<i>Spinus spinus</i>	0.52	2018	Bern2
Skylark	<i>Alauda arvensis</i>	0.53	2020	Sect.41; BRed
Song Thrush	<i>Turdus philomelos</i>	0.53	2020	LBAP; BAmb
Sparrowhawk	<i>Accipiter nisus</i>	0.37	2020	BAmb; CMS_A2
Spotted Flycatcher	<i>Muscicapa striata</i>	0.66	2018	Sect.41; UKBAP; Bred; Bern2; CMS_A2; HSCC.RT; Herts LD3
Starling	<i>Sturnus vulgaris</i>	0.37	2020	Bred; HSCC.RT
Stock Dove	<i>Columba oenas</i>	0.53	2018	BAmb
Stonechat	<i>Saxicola rubicola</i>	0.66	2018	Bern2
Swallow	<i>Hirundo rustica</i>	0.52	2020	Bern2
Swift	<i>Apus apus</i>	0.37	2020	Bred; HSCC.RT
Tawny Owl	<i>Strix aluco</i>	0.52	2020	BAmb; Bern2
Tree Sparrow	<i>Passer montanus</i>	<0.10	2016	Sect.41; LBAP; UKBAP; Bred; HSCC.RT; Herts LD3
Treecreeper	<i>Certhia familiaris</i>	0.66	2018	Bern2
Water Pipit	<i>Anthus spinoletta</i>	0.53	2018	BAmb; Bern2; Herts WS
Wheatear	<i>Oenanthe oenanthe</i>	0.52	2018	BAmb; Bern2
White Wagtail	<i>Motacilla alba alba</i>	0.66	2018	Bern2
Whitethroat	<i>Curruca communis</i>	0.66	2018	BAmb
Willow Warbler	<i>Phylloscopus trochilus</i>	0.52	2020	BAmb; HSCC.RT; Herts LD2
Woodpigeon	<i>Columba palumbus</i>	0.37	2020	BAmb
Yellowhammer	<i>Emberiza citrinella</i>	0.53	2020	Sect.41; UKBAP; Bred; Bern2; HSCC.RT
Wren	<i>Troglodytes troglodytes</i>	0.53	2020	BAmb; Bern2
Yellow Wagtail	<i>Motacilla flava</i>	1.50	2018	Bred; Bern2; HSCC.RT; Herts LD3
Yellow-legged Gull	<i>Larus michahellis</i>	<0.10	2015	BAmb
Mammals – Terrestrial (excl. bats)				
American Mink	<i>Neovison vison</i>	1.77	2015	WCA9
Badger	<i>Meles meles</i>	0.82	2023	PBA
Brown Hare	<i>Lepus europaeus</i>	1.51	2023	Sect.41; UKBAP; HSCC.RT

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Grey Squirrel	<i>Sciurus carolinensis</i>	0.51	2020	WCA9
Hedgehog	<i>Erinaceus europaeus</i>	0.06	2021	Sect.41; UKBAP; RLGB.VU; HSCC.RT
Muntjac	<i>Muntiacus reevesi</i>	1.13	2020	WCA9
Weasel	<i>Mustela nivalis</i>	1.60	2022	HSCC.RT
Mammals – Terrestrial (bats)				
Bat	<i>Chiroptera spp.</i>	1.68	2020	HSD2p; HSD4; WCA5/9.4b; Sect.41; LBAP; UKBAP; RLGB.CR; RLGB.EN; RLGB.Lr(NT); RLGB.VU; Bern2; CMS_A2; HSCC.RT
Brown Long-eared Bat	<i>Plecotus auritus</i>	1.03	2016	HSD4; WCA5/9.4b; LBAP; Bern2; CMS_A2
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	1.81	2019	HSD4; WCA5/9.4b; CMS_A2
Daubenton's Bat	<i>Myotis daubentonii</i>	1.03	2017	HSD4; WCA5/9.4b; LBAP; Bern2; CMS_A2
Natterer's Bat	<i>Myotis nattereri</i>	1.03	2017	HSD4; WCA5/9.4b; LBAP; Bern2; CMS_A2
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	1.54	2014	HSD4; WCA5/9.4b; LBAP; Bern2; CMS_A2
Invertebrates				
Adonis Blue	<i>Polyommatus bellargus</i>	0.20	2020	RLGB.Lr(NT); Herts Extinct (B)
Alder Tuft	<i>Bucculatrix cidarella</i>	0.66	2015	HSCC.RT; Herts Rare (M)
<i>Aphanus rolandri</i>	<i>Aphanus rolandri</i>	0.37	2023	Na
Bastard-toadflax Bug	<i>Canthophorus impressus</i>	1.51	2023	HSCC.Resp; HSCC.RT
Beaded Chestnut	<i>Agrochola lychnidis</i>	0.51	2016	Sect.41; UKBAP
Blackthorn Gelechia	<i>Gelechia scotinella</i>	1.50	2015	RDBG.B.IK
Blood-vein	<i>Timandra comae</i>	0.66	2016	Sect.41; UKBAP
Brown-spot Pinion	<i>Anchoscelis litura</i>	0.51	2014	Sect.41; UKBAP; HSCC.RT; Herts Threat 3 (M)
Buckthorn Tuft	<i>Bucculatrix frangutella</i>	1.51	2015	Herts Extinct (M)
Buff Ermine	<i>Spilosoma lutea</i>	0.51	2016	Sect.41; UKBAP
Centre-barred Sallow	<i>Atethmia centrigo</i>	0.51	2014	Sect.41; UKBAP
Chalk Hill Blue	<i>Polyommatus coridon</i>	0.66	2020	LBAP; RLGB.Lr(NT); Herts Rare (B); HSCC.RT
Cinnabar	<i>Tyria jacobaeae</i>	0.66	2015	Sect.41; UKBAP
Clouded Knot-horn	<i>Homoeosoma nebulella</i>	0.66	2015	Nb; HSCC.RT; Herts Extinct (M)
Cramp-Ball Fungus Weevil	<i>Platyrhinus resinosus</i>	1.71	2021	Nb
Dark Green Fritillary	<i>Speyeria aglaja aglaja</i>	1.36	2020	Herts Rare (B); HSCC.RT
Dingy Knot-horn	<i>Hypochalcia ahenella</i>	0.51	2014	HSCC.RT; Herts Rare (M)
Dock Streak	<i>Monochroa palustrellus</i>	0.51	2016	Nb
Dot Moth	<i>Melanchra persicariae</i>	0.51	2016	Sect.41; UKBAP

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Dotted Rustic	<i>Rhyacia simulans</i>	0.51	2014	Herts End 4 (M); HSCC.RT
Essex Skipper	<i>Thymelicus lineola</i>	1.43	2020	Herts Wide Decl (B)
Ghost Moth	<i>Hepialus humuli</i>	0.66	2016	Sect.41; UKBAP
Green-brindled Crescent	<i>Allophyes oxyacanthae</i>	0.51	2016	Sect.41; UKBAP
Grey Dagger	<i>Acronicta psi</i>	0.51	2016	Sect.41; UKBAP
Hart's-tongue Moth	<i>Psychoides verhuella</i>	0.51	2016	HSCC.RT; Herts Rare (M)
Hedge Rustic	<i>Tholera cespitis</i>	0.51	2014	Sect.41; UKBAP; Herts End 2 (M); HSCC.RT
Hook-tipped Grass-moth	<i>Platytes alpinella</i>	0.51	2015	RDBG.B.R
Knot Grass	<i>Acronicta rumicis</i>	0.51	2016	Sect.41; UKBAP
Lackey	<i>Malacosoma neustria</i>	0.51	2014	Sect.41; UKBAP; HSCC.RT; Herts Threat 3 (M)
Large Nutmeg	<i>Apamea anceps</i>	0.51	2016	Sect.41; UKBAP
Latticed Heath	<i>Chiasmia clathrata</i>	0.51	2016	Sect.41; UKBAP; HSCC.RT; Herts Threat 3 (M)
Maple Seed Dot	<i>Etainia louisella</i>	1.57	2014	HSCC.RT; Herts Rare (M)
Maple Stilt	<i>Caloptilia semifascia</i>	0.51	2016	HSCC.RT; Herts Rare (M)
Mottled Rustic	<i>Caradrina morpheus</i>	0.51	2016	Sect.41; UKBAP
Mouse Moth	<i>Amphipyra tragopoginis</i>	0.51	2016	Sect.41; UKBAP
Northern Drab	<i>Orthosia opima</i>	0.51	2014	Herts Extinct (M)
Ornate Tailed Digger Wasp	<i>Cerceris rybyensis</i>	1.71	2023	HertsRare
<i>Phytoecia cylindrica</i>	<i>Phytoecia cylindrica</i>	1.71	2020	Nb
Red-tailed Mason Bee	<i>Osmia bicolor</i>	1.71	2022	Nb
Ridge-saddled Carpenter Bee	<i>Heriades truncorum</i>	1.70	2023	RDBG.B.IK
Rolled Grass-moth	<i>Pediasia contaminella</i>	0.51	2016	Nb
Rosy Minor	<i>Litologia literosa</i>	0.66	2015	Sect.41; UKBAP
Rosy Rustic	<i>Hydraecia micacea</i>	0.51	2014	Sect.41; UKBAP
Rustic	<i>Hoplodrina blanda</i>	0.51	2016	Sect.41; UKBAP
Sandrunner	<i>Sciocoris (Sciocoris) cursitans</i>	0.22	2023	HSCC.RT
Scarce Tissue	<i>Rheumaptera cervinalis</i>	0.51	2016	HSCC.RT; Herts Threat 1 (M)
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>	0.51	2016	Sect.41; UKBAP; HSCC.RT; Herts Threat 3 (M)
Small Blue	<i>Cupido minimus</i>	1.68	2018	Sect.41; UKBAP; RLGB.Lr(NT); Herts Rare (B); HSCC.RT
Small Emerald	<i>Hemistola chrysoprasaria</i>	0.61	2020	Sect.41; UKBAP

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Small Heath	<i>Coenonympha pamphilus</i>	0.51	2015	Sect.41; UKBAP; RLGB.Lr(NT)
Small Phoenix	<i>Ecliptopera silaceata</i>	0.66	2015	Sect.41; UKBAP
Small Ranunculus	<i>Hecatera dysodea</i>	0.51	2016	RDBGB.EX
Small Skipper	<i>Thymelicus sylvestris</i>	1.36	2020	Herts Wide Decl (B)
Small Square-spot	<i>Diarsia rubi</i>	0.51	2015	Sect.41; UKBAP
Spindle Knot-horn	<i>Nephopterix angustella</i>	0.51	2016	Nb; HSCC.RT; Herts Rare (M)
Sprawler	<i>Asteroscopus sphinx</i>	0.66	2014	Sect.41; UKBAP
<i>Stictoleptura rubra</i>	<i>Stictoleptura rubra</i>	1.71	2021	Herts HR? (Col); HSCC.RT
Straw Yellowneck	<i>Oegoconia caradjai</i>	0.51	2014	Nb
Stripe-legged Robberfly	<i>Dioctria baumhaueri</i>	1.50	2016	HSCC.RT
Toadflax Brocade	<i>Calophasia lunula</i>	0.51	2016	RDBGB.R; HSCC.RT
Webb's Wainscot	<i>Globia sparganii</i>	0.66	2015	Herts Vul 3 (M)
Western Thyme Knot-horn	<i>Delplanqueia dilutella</i>	0.66	2015	HSCC.RT; Herts Vul 1 (M)
White Ermine	<i>Spilosoma lubricipeda</i>	0.51	2020	Sect.41; UKBAP
White Satin Moth	<i>Leucoma salicis</i>	0.51	2014	HSCC.RT; Herts Threat 3 (M)
White-letter Hairstreak	<i>Satyrrium w-album</i>	1.41	2019	Sect.41; UKBAP; RLGB.EN; Herts Rare (B); HSCC.RT
Wood Carpet	<i>Epirrhoe rivata</i>	0.51	2015	HSCC.RT; Herts Rare (M)
Higher plants (Flowering Plants)				
Chicory	<i>Cichorium intybus</i>	1.57	2015	RENG.VU
Common Fragrant-orchid	<i>Gymnadenia conopsea</i>	1.51	2019	Herts Rare; HSCC.RT
Corn Marigold	<i>Glebionis segetum</i>	1.57	2015	RENG.VU; RLGB.VU
Field Scabious	<i>Knautia arvensis</i>	1.57	2015	RENG.Lr(NT)
Hoary Plantain	<i>Plantago media</i>	1.74	2023	RENG.Lr(NT)
Lesser Meadow-rue	<i>Thalictrum minus</i>	1.50	2019	Herts Rare; HSCC.RT
Perennial Flax	<i>Linum perenne</i>	0.66	2019	RLGB.VU; NS-excludes; Herts Rare; HSCC.RT
Sanicle	<i>Sanicula europaea</i>	0.73	2014	RENG.Lr(NT)
Wall Cotoneaster	<i>Cotoneaster horizontalis</i>	0.80	2014	WCA9
White Helleborine	<i>Cephalanthera damasonium</i>	0.90	2014	Sect.41; UKBAP; RENG.VU; RLGB.VU; HSCC.RT

Abbreviations used in Table 3.2: HSD2p: Habitats and Species Directive (Annex 2 – priority species); HSD4: Habitats and Species Directive (Annex 4); WCA1i: Wildlife and Countryside Act 1981 (as amended), Schedule 1 part 1; WCA5 (s9.1t; s9.1k; s9.4a; s9.4b; s9.4c): Wildlife and Countryside Act 1981 (as amended), Schedule 5 (Section 9 part 1 (taking); Section 9 part 1 (killing/ injuring; Section 9 part 4a/ 4b/ 4c); WCA8: Wildlife and Countryside Act 1981 (as amended), Schedule 8; WCA9: Wildlife and Countryside Act 1981 (as amended) Schedule 9; Sect.41: Natural Environment and Rural Communities Act 2006, Section 41; UKBAP: UK Biodiversity Action Plan Priority Species; LBAP: Local Biodiversity Action Plan Species; PBA: Protection of Badgers Act 1982; BAMB: Bird Population Status – Amber; Bred: Bird Population Status – Red; RLGB.VU: Global Red List: IUCN – Vulnerable; RDBGB.R: Red List for Great Britain (pre-1994) – Rare; RLGB.Lr(NT): Red List for Great Britain: IUCN – Lower Risk – near Threatened; RENG.VU: Plant Red List for England –

Vulnerable; RLENG.Lr(NT): Plant Red List for England – Lower Risk – Near Threatened; BD1: Bird Directive (Annex 1); Bern2: The Convention on the Conservation of European Wildlife and Natural Habitats (Appendix 2); CMS_A2: The Convention on the Conservation of Migratory Species of Wild Animals (Appendix 2); HSCC.RT: Species identified as being rare, in decline or a special responsibility within Hertfordshire for their overall national status; HSCC.Ex: Species believed to have gone extinct from Hertfordshire since 1970; HSCC.Resp: Species whose national welfare could be dependent on their status in Hertfordshire; Herts HL: Birds – Hertfordshire local breeding pairs with 10 or less occupied breeding tetrads; Herts HR: Birds: Hertfordshire rare breeding species with less than 25 breeding pairs; Herts LD1: Birds: Local decline. Hertfordshire breeding species with greater than 50% decline in occupied tetrads between 1970 and 1990 based on the 1967-73 and 1988-92 atlases; Herts LD2: Birds: Recent local decline. Hertfordshire breeding species with greater than 25% decline between 1994 and 2000 based on the Hertfordshire BBS data; Herts LD3: Birds: Local decline based on records submitted to the county Bird Report or the results of specific Herts Bird Club surveys; Herts Rare (B): Butterflies: Herts Rare. Species with restricted distributions, and in some cases recorded infrequently and/or in low abundances; Herts Rare (M): Moths: Herts Rare; Na: Taxa which do not fall within RDB categories but which are none-the-less uncommon in Great Britain and thought to occur in 30 or fewer 10km squares of the National Grid or, for less well-recorded groups, within seven or fewer vice-counties. Superseded by Nationally Scarce, and therefore no longer in use; Nb: Taxa which do not fall within RDB categories but which are none-the-less uncommon in Great Britain and thought to occur in between 31 and 100 10km squares of the National Grid or, for less well recorded groups between eight and twenty vice-counties. Superseded by Nationally Scarce, and therefore no longer in use; NS-excludes: Nationally Scarce. Occurring in 16-100 hectads in Great Britain. Excludes rare species qualifying under the main IUCN criteria.

3.3 UK Habitat Survey

- 3.3.1 The survey results are presented in the form of a map with the habitat types and boundary features displayed in **Figure 3-3**.
- 3.3.2 Habitat types were identified in accordance with UK Habitat Classification v2.0 (UKHab, 2023). Descriptions of the habitat types and boundary features are detailed below. Where they applied, secondary codes are included.

Modified Grassland – g4

- 3.3.3 Mown modified grassland was present on the west of the site, the grassland was species poor and had a short sward height. The grassland was dominated by annual meadow grass (*Poa annua*) and perennial rye (*Lolium perenne*) and included cock's foot (*Dactylis glomerata*), yarrow (*Achillea millefolium*), hawkweed (*Hieracium lachenalia*), dandelion (*Taraxacum officinale*), daisy (*Bellis perennis*), dove's-foot crane's-bill (*Geranium molle*), bristly ox-tongue (*Helminthotheca echioides*), lady's bedstraw (*Galium verum*), meadow vetchling (*Lathyrus pratensis*), and greater plantain (*Plantago major*).

Suburban mosaic of developed land and natural surface -introduced shrub – u1d.847

- 3.3.4 At the eastern end of the building was a large area of non-native planting. Species included grey santolina (*Santolina chamaecyparissus*), flaky juniper (*Juniperus squamata*), dwarf mountain pine (*Pinus mugo*), and Japanese yew (*Taxus cuspidate*). This was surrounded on the driveway side by cherry laurel *Prunus laurocerasus* shrubs.
- 3.3.5 In the northwest of the site two areas dominated by *Photinia sp.* were present.

Tree –200

- 3.3.6 A medium wild cherry (*Prunus avium*) and a small silver birch (*Betula pendula*) were identified within the site. Both trees fit the early-mature age class.

Artificial unvegetated; unsealed surface – u1c

- 3.3.7 A paved bicycle parking area, gravel drains and unsealed pathways were also present on site.

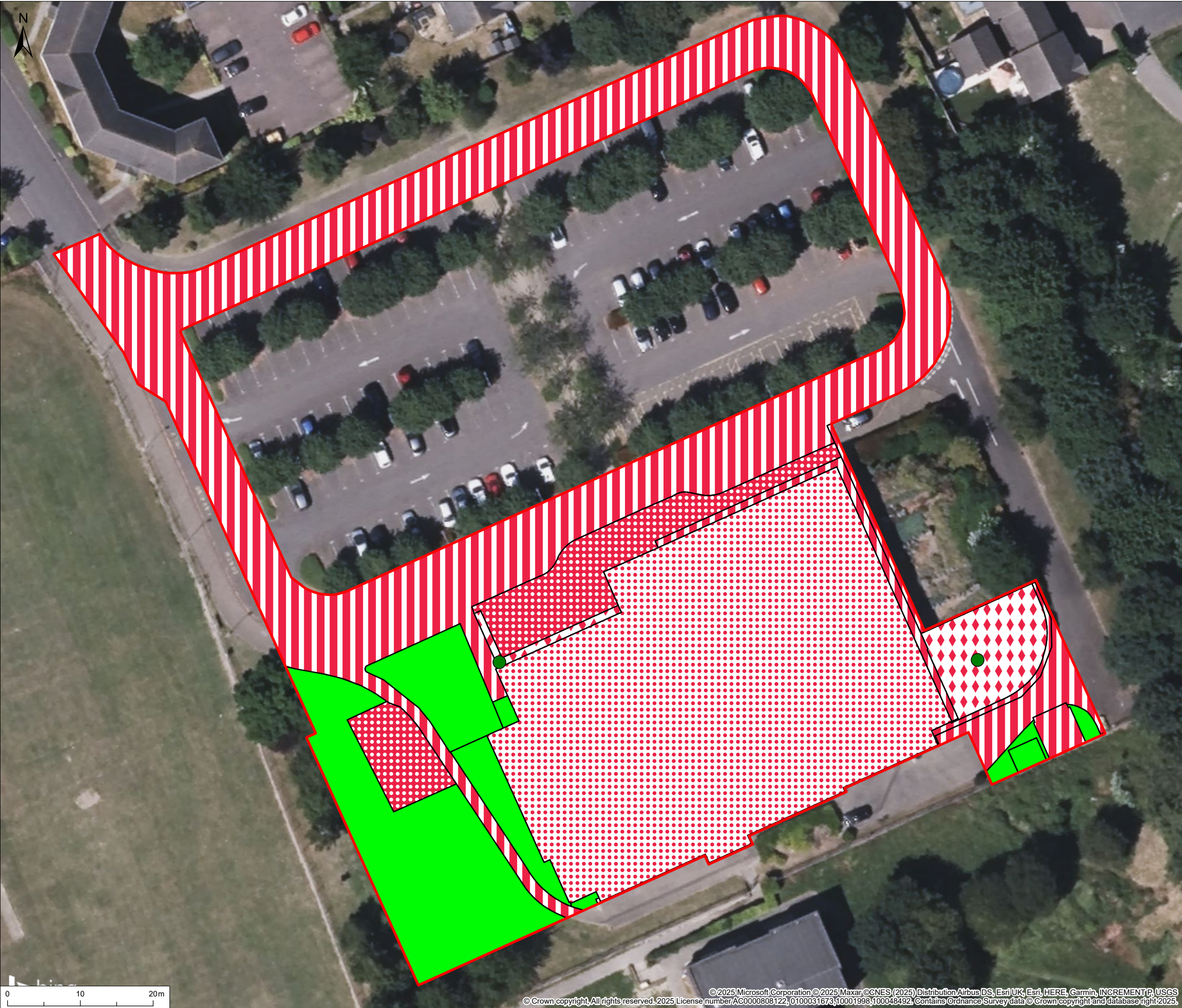
Building – u1b5

- 3.3.8 The site contains one large building constructed using brick, timber and cladding. The building is double storey with a skillion roof. The building is in good condition.

Other developed land – u1b6

- 3.3.9 A large area of the site comprised a carpark and walkways.

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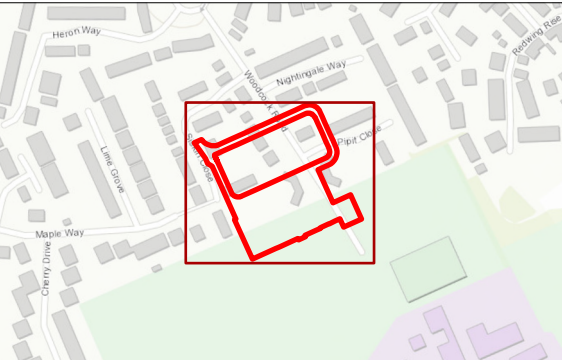
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Notes

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- Legend**
- Site boundary
 - Habitat
 - g4 - Modified grassland
 - u1b - Developed Land; sealed surface
 - u1b5 - Building
 - u1c - Artificial unvegetated; unsealed surface
 - u1d - Suburban mosaic of developed land and natural surface
 - 200 - Tree



Rev	Description	By	CB	Date

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Figure Number		Rev
3.3		04

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3.4 Ecological Scoping Survey

Plants

- 3.4.1 No plant species of conservation interest were noted on site and the site is not considered likely to support any populations of rare or scarce native plants. Therefore, plant species of conservation concern are not considered further in this assessment.

Invertebrates

- 3.4.2 The majority of the site comprises buildings and hard standing with limited areas of low quality grasslands and shrubs. The site is not considered likely to support an invertebrate assemblage of importance at more than a site level. Therefore, invertebrates are not considered further in this assessment.

Reptiles

- 3.4.3 Records for common lizard were returned within 2 km of the site in the desk study. The records nearest to the site were located approximately 1.73 km from the site. The site has some connectivity to adjacent areas of greenspace and parkland.
- 3.4.4 Areas of managed grassland and shrubs within the site may provide sub-optimal habitat for reptiles within the site, however, the connectivity of most of these areas is interrupted by hardstanding.

Amphibians

- 3.4.5 Common toad records were returned within 2 km of the site in the desk study. The records nearest to the site were located approximately 1.73 km from the site. The site has some connectivity to adjacent areas of greenspace and parkland.
- 3.4.6 Areas of managed grassland and shrubs within the site may provide sub-optimal habitat for amphibians, however, the connectivity of most of these areas is interrupted by hardstanding. A potentially dry pond constructed by a recent housing development was identified approximately 210 m southeast of the site via satellite imagery review (Google, 2025).

Birds

- 3.4.7 The site has foraging and nesting habitat with the potential to support common and widespread breeding birds in the trees, scrub, ornamental shrub areas and buildings on site.
- 3.4.8 The offsite trees adjacent to the west and south site boundaries also have potential to support common and widespread breeding birds.

Bats

Commuting / Foraging

- 3.4.9 The site offers moderate suitability to support commuting and foraging bats (Bat Conservation Trust, 2023). The grassland, shrubs and trees on site, when considering the surrounding habitats, have potential to provide foraging and commuting habitat corridors for bats in the local area.

Roosting

- 3.4.10 Records for brown long-eared bat, common pipistrelle, daubenton's bat, natterer's bat and soprano pipistrelle were returned within 2 km of the site in the desk study. The nearest record to the site was located approximately 1.03 km the site.
- 3.4.11 During the walkover potential roosting features (PRFs) were identified within the building on site.

Badgers

- 3.4.12 Numerous records for badger were returned within 2 km of the site in the desk study. The nearest record to the site was located approximately 0.82 km southeast of the site.
- 3.4.13 No evidence of badgers was identified within the site. Considering the urban nature of the site, it is considered unlikely badgers would use the site.

Dormice

- 3.4.14 The site is not considered suitable to support dormice due to the lack of suitable habitat on site and poor connectivity to surrounding suitable habitats.
- 3.4.15 Furthermore, no dormice records were returned in the data search. Therefore, dormice are not considered further in this report.

Hedgehog

- 3.4.16 Records for hedgehog were returned within 2 km of the site in the desk study. The closest of which was 0.02 km away northeast of the site.
- 3.4.17 The modified grassland and gardens have potential for foraging Hedgehogs.

Other Mammals

- 3.4.18 Records for brown hare, stoat and polecat were returned within 2 km of the site in the desk study.
- 3.4.19 No other mammal species of conservation significance were recorded during the site visit.
- 3.4.20 The site provides some suitable foraging habitat for small mammals.

4 EVALUATION AND POTENTIAL IMPACTS

4.1 Designated sites

- 4.1.1 The proposals do not directly affect any statutory or non-statutory designated sites. The closest statutory site is Holland Hall (Melbourn) Railway Cutting SSSI, located approximately 0.76 km from the site. The nearest non-statutory site is Shaftesbury Green LWS, located 1.09 km from the site.
- 4.1.2 All of the designated sites are sufficiently far from the site, with urban, intervening habitats, meaning that the proposals (especially considering the small nature of the works) would be unlikely to have any effect upon the features for which the sites are designated.

4.2 Habitats

- 4.2.1 The proposals will see the removal of:
- Modified grassland to facilitate the construction of the proposed cycle parking and substation;
 - Vegetated gardens to facilitate the ASHP compound and building extension; and
 - Two urban trees to facilitate the construction of the ASHP compound and building extension.
- 4.2.2 In England, Biodiversity Net Gain (BNG) is mandatory for all qualifying developments, with developers required to demonstrate a 10% net gain for biodiversity as a result of development.
- 4.2.3 A BNG Assessment (RPS, 2025a) is being submitted with the application, achieving at least 10% BNG.
- 4.2.4 Furthermore, a landscape masterplan (RPS, 2025b) is being submitted with the application, and will see on site habitat creation and/or enhancement to meet BNG requirements.

4.3 Species

Reptiles

- 4.3.1 All common UK reptile species (adder *Vipera berus*), grass snake (*Natrix Helvetica*), common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*) are protected through part of Section 9(1 and 5) of the Wildlife and Countryside Act 1981 (as amended). These species are also listed in Section 41 of the NERC Act 2006.
- 4.3.2 The proposals involve the removal of managed grassland and gardens that could provide sub-optimal habitat for reptiles; however, due to the low quality and limited removal it is not expected the removal will affect reptiles. Therefore, no further surveys are required, and reptiles are not considered to pose a risk to the development.

Amphibians

- 4.3.3 Common toads are listed as a species of principal importance under the Natural Environment and Rural Communities (NERC) Act (2006) because of recent declines. This means that the species should be considered during planning and development.
- 4.3.4 Areas of managed grassland and shrubs within the site may provide sub-optimal habitat for amphibians. Furthermore, due to the low quality and limited removal of sub-optimal modified grassland and gardens it is not expected the removal will affect amphibians. Therefore, no further surveys are required, and amphibians are not considered to pose a risk to the development.

Breeding birds

- 4.3.5 Breeding birds are protected by the Wildlife and Countryside Act 1981 (as amended) (WCA). Under this legislation it is an offence to intentionally kill, injure or take the birds or their eggs, or to intentionally destroy or disturb a nest, when it is in use or being built.
- 4.3.6 As common species of bird may use the building and trees, which are to be removed, for nesting and Schedule 1 WCA species could be disturbed if nesting in trees in the site, in order to prevent any legislative offences during construction, mitigation measure have been recommended in **Section 5.2**.

Bats

- 4.3.7 All species of bat present in the UK receive full protection under The Conservation of Habitats and Species (EU Exit) Regulations 2019, and the Wildlife and Countryside Act 1981 (as amended). Several bat species are also listed in Section 41 of the NERC Act 2006. These include the widespread species soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus*, and the rarer woodland species such as Bechstein's *Myotis bechsteinii* and barbastelle *Barbastella barbastellus*.

Commuting/ Foraging

- 4.3.8 As the site offers moderate suitability for commuting/ foraging bats, bats may be impacted by lighting; therefore, mitigation measures have been introduced in **Section 5.2**.
- 4.3.9 As the vegetation removal is of small areas of low quality habitat, it is not anticipated that commuting and foraging bats will be impacted.

Roosting

- 4.3.10 The buildings contain potential roosting features (PRFs) and the proposals involve work on the buildings. Roosting bats therefore have potential to be directly impacted as a result of the works.
- 4.3.11 Therefore, mitigation and further survey recommendations are provided in **Section 5.2**.

Badgers

- 4.3.12 Badgers and their setts are protected by the Protection of Badgers Act 1992. This makes it a criminal offence to kill/injure a badger, interfere with or damage a sett or disturb a badger occupying a sett. If a sett is likely to be disturbed or destroyed a license will be required from Natural England and options to minimise impact to the species should be considered.
- 4.3.13 No evidence of badger activity was identified during the survey and no setts were found. Although badger records were returned within the desk study, due to small scale and nature of the works, it is not anticipated that badgers will be impacted by the works. Therefore, no further surveys are required, and badgers are unlikely to be negatively impacted by the proposed development.
- 4.3.14 However, mitigation recommendations are provided in **Section 5.2** to ensure badgers are not impacted by works.

Hedgehog

- 4.3.15 Although it is unlikely, it is possible that hedgehog may use the site for foraging. Hedgehogs are a Section 41 species and therefore a material planning consideration.

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- 4.3.16 Due to the due to small scale and nature of the works, it is not anticipated that hedgehogs will be impacted as a result of the works. Furthermore, mitigation measures outlined in **Section 5.2** to protect badgers will protect hedgehogs during works.

Other mammals

- 4.3.17 All wild mammals are protected from unnecessary suffering and asphyxiation under the Wild Mammals (Protection) Act 1996.
- 4.3.18 Due to the due to small scale and nature of the works, it is not anticipated that other mammal species will be impacted as a result of the works. Furthermore, mitigation measures outlined in **Section 5.2** to protect badgers will protect other mammals during works.

5 MITIGATION AND ENHANCEMENT

5.1 Habitats

- 5.1.1 Mandatory biodiversity net gain for developments in England is set out in the Environment Act 2021. The Town & Country Planning Act 1990 has been amended, to set out the requirement of a 10% net gain to be achieved by all developments. A Biodiversity Net Gain Assessment is being submitted with the application (RPS, 2025a).

5.2 Species

Breeding Birds

- 5.2.1 To avoid offences such as damaging or destroying active nests during works, prior to construction it is recommended works be undertaken outside of the bird breeding season (March to September). If this is not possible, building and vegetation should be checked prior to clearance by a suitably experienced ecologist, and any active nests found must be left undisturbed, with a suitable buffer, until the chicks have fledged.

Bats

Commuting / foraging

- 5.2.2 In order to protect foraging/commuting bats, should any lighting be deemed necessary during construction a sensitive lighting scheme should be implemented so that no increase in the amount of light is experienced by vegetated areas adjacent to the site. The points listed below will help to minimise potential impact from lighting:
- Avoid illumination of retained boundary features including trees, hedges and neighbouring vegetation;
 - Use light sources that emit minimal ultraviolet light and avoid white or blue wavelengths to avoid attracting lots of insects (attracting insects to lamps may reduce their abundance in darker foraging areas favoured by bats);
 - 2700 Kelvin colour temperature LED floodlights delivering warm white spectrum lighting;
 - Back shields and side shields added to all AMNIS LED floodlights, to reduce spill light and back light as much as practically possible; and
 - LED floodlights with >550nm peak wavelengths to avoid the component of light most disturbing to bats (Stone, 2012).
- 5.2.3 If the above lighting recommendations cannot be adhered to, further, more detailed bat night-time walkover surveys may be necessary, to determine the level of bat activity present on site.

Roosting

- 5.2.4 A Preliminary Bat Roost Assessment (PBRA) of the buildings should be completed in line with current industry standards (BCT, 2023). The purpose of these initial surveys are to look for evidence of bat roosts in the buildings such as droppings, live/dead bats, fur/urine staining and feeding remains and to fully classify the potential for supporting roosting bats.
- 5.2.5 Where suitable roosting features are identified, further surveys will be required such as dusk emergence surveys. Surveys should coincide with the survey season (May-September inclusive).

If multiple surveys are required (dependent on the results of the PBRA), then these should be carried out at least three weeks apart.

5.2.6 The results of this survey will inform the required mitigation. Should bats be found roosting in any of the structures on site, a license will be required from Natural England to proceed with the works, detailing specific measures to ensure any bat species are not harmed as a result of the development.

5.2.7 A PBRA has been prepared and will be submitted with the application (RPS, 2024).

Badgers

5.2.8 During construction the following should be implemented in order to prevent harm to foraging and commuting badgers (and other species) will need to be implemented to prevent harm as follows:

- All rubbish to be picked up daily and stored appropriately;
- Any open excavations must be covered overnight; and
- Any hazardous materials to be stored in a secure store.

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Appendix A Relevant Legislation

A.1 REPTILES

All common UK reptile species (adder *Vipera berus*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and slow worm *Anguis fragilis*) are protected through part of Section 9 (1 and 5) of the Wildlife & Countryside Act 1981 (as amended). This prohibits:

- Intentional or reckless injuring or killing;
- Selling, offering or exposing for sale, or having in possession or transporting for the purpose of sale, any live or dead wild animal or any part of, or anything derived from, such an animal; or
- Publishing or causing to be published any advertisement likely to be understood as conveying buying or selling, or intending to buy or sell, any of those things.

A.2 BIRDS

All birds, their nests and eggs are afforded protection under the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. It is an offence to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; and
- intentionally take or destroy the egg of any wild bird.

Schedule 1 birds cannot be intentionally or recklessly disturbed when nesting and there are increased penalties for doing so. Licences can be issued to visit the nests of such birds for conservation, scientific or photographic purposes but not to allow disturbance during a development even in circumstances where that development is fully authorised by consents such as a valid planning permission.

A.3 BATS

All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. All British bats are also included on Schedule 2 of The Conservation of Habitats and Species Regulations 2019 as European Protected Species. It is an offence to:

- intentionally or recklessly kill, injure or capture bats;
- deliberately or recklessly disturb bats (whether in a roost or not); and
- damage, destroy or obstruct access to bat roosts

A roost is defined as 'any structure or place which [a bat] uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present at the time of survey.

A licence will therefore be required by those who carry out any operation that would otherwise result in offences being committed.

The following bat species are listed as being of principal importance for the conservation of biodiversity in England, (commonly referred to as UKBAP Priority species): barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, greater horseshoe, and lesser horseshoe.

A.4 BADGER

Badgers are protected under the Protection of Badgers Act 1992. This act is based on the need to protect badgers from baiting and deliberate harm or injury. The act makes it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger, or attempt to do so;

- 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 routes.

A sett is defined as “any structure or place that displays signs indicating current use by a badger”.

A.5 DORMOUSE

Hazel Dormouse *Muscardinus avellanarius* is fully protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2019. The Regulations prohibit:

- Intentionally, recklessly or deliberately kill, injure or take a Dormouse;
- The deliberate disturbance of this species in such a way as to be significantly likely to affect:
 - Their ability of to survive, hibernate, migrate, breed, or rear or nurture their young; or;
 - The local distribution or abundance of Dormice.
- Damage or destruction of a breeding site or resting place (nest);
- The possession or transport of Dormice or any other part of.

Dormice are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion in Schedule 5. Under the Act, they are protected from:

- Intentional or reckless disturbance (at any level);
- Obstruction of access to any place of shelter, breeding or rest;
- Selling, bartering or exchange of these species, or parts of.

Offences can be deliberate, intentional or reckless and penalties for any of the above include fines of up to £5k and imprisonment of up to 6 months, per animal affected.

Dormice are also listed on Section 41 of the NERC Act 2006 as a Species of Principal Importance; national objectives & targets include the maintenance of the geographical range and viability of existing Dormice populations to ensure that it remains in favourable conservation status.

Appendix B Site Photos

Description	Photo
Proposed vegetation removal in the northwest of the site (1 of 2).	
Proposed vegetation removal in the northwest of the site (2 of 2).	

Description	Photo
Area of vegetated garden and tree removal in the southeast of the site to facilitate the ASHP compound.	

BNG enhancement area in foreground	
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