



Surrey Wildlife Trust
Ecology Services

Ecology Report

Havelock Farm

Royal Botanic Gardens Kew



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Wildlife Trust
Consultancies



Constructionline
Gold Member



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Validity of report (Chartered Institute of Ecology and Environmental Management, 2019)	In most cases, this report will be valid for 12 months. Where habitat management has not been altered and new features have not formed, it is possible the report remains valid for between 12 and 18 months, however it is advised an updated site visit is undertaken to confirm this. Where more than 18 months have elapsed, an ecologist should review the information to confirm whether the information in this report can be relied upon. Reports more than three years old are unlikely to remain valid.		

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Acronyms

Acronym	Definition
ACIEEM	Associate Member of CIEEM
AONB	Area of Outstanding Natural Beauty
AWI	Ancient Woodland Indicator
BCT	Bat Conservation Trust
BER	Bat Earned Recognition
BNG	Biodiversity Net Gain
BSI	British Standard Institute
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
DAFOR	Dominant, Abundant, Frequent, Occasional, Rare
DEFRA	Department for Environment, Food and Rural Affairs
EEC	European Economic Community
EIA	Environmental Impact Assessment
GCN	Great crested newt
GIS	Geographic Information System
HGBI	Herpetofauna Groups of Britain and Ireland
HMMP	Habitat Management and Monitoring plan
HPI	Habitats of Principal Importance
HRA	Habitat Regulations Assessment
IEMA	Institute of Environmental Management and Assessment
ILP	Institute for Lighting Professionals
JNCC	Joint Nature Conservation Committee
JSTOR	Journal Storage
LED	Light-emitting diode
LEMP	Landscape and Ecological Management Plan
LISI	London Invasive Species Initiative
LNR	Local Nature Reserve
LPA	Local Planning Authority
LWS	Local Wildlife Site
MAGIC	Multi-Agency Geographic Information for the Countryside
NERC	Natural Environment and Rural Communities
NGO	Non-governmental organisation
NPPF	National Planning Policy Framework
NSL	Noctule, Serotine, Leisler's
ODPM	Office of the Deputy Prime Minister
P/LA	Presence/Likely Absence
PEA	Preliminary Ecological Appraisal
PMoW	Precautionary Method of Works
PRA	Preliminary Roost Assessment
PRF	Preliminary Roost Feature
SAC	Special Areas of Conservation
SPA	Special Protection Areas
SPI	Species of Principal Importance
SSSI	Site of Special Scientific Interest
SWT	Surrey Wildlife Trust
TBC	To be confirmed
VAT	Value Added Tax

Table 1: Ecological Impact Assessment (EcIA) planning checklist

EcIA Criteria ¹		Addressed	Report section
Pre-app/ scope	Where pre-application has been received from the LPA and/or an NGO and/or statutory body (e.g. Natural England's Discretionary Advice Service), it has been fully accounted for in the EcIA.	N/A	N/A
	The scope, structure and content of the EcIA is in accordance with published good practice.	Yes	4
Surveys, sites, species and habitats	Adequate and up-to-date: Desk study has been undertaken. Phase 1 habitat survey (or equivalent) has been undertaken. Phase 2 ecology surveys have been undertaken (where necessary).	Yes	4 (plus relevant appendices)
	All statutory and non-statutory sites likely to be significantly affected are clearly and correctly identified.	Yes	4
	All protected or priority species and priority habitats likely to be significantly affected are clearly and correctly identified, and adequate surveys have been undertaken to inform the baseline.	Yes	4 and 5
	Any invasive non-native plant species present are clearly and correctly identified.	Yes	4 and 5
	Where a separate PEA Report states that Phase 2 ecology surveys are required, these have been undertaken in full, and results submitted with the application (or lack of such surveys is justified).	Yes	4
Impacts and Effects	The assessment is based on clearly defined development proposals along with relevant drawings/plans (and any plans used are the same version number as those submitted with the application) or The residual ecological effects are considered to be not significant at any geographical scale irrespective of the detailed development proposals, and the assessment is based on a worst-case scenario.	Yes	6 and Appendix 5
	The report clearly describes and assesses all likely significant ecological effects (including cumulative effects) clearly stating the geographical scale of significance (where relevant).	Yes	4 and Table 4
Mitigation, compensation and enhancement	The mitigation hierarchy has been clearly followed.	Yes	6 and Table 6
	The report: Clearly identifies the proposed mitigation and compensation measures and explains how these will adequately address all likely significant adverse effects. Includes, where necessary, proposals for post-construction monitoring. Recommends how proposed measures may be secured through planning conditions/obligations and/or necessary licences.	Yes	5 and Table 4
	A summary table of proposed mitigation and compensation measures has been provided.	Yes	1
	The need for any mitigation licences required in relation to protected species is clearly identified.	Yes	1
	Proposals to deliver ecological enhancement have been provided.	Yes	6
Competence/ good practice	Limitations of the ecological work have been correctly identified and the implications explained.	Yes	Table 3
	All relevant key timing issues (e.g. site vegetation clearance or roof removal) that may constrain or adversely affect the proposed timing of development have been identified.	Yes	Table 4
	All ecological work and surveys accord with published good practice methods and guidelines OR deviation from such guidelines is made clear and fully justified, and the implications for subsequent conclusions and recommendations made explicit in the report.	Yes	4, Table 3 and relevant appendix for habitats and species
	All ecologists and surveyors hold appropriate species licences (where relevant) and/or have all necessary competencies to conduct the work undertaken.	Yes	Relevant appendix for habitat and species
Conclusions	The report clearly identifies where the proposed development complies with relevant legislation and policy, highlighting any possible non-compliance issues, and highlighting circumstances where a conclusion cannot be drawn as it requires an assessment of non-ecological issues (such as socio-economic ones).	Yes	3, Table 4
	The report provides a clear summary of losses and gains for biodiversity, and a justified conclusion of an overall net gain for biodiversity.	Yes	6 and Table 5
	Justifiable conclusions based on sound professional judgement have been drawn as to the significance of effects on any designated site, protected or priority habitat/species or other ecological feature, and a justified scale of significance has been stated.	Yes	4

¹ To ensure decisions are based on adequate information in accordance with Clauses 6.2 and 8.1 of BS42020:2013

1 Summary

- 1.1.1 This updated Ecology Report has been prepared to inform a planning application. The key results and recommendations are detailed below.
- 1.1.2 All surveys required to inform the planning application and ecological impact assessment have been undertaken in line with best practice.

1.2 Executive summary

Project overview

Aim of the report	Identify the ecological receptors present (i.e. baseline conditions). Assess the impact of the proposals on the ecological receptors present. Characterise the impacts (e.g. extent, magnitude, duration, reversibility, timing and frequency). Identify the cumulative impacts. Recommend: - Measures to avoid impacts on the ecological receptors (e.g. alternative designs) - Mitigation measures to minimise the impact on the ecological receptors - Opportunities for ecological compensation where residual impacts are unavoidable - Enhancement opportunities to provide net benefits for biodiversity over and above the minimum requirements Conclude on the residual impacts with the implementation of the mitigation measures.
Project description	The proposed development, known as Havelock Farm Refurbishment, is for the refurbishment and conversion of the Havelock Farm site buildings as new staff offices and as an educational centre for Kew. This new project falls within the red line planning boundary for the project referred to as Wakehurst Conservation and Research Nursery (WCRN), for which a planning application has been submitted (reference DM/24/1068, received 29th April 2024). A number of ecological reports have previously been issued for the WCRN project (which the Havelock Farm area forms a part of), and these are as follows: 21-1903.01 Preliminary Ecological Appraisal (Delta-Simons, 2021), issued 26th of November 2021. 21-1903.02 Ecological Impact Assessment (Delta-Simons, 2022), issued 30th November 2022 6136-B/1.0 Biodiversity Net Gain Assessment (SWT Ecology Services, 2023), issued 31st of March 2023. 6136-B Bat mitigation strategy and hazel dormice method statement (SWT Ecology Services, 2023) issued 30th March 2023, updated 20th October 2023. 6136-C/1.0 Updated Biodiversity Assessment Report (SWT Ecology Services, 2023) issued 17th September 2023. 6136-C/1.0 CEMP (Biodiversity) Report (SWT Ecology Services, 2023), issued 18th October 2023. 6136-C/1.0 LEMP and BCES Report (SWT Ecology Services, 2023), issued 5th December 2023. Given that the PEA and the bat survey were undertaken over a year ago, the following updates surveys/assessments were completed to inform this ecology report of the Havelock Farm area. - Updated Preliminary Ecological Appraisal, including UK habitat survey and condition assessment. - Updated Preliminary Roost Assessment - Updated bat Presence/Likely Absence survey of B2 The following development and landscaping plans were reviewed to inform the report, although there has been a reduction in the development boundary since their receipt, such that the development boundary now includes only part of the building and some developed land; sealed surface, see also Figure 1 in this report: 6730-LLB-XX-XX-DR-0001 dated 19/08/2024 6730-LLB-SH-L-0001-S3-P01_Plant Schedule Prelim dated 16/08/2024
Planning consent type	Full planning consent
Local planning authority	Mid Sussex District Council
Survey information	Survey dates are detailed in Table 3. No residual limitations were recorded during the assessment and as such all data can be relied upon for the EcIA.

1.3 Baseline information scoped into the EcIA

1.3.1 Baseline information scoped into the EcIA is detailed below. The full survey information is provided in the relevant appendix for the sites, habitats and species considered, along with information as to why these were unlikely to be impacted by the proposals and scoped out of the EcIA.

Habitats of ecological consideration recorded in the desk study

HPI	The survey area lies adjacent to an area mapped as deciduous woodland on the Priority Habitat Inventory (England).
Waterbodies within 250m/500m	- There are five water bodies within 250m of the survey area. - There are a further four water bodies within 500m of the survey area
Watercourses within 250/500m	- There is one water course within 250m of the survey area. - There are a further two watercourses within 500m of the survey area.

Habitats

UK habitat classification and code	Compartment number (refer to Figure 1)	Confirmed as HPI ²	Habitat condition	Summary of impact of proposed development	Summary of opportunities for enhancement
u1b5: Buildings	1	No	Not applicable	Disturbance, damage or destruction of two bat roosts and one bird nest under the development proposals.	Opportunities for installation of bat and bird boxes across the building.

² Confirmed through surveys or MAGIC mapping of HPI boundaries

UK habitat classification and code	Compartment number (refer to Figure 1)	Confirmed as HPI ²	Habitat condition	Summary of impact of proposed development	Summary of opportunities for enhancement
u1b5: Buildings	1	No	Poor	Area may be removed or retained under development proposals. Green wall habitat supports Schedule 9 invasive non-native species; measures should be taken to ensure this species does not spread into semi-natural habitat.	Opportunity to create new ground based green walls with native (or non-invasive) creeping plant species.
u1b-developed land; sealed surface	2				
842-Ground based green wall BNG Code: 1121 <i>Ground based green wall</i>	4				

Species

Species group	Species	Recorded in the desk study	Summary of survey results	Further ecological surveys required to complete EcIA	Optimal seasonal timing as per Appendix 7 and number of survey visits
Amphibian	Common frog Common toad Smooth newt Great crested newt	Yes	There are nine waterbodies within 500m of the survey area. P/LA and eDNA surveys for GCN were completed by Delta-Simons in 2022 of WB2 located 80m to the west of the survey area. These surveys found no evidence of GCN, and they were considered likely absent from this waterbody. The survey area has no suitable habitat for amphibians.	No	None required
Reptiles	Slow-worm Grass snake	No	The survey area has no suitable habitat for reptiles.	No	None required
Birds	Common types	Yes	Building B2 has suitability for nesting birds, and a bird nest was identified within the building (TN1).	No	None required
Mammals	Bats	Yes	Building B2 has two known bat roosts present. R1 – A occasional or transitional roost of a single brown long eared. R2 – A day roost of a single common pipistrelle. No works to the building are proposed to the part of the building where this roost is located.	No	None required
	Hedgehog	Yes	There is some low-quality habitat present within the survey area that has suitability for foraging hedgehog.	No	None required
	Other mammals	N/A	There is some low-quality habitat present within the survey area that has suitability for other mammals such as foraging fox. No mammal holes were identified within the survey area, or in accessible areas within 30m of the survey area.	No	Not applicable
All species	Invasive, non-native species	N/A	The schedule 9 invasive species false Virginia creeper is present on site. Some butterfly-bush is present on site.	No	None required

1.4 Summary of Ecological Impact Assessment

Summary of mitigation measures that need to be incorporated into the construction phase of the project

- In the unlikely event a reptile or great crested newt is recorded during the works, works must cease, and an ecologist/ Natural England contacted.
- Timing of works to minimise impacts to biodiversity and supervised habitat removal where impacts cannot be avoided.
- Undertake building works between September and February, outside the breeding bird season. Where this cannot be avoided, works will need to be supervised by an ecologist, and identified nests adequately protected until chicks have fledged.
- Construction lighting to be directed away from the woodland block the south of the survey area, as this was identified as being used by bats as a foraging/commuting feature during the bat P/LA surveys.
- Checking of piles of material such as bricks ahead of vegetation clearance if this is occurring outside the optimal season.
- Using material from site to create habitat piles elsewhere to enhance these for biodiversity.
- Appropriate storage of any stored materials/waste piles and other site materials. Any trenches should be covered over-night to protect amphibians, reptiles, hedgehog and other mammals.

Summary of mitigation measures that need to be incorporated into project design (operational phase)

- Install bird boxes suitable for a range of species onto the building and in suitable trees outside of the survey area.
- Installation of bat boxes on suitable areas of B2 or nearby trees as mitigation, compensation and enhancement.
-

Ecological receptors with residual negative impacts larger than minor

- None anticipated.

Ecological receptors with residual positive impact

- Bats
- Birds

1.5 Mitigation licences required

A Bat Earned Recognition (BER) Licence is currently in place for the proposed works to B2.

1.6 Biodiversity net gain exemption

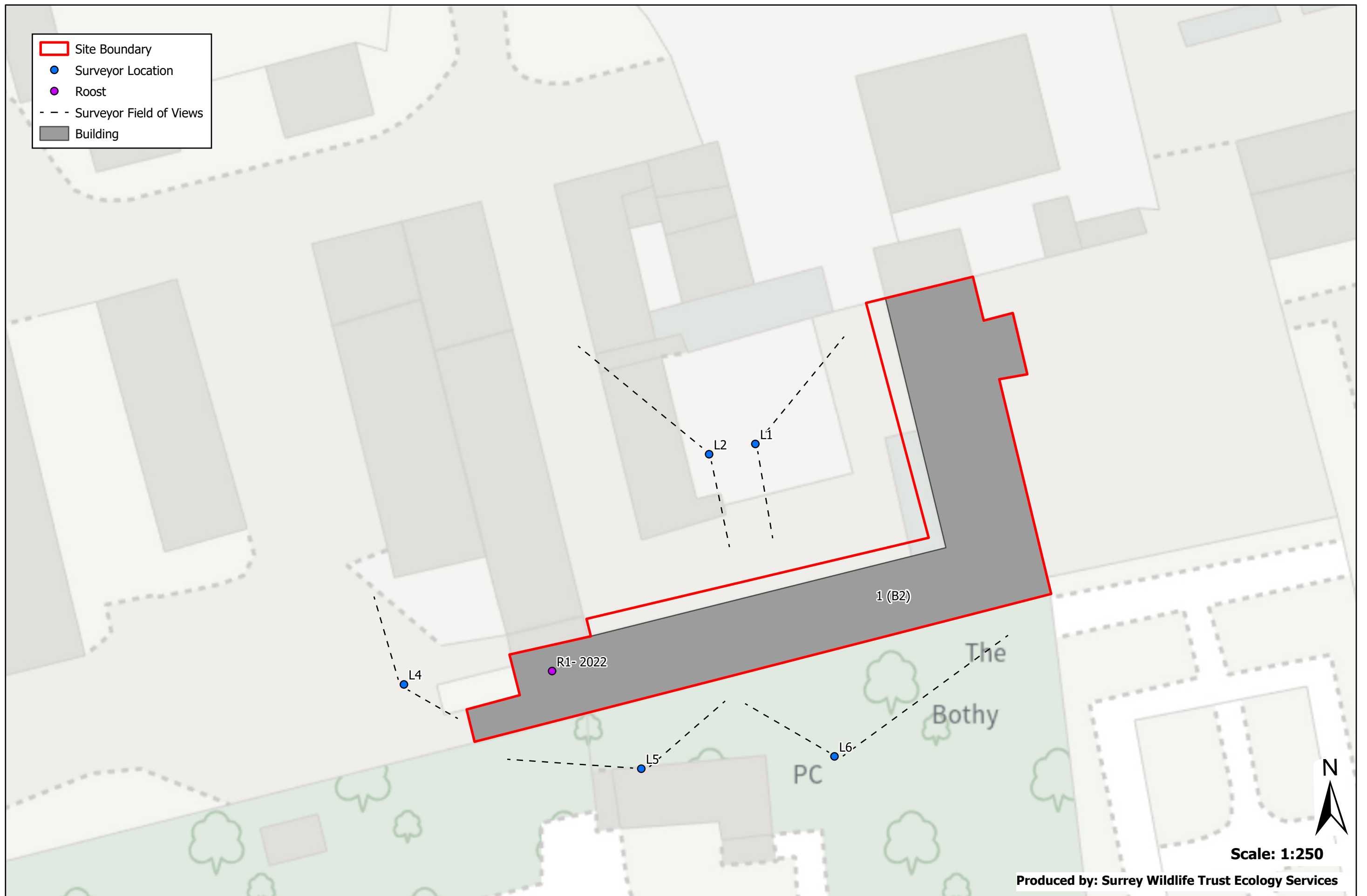
The total application boundary area is approximately 392m² covering buildings, developed land sealed surface and a ground based green wall. Under government guidance, development proposals that do not impact a priority habitat and impacts less than 25m² (5m by 5m) of on-site habitat are exempt from the mandatory biodiversity net gain (BNG) requirements (GOV.UK, accessed 25/02/2026). The only vegetated habitat within the application boundary is the green wall, which covers an extent of 24m², and as such proposals are considered to be exempt from mandatory Biodiversity Net Gain.

1.7 Summary of biodiversity enhancement measures for species

Feature type	Species suitability	Additional box information	Where to place	Number of features required
Multi Chamber Wood Stone Bat Box or equivalent.	Brown long eared bat (suitable for maternity roosts)	Box information from current BER bat licence	Integrated bat box on B2 or on suitable trees or buildings within the Zol of the development across the Havelock farm estate.	1
Cavity Bat Box or equivalent.	Brown long eared bat			2
Multi Chamber Wood Stone Bat Box or equivalent.	Common pipistrelle (suitable for maternity roosts)	Additional boxes for new roost enhancement		1
Cavity Bat Box or equivalent.	Common pipistrelle			1
Vivara Pro Seville 32mm WoodStone Nest Box or equivalent.	Suitable for a range of garden bird species including blue tits, tree sparrows, house sparrows, great tits, crested tits, nuthatches, coal tits and pied flycatchers.	NA		2
Total				7







2 Introduction

2.1 Project proposals

- 2.1.1 The project proposals are for the refurbishment and conversion of the Havelock Farm site buildings as new staff offices and as an educational centre for Kew. This new project falls within the red line planning boundary for the project referred to as Wakehurst Conservation and Research Nursery (WCRN), for which a planning application has been submitted (reference DM/24/1068, received 29th April 2024). However, these development proposals are for a separate planning application.

2.2 Survey area

- 2.2.1 The survey area, presented in Figure 1, comprises the development boundary. It is located at Havelock Farm, Wakehurst Place, Selsfield Road, Ardingly, Haywards Heath, RH17 6TN (GR: TQ 3383 3146). The survey area consists of an old farm building (B2) and its immediate grounds. Located within the larger grounds of Kew Gardens Wakehurst, and the survey area is surrounded by ornamental and botanical gardens and associated buildings, woodland and grasslands.

3 Legislative and planning policy framework

- 3.1.1 All projects need to comply with relevant UK legislation, as detailed in Appendix 1.
- 3.1.2 Projects must also comply with relevant national and local planning policies, as detailed in Appendix 1. The relevance of these was reviewed to ensure recommendations relating to sites, habitats and species in the EcIA reflected legal and planning policy consideration, as detailed in Section 5.

4 Methods

4.1 Collection of baseline information

- 4.1.1 Table 2 presents a summary of the scope of work and methods undertaken to identify the ecological receptors currently or potentially present in the survey area (baseline conditions), with detailed survey methods and results provided in the relevant appendix. Appropriately trained and competent ecologists have undertaken all surveys.

Table 2: Scope of work and methods undertaken

Scope type	Species group	Scope of work and methodology	Report or appendix reference with detailed methods and results	Date surveys commenced	Residual limitations recorded	Further assessment required to inform EcIA/HRA
Desk study		Purchase of data from the local record centre that includes statutory designated sites, non-statutory designated sites, records of protected species and species of conservation concern	21-1903.01 PEA (Delta-Simons, 2021)	November 2021	No	No
		Review of local plan	Appendix 1	25/10/2024	No	No
		Review of biodiversity opportunity areas	Appendix 2	25/10/2024	No	No
		Review of mitigation licences	Appendix 2	25/10/2024	No	No
		Review of parcels of ancient woodland	Appendix 2	25/10/2024	No	No
		Review of parcels of habitats of principal importance	Appendix 2	25/10/2024	No	No
		Review of impact risk zones for statutory designated sites	Appendix 2	25/10/2024	No	No
Habitat survey		UK habitat classification	Appendix 3	30/09/2024	No	No
		Habitat condition assessment	Appendix 3	30/09/2024	No	No
Invertebrate		Habitat assessment	Appendix 3	30/09/2024	No	No
Amphibians		Check for mitigation licences within 2km	Appendix 2	25/10/2024	No	No
		Habitat Suitability Index Assessment of one waterbody	21-1903.02 EcIA (Delta-Simons, 2022)	21/04/2022	No	No
		Presence/likely absence using eDNA of one waterbody	21-1903.02 EcIA (Delta-Simons, 2022)	21/04/2022	No	No
		Presence/likely absence using egg search; bottle trapping; and torching, of one waterbody	21-1903.02 EcIA (Delta-Simons, 2022)	21/04/2022	No	No
Reptiles		Habitat assessment	Appendix 3	30/09/2024	No	No
Birds		Habitat assessment	Appendix 3	30/09/2024	No	No
Mammals	Badger	Habitat assessment	Appendix 3	30/09/2024	No	No
	Bats	Check for mitigation licences within 2km	Appendix 2	25/10/2024	No	No
		Preliminary Roost Assessment of building B (2021)	21-1903.01 PEA (Delta-Simons, 2021)	04/11/2021	No	No
		Three summer roost presence/likely absence surveys of building B2 (2022).	21-1903.02 EcIA (Delta-Simons, 2022)	12/05/2022 25/05/2022 21/09/2022	No	No
		Update summer roost presence/likely absence survey of building B2.	Appendix 4	30/09/2024	No	No
	Hazel dormouse	Check for mitigation licences within 2km	Appendix 2	25/10/2024	No	No
		Habitat assessment	Appendix 3	30/09/2024	No	No
		Presence/likely absence survey	21-1903.02 EcIA (Delta-Simons, 2022)	29/03/2022	No	No
	Otter	Check for mitigation licences within 2km	Appendix 2	25/10/2024	No	No
		Habitat assessment	Appendix 3	30/09/2024	No	No
	Water vole	Check for mitigation licences within 2km	Appendix 2	25/10/2024	No	No
		Habitat assessment	Appendix 3	30/09/2024	No	No
	Western European hedgehog	Habitat assessment	Appendix 3	30/09/2024	No	No
	Other mammals	Habitat assessment	Appendix 3	30/09/2024	No	No
Higher and lower plants	Rare/notable species	Habitat assessment	Appendix 3	30/09/2024	No	No
All species	Invasive/non-native species	Habitat assessment	Appendix 3	30/09/2024	No	No

4.2 Ecological Impact Assessment

- 4.2.1 Following the collation of baseline information, the EclA was undertaken to ascertain how the project proposals at the construction and operational phase could impact the ecological receptors and determine whether a measurable change from baseline conditions is predicted, resulting in a significant effect. The EclA was undertaken in line with best practice methodology (Chartered Institute of Ecology and Environmental Management, 2022b) and reflected the scale of the project to ensure a proportionate approach was undertaken. Ecological features that would not be impacted by the proposals were scoped out of the assessment.
- 4.2.2 Throughout the process, the ecologist used the best available scientific knowledge in assessing impacts and applied a precautionary principle. Therefore, where insufficient information was available to justify a robust conclusion of no significant effect, a significant effect was assumed.
- 4.2.3 For the ecological receptors scoped into the assessment, the impact of the development proposals was assessed. Impacts were considered significant where a measurable change from baseline conditions are predicted. Factors that were considered included are presented in Table 3, as defined in (Chartered Institute of Ecology and Environmental Management, 2022b).

Table 3: Impact characteristics

Characteristic	Definition
Positive or negative impact	Positive impact results in an improvement in the quality of the environment, such as increasing connectivity or extending habitat; increasing conservation status of a species, habitat or designated site, in terms of distribution and/or population size.
	Negative impact results in a change which reduces the quality of the environment, such as destruction or fragmentation of habitat; decreasing conservation status in terms of distribution and/or population size.
Extent	Spatial or geographical area affected
Magnitude	Amount affected by the project, including size, amount, intensity and volume. Impacts are also defined as being direct, indirect, secondary or cumulative
Duration	Defined in relation to the ecological feature. Effects are described as short, medium or long-term and permanent or temporary.
Frequency or timing	The number of times an event occurs, and timing relates to a particular season
Reversibility	Defined as reversible or irreversible.

5 Ecological Impact Assessment

5.1.1 The following ecological receptors were scoped into the EclA:

Habitats

- u1b5: Building \b2
- u1b5 -842: Ground based green wall

Species

- Birds
- Bats

5.1.2 The impact of the proposed development on each ecological receptor scoped into the assessment is presented in the table below.

5.1.3 Species scoped out of the assessment include:

- Hazel dormouse, badger, otter, hedgehog, other mammals, and water vole due to lack or sub-optimal habitats present in the survey area.

Table 4: EclA for ecological receptors scoped into the assessment

Ecological receptor name	Construction phase			Operational phase			Recommended actions
	Initial impact	Mitigation measures	Residual impact	Initial impact	Mitigation measures	Residual impact	
HPI's							
Lowland mixed deciduous woodland HPI	There is an area mapped as deciduous woodland Priority Habitat Inventory (England), 5m south of the survey area. The LPA will have due regard for the protection and enhancement of HPI habitats. This woodland could be damaged from construction activities, through damage to roost systems/branches during works. The impact of this will be Low Negative Impact at a Site Level	Avoiding impacts to surrounding woodland outside the red line boundary by ensuring the implementation of adequate protection during the construction period. Do not allow works or heavy track machinery within root protection areas.	With the implementation of mitigation measures, impacts will be Negligible Impact at a Site Level.	The proposals of refurbishment to the existing buildings may result in a change in lighting levels on site. Impacts to the woodland from lighting are Negligible and Not Significant.	Implement root protection areas for woodland trees during construction works. Mitigation measures relating to lighting impacts on bats (see below) will be applicable here.	With the implementation of mitigation, the residual impact will be Minor Negative as a Site Level.	Lighting plans in line with best practice guidance.
Habitats							
u1b5: Buildings B2	Potential impacts to nesting birds and roosting bats during construction activities. See section under birds and bats below			Potential impacts to nesting birds and roosting bats during operational activities. See section under birds and bats below			See section under birds and bats below.
u1b5: Buildings B2 842-Ground based green wall BNG Code: <i>BNG1121: Ground based green wall</i>	The development proposals may lead to the loss of this habitat. The green wall consists of false Virginia creeper which is a Schedule 9 listed non-native invasive under the 1981 Wildlife & Countryside Act. There is potential for this species to spread into the wild without appropriate management. The impact of this will be Low Negative at Local Level.	This species should be removed and disposed of by suitably qualified contractors, if possible, outside of the bird nesting (March to October). Or following a check and confirmed likely absent of nesting birds by a suitably qualified ecologist.	With the implementation of mitigation measures, impacts will be Low Positive Impact at Site Level.	In the operational phase, the survey area will be used as staff offices and as an education centre, as such there will likely be high levels of anthropogenic disturbance to any new planting or landscaping. On this basis, the impact will be Minor Negative at a Site Level.	Replacement planting could include native species-rich shrub/scrub planting, tree planting, or areas of introduced shrub or vegetated garden. Or if replacement with another green wall, native (or non-invasive with known benefit to wildlife) species should be used such as ivy, hops or honeysuckle. To mitigate impacts of high anthropogenic disturbance, it is recommended that any landscaping proposals account for this and that a planting schedule is used with hardy and resistant species.	With the implementation of mitigation measures, the impacts will be Low Positive Impact at Site Level	Removal of Schedule 9 invasive false Virginia creeper by suitably qualified contractors. Creation of soft landscaping to mitigate the losses of this habitat, with a planting mix that is suitable for the high anthropogenic disturbance anticipated for survey area.
Species							
Birds	The survey has suitable habitat for nesting birds within the buildings and a bird's nest was found within part of B2 (TN1). Works to the building could lead to damage, disturbance of bird nests without appropriate mitigation. The loss of this habitat will be Major Negative at a Site Level.	Undertake vegetation removal or building demolition between September and February, outside the breeding bird season. Where this cannot be avoided, works will need to be supervised by an ecologist, and identified nests adequately protected until chicks have fledged. Provide compensatory habitat for the loss of nesting habitat. Install bird boxes suitable for a range of species onto the	With the implementation of the mitigation measures impacts will be Minor Negative at a Site Level.	There will be anthropogenic disturbance to birds during daytime hours when the building is in use. Impact from the operational phase will be Minor Negative at a Site Level.	Install bird boxes onto parts of the building where disturbance is likely to be minimal, away from areas that high footfall is anticipated.	With the implementation of mitigation measures the impacts will be Minor Positive Impact at Site Level.	Sensitive timings of works. Installation of bird boxes. Creation of habitats with suitability for foraging/nesting birds.

		building and in suitable trees outside of the survey area. The survey area can be enhanced for birds by including soft landscaping with features such as mixed shrubs, individual trees, native scrub, introduced shrub and vegetated gardens that will provide foraging/roosting habitat for birds.					
Bats – Foraging and commuting	The habitat present on site was assessed as having low suitability for foraging and commuting bats. A PRA assessment of the buildings on site was completed by Delta-Simons in 2021, there were two buildings present on site B1 was assessed as having low suitability, and B2 having moderate suitability for roosting bats (Delta-Simons, 2021). During the update bat P/LA surveys on 30th September 2024 the following species of bat were recorded: Myotis species; Leisler's; Noctule; Common pipistrelle; Soprano pipistrelle; and Brown long eared. Foraging activity was centred on the woodland located to the south of the survey area. The proposed refurbishment into offices will not result in the loss of building or features, but there will be some disturbance. Impacts to foraging and commuting bats will be Minor Negative at a Site Level.	Construction lighting to be directed away from the woodland block the south of the survey area, as this was identified as being used by bats as a foraging/commuting feature during the bat P/LA surveys. The survey area can be enhanced for bats by including soft landscaping with features such as mixed shrubs, individual trees, native scrub, introduced shrub and vegetated gardens that will provide indirect opportunities for bats by attracting invertebrates.	With the implementation of the mitigation measures impacts will be Minor Negative at a Site Level.	During the operational phase, the building is only likely to be used during normal working hours (8am-6pm), however there may be some occasional disturbance in the evenings from noise and lighting. There may be anthropogenic disturbance in daylight hours from noise that could impact retained roosts or newly installed bat boxes. On this basis, the impact of lighting and disturbance will be Minor Negative at a Site Level.	Lighting for the proposed development should be designed as per best practice guidance (Bat Conservation Trust and Institute of Lighting Professionals, 2023). Methods of achieving this would include: • Recess lighting within the building. • Siting windows to avoid areas of particular interest for bats, identified during the further survey. • Incorporating dark zones within [insert habitat type] in line with foraging and commuting habitat and maintaining this post-development. • For outside areas, using LED lighting that are in the warm spectrum (2700 K) to minimise impacts on bats. Timers, dimmers and off-times could be considered, where possible. Lighting plans should be developed in consultation with a suitably experienced ecologist.	With the implementation of the recommendations, impacts will be Minor Positive Impact at Site Level.	Sensitive lighting. Creation of habitats with suitability for foraging bats.
Bats – Roosting	Bat P/LA surveys were completed of the two buildings in 2022. These surveys identified no roosting bats in B1, and roosting bats were considered likely absent from, building B1. This building was then demolished and is no longer present in the survey area. The 2022 P/LA surveys identified a single brown long eared emerging from B2 on the 25/02/2022, and the building was assessed as having an occasional or transitional roost of a single brown long eared (R1) (Delta-Simons, 2022). An update presence/likely absence survey was undertaken on the 30th of September 2024. During this survey second bat roost was identified with a single	Avoid impacting roosts by retaining these through project design. Works to potential and confirmed roosting features should take place between November and February Installation of bat boxes on suitable areas of B2 or nearby trees as mitigation, compensation and enhancement. A BER License is currently in place for the proposed works to B2. This only covers the brown long-eared bat roost (R1) and may need to be updated to cover the newly identified common pipistrelle day roost (R2) if disturbance to the roost during construction is possible.	With the implementation of mitigation measures, impacts will be Minor Negative at a Site Level.	Potential anthropogenic disturbance to bat roosts during operational hours. Impacts will be Minor Negative at a Site Level.	New bat boxes should be installed in areas of the building (or nearby trees) where disturbance is likely to be minimal, away from areas that high footfall is anticipated.	With the implementation of the recommendations, impacts will be Minor Positive at a Site Level.	Any building works in areas that the roosts are located to be completed outside of the bat active season. Installation of bat boxes.

	common pipistrelle seen emerging from B2. This roost (R2) was assessed as being a day roost of a single common pipistrelle. No works to the building are proposed to the part of the building where R2 is located. The development proposals could lead to damage, disturbance or destruction off these two identified bat roosts. Impacts to roosting bats will be Major Negative at Site Level.	Where destruction of roosts is required, using soft stripping/dismantling methods under license by a suitably qualified ecologist, in the hibernation period. .					
Invasive/non-native species	The green wall consists of false Virginia creeper which is a Schedule 9 listed non-native invasive under the 1981 Wildlife & Countryside Act. Butterfly-bush was also identified in the survey area during the habitat survey, however whilst this species is an invasive non-native, it is not schedule 9 listed. There is potential for these species to spread into the semi-natural habitat during construction. Impacts will be Minor Negative at a Local Level.	Areas of invasive non-native species to be marked out on site. Removal is recommended for the Schedule 9 listed species false Virginia creeper, which should be completed by suitably qualified contractors.	Impacts will be Minor Positive at a Local Level.	Spread of invasive non-native species through site management. Impacts will be Minor Negative at a Local Level.	Monitoring and removal of invasive non-native species where they are identified. Landscape plan to incorporate native species in planting mix.	With implementation of the recommendations the impacts will be Minor Positive at a Site Level.	Removal of Schedule 9 invasive false Virginia creeper by suitably qualified contractors.

6 Biodiversity net gain and biodiversity enhancements

6.1 Biodiversity Net Gain Exemption

6.1.1 The total application boundary area is approximately 392m² covering buildings, developed land sealed surface and a ground based green wall. Under government guidance, development proposals that do not impact a priority habitat and impacts less than 25m² (5m by 5m) of on-site habitat are exempt from the mandatory biodiversity net gain (BNG) requirements (GOV.UK, accessed 25/02/2026). The only vegetated habitat within the application boundary is the green wall, which covers an under 24m², and as such proposals are considered to be exempt from mandatory Biodiversity Net Gain.

6.2 Species

6.2.1 To provide additional enhancements (in addition to the mitigation measures already mentioned) for protected species and species of conservation concern the measures detailed in Table 6 should be incorporated into the project design.

Table 5: Biodiversity enhancement features for species

Feature type	Species suitability	Where to place	Number of features required
Multi Chamber Wood Stone Bat Box or equivalent.	Brown long eared bat (suitable for maternity roosts)	Integrated bat box on B2 or on suitable trees or buildings within the Zol of the development across the Havelock farm estate.	1
Cavity Bat Box or equivalent.	Brown long eared bat		2
Multi Chamber Wood Stone Bat Box or equivalent.	Common pipistrelle (suitable for maternity roosts)		1
Cavity Bat Box or equivalent.	Common pipistrelle		1
Vivara Pro Seville 32mm WoodStone Nest Box or equivalent.	Suitable for a range of garden bird species including blue tits, tree sparrows, house sparrows, great tits, crested tits, nuthatches, coal tits and pied flycatchers.		2
Total			7

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Appendix 1: Legislation and Planning Policy

Legislation

Conservation of Habitats and Species Regulations 2017 (as amended)

Provides for the protection of Natura 2000 sites (SACs, SPAs and Ramsar sites), European Protected Species and habitats. Species listed under Schedule 2 are protected from:

- Deliberate capture, injury or killing.
- Deliberate disturbance [...], such that it impairs their ability to breed, reproduce or rear their young, hibernate, migrate, or significantly affect their local distribution or abundance.
- Deliberate taking or destroy effect.
- Damage or destroying a breeding site or resting place.
- Keeping, transporting, selling or exchanging any live, dead or part.

Species listed under Schedule 2 include, but are not limited to:

- Great crested newt
- Natterjack toad
- Otter
- Smooth snake
- Sand lizard
- All bat species
- Hazel dormouse

The LPA will be aware of its legal duty under Regulation 9(3) of Conservation of Habitats and Species Regulations 2017, as amended, which states that “*a competent authority in exercising any of its functions, must have regard to the requirements of the Directives so far as they may be affected by the exercise of those function*”.

Also, under Regulation 55 (9b) of the above regulations, the LPA must apply the following three tests when deciding whether to grant planning permission where a Protected Species (bats) may be harmed, in line with the Conservation of Habitats and Species Regulations 2017, as amended.

- The activity must be for imperative reasons of overriding public interest or for public health and safety;
- There must be no satisfactory alternative;
- Favourable conservation status of the species must be maintained.

Natural England has stated that they would expect these three tests to be adequately considered by the LPA before planning permission is granted. Natural England will require evidence from the applicant that the LPA has considered the three tests and how they were met, before a mitigation licence can be issued. Where a mitigation licence is required to avoid breach of legislation, development cannot proceed even where a valid planning permission is granted.

Wildlife and Countryside Act 1981 (as amended)

Key piece of legislation consolidating existing wildlife legislation to incorporate the requirements of the Bern Convention and Birds Directive. It includes additional protection measures for species listed under the Conservation of Habitats and Species Regulations 2017

(as amended) and includes a list of species protected under the Act. It also provides for the designation and protection of Sites of Special Scientific Interest (SSSI).

Development which would adversely affect a SSSI is not acceptable except only in special cases, where the importance of a development outweighs the impact on the SSSI when planning conditions or obligations would be used to mitigate the impact. Developments likely to impact on a SSSI will likely require an Environmental Impact Assessment (EIA).

The Impact Risk Zones dataset is a GIS tool which details zones around each SSSI according to the particular sensitivities of the features for which it is notified and specifies the types of development that have the potential to have adverse impacts. Natural England uses the Impact Risk Zones to make an initial assessment of the likely risk of impacts on SSSIs and to quickly determine which consultations are unlikely to pose risks and which require more detailed consideration. Local Planning Authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI.

Further information on specific legislation relating to species protected under the Wildlife and Countryside Act 1981 (as amended) is detailed below, under Protection of Protected Species and Habitats.

Environment Act (2021)

The Environment Act (2021) makes a provision for biodiversity net gain to be a condition of planning permission in England. Planning applications will need to demonstrate a 10% biodiversity net gain can be met. A biodiversity net gain plan must be submitted and must include:

- (a) information about the steps taken or to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat
- (b) the pre-development biodiversity value of the onsite habitat,
- (c) the post-development biodiversity value of the onsite habitat,
- (d) any registered offsite biodiversity gain allocated to the development and the biodiversity value of that gain in relation to the development,
- (e) any biodiversity credits purchased for the development,

Countryside and Right of Way Act 2000

Amends and strengthens the Wildlife and Countryside Act 1981 (as amended). It also details habitats and species for which conservation measures should be promoted.

Natural Environment and Rural Communities Act 2006

Section 40 of the Act places a duty on local planning authorities to conserve and enhance biodiversity in England whilst conducting their normal functions. Section 41 comprises a list of Habitats of Principal Importance (HPIs) and Species of Principal Importance (SPIs) which should be considered.

Section 41 details 56 HPIs, of which the following could be present in south-east England: Lowland calcareous grassland, Lowland dry acid grassland, Lowland meadows, Lowland Heathland, Open Mosaic Habitats on Previously Developed Land, Lowland fens, Lowland raised bog, Reedbeds, Lowland beech and yew woodland, Lowland mixed deciduous woodland and Wet woodland.

Impacts to HPI are of material planning consideration.

The LPA will need to have particular regard to any relevant local nature recovery strategies, and any relevant species conservation strategy or protected site strategy prepared by Natural England.

Hedgerows Regulations 1997

Under the Hedgerows Regulations 1997 it is against the law to remove or destroy certain hedgerows without permission from the LPA, which are also the enforcement body for offences created by the Regulations. LPA permission is normally required before removing hedges that are at least 20 m in length, more than 30 years old and contain certain plant species. The authority will assess the importance of the hedgerow using criteria set out in the regulations. The regulations **do not** apply to hedgerows within the curtilage of, or marking a boundary of the curtilage of, a dwelling house.

Hedgerow is a HPI.

Wild Mammals (Protection) Act 1996

Under this act wild mammals are protected from the intentional unnecessary suffering by crushing and asphyxiation.

ODPM Circular 06/05: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System (2005)

The Government's Office of the Deputy Prime Minister (ODPM) Circular 06/05 (ODPM 2005) presents the legal requirement for planning authorities with regard to statutory designated sites. Planning approval should not be granted where impacts to statutory designated sites that are not connected to the site maintenance for nature conservation or will have a significant effect on the site's conservation objectives and/or affect the site's integrity. Permission may be granted if the proposed development overrides public interest.

The presence of a protected species is a material planning consideration. The Circular clearly outlines that it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted. Otherwise, all relevant considerations may not have been addressed in making the decision.

Protection of protected species and habitats

Amphibians

Natterjack toad, pool frog and great crested newt are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). They are also afforded additional protection under the Wildlife and Countryside Act 1981 (as amended).

Natterjack toad, common toad, great crested newt and northern pool frog are also SPIs.

Reptiles

Smooth snake and sand lizard are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded additional protection under the Wildlife and Countryside Act 1981 (as amended).

Adder, grass snake, common lizard and slow-worm are all protected from killing and injury under the Wildlife and Countryside Act 1981 (as amended). All UK reptile species are SPIs.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). This includes damage and destruction of their nests whilst in use, or construction. Species listed under Schedule 1 of the Act, such as barn owl, are afforded protection from disturbance during the nesting season.

The following 50 bird species are SPIs: lesser redpoll, aquatic warbler, marsh warbler, skylark, white-fronted goose, tree pipit, scaup, bittern, dark-bellied brent goose, stone-curlew, nightjar, hen harrier, northern harrier, hawfinch, corncrake, cuckoo, Bewick's swan, lesser spotted woodpecker, corn bunting, ciril bunting, yellowhammer, reed bunting, red grouse, herring gull, black-tailed godwit, linnet, twite, Savi's warbler, grasshopper warbler, woodlark, common scoter, yellow wagtail, spotted flycatcher, curlew, house sparrow, tree sparrow, grey partridge, wood warbler, willow tit, marsh tit, dunnoek, Balearic shearwater, bullfinch, roseate tern, turtle dove, starling, black grouse, song thrush, ring ouzel and lapwing.

Badger

Badger is protected under the Protection of Badgers Act 1992. Under this legislation it is an offence to kill or injure a badger; to damage, destroy or block access to a badger sett; or to disturb badger in its sett. The Act also states the conditions for the Protection of Badgers licence requirements.

Bats

All bat species are protected under the Conservation of Habitats and Species Regulations 2017 (as amended), as detailed above. Bats are further protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence to:

- Deliberately or recklessly damage or destroy any structure or place which bat(s) use for shelter or protection.
- Disturb bat(s) while occupying a structure or place which it uses for shelter or protection.
- Obstruct access to any structure or place which they use for shelter or protection.

Greater horseshoe, lesser horseshoe, Bechstein's and barbastelle are Annex II species for which Special Areas of Conservation have been designated.

Furthermore, seven bat species are SPIs, covered under Section 41 of the NERC Act 2006. These include western barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe.

Beaver

Beaver is provided under Conservation of habitats and Species Regulations 20217 (as amended). Beaver is also afforded additional protection under the Wildlife and Countryside Act 1981, as amended.

Hazel dormouse

Hazel dormouse is protected under the Conservation of Habitats and Species Regulations 2017 (as amended). It is afforded additional protection under the Wildlife and Countryside Act 1981 (as amended), including obstruction to a place of shelter or rest.

Hazel dormouse is also a SPI.

Otter

Otter is protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and is afforded additional protection under the Wildlife and Countryside Act 1981 (as amended). Otter is also a SPI.

Water vole

Water vole is fully protected from capture, killing or injury; damage, destruction or blocking access to a place of shelter; disturbance whilst in a place of shelter or possessing, selling any part of a water vole, dead or alive under the Wildlife and Countryside Act 1981 (as amended).

Water vole is also a SPI.

Other mammals

West European hedgehog, brown hare, mountain hare, pine marten, harvest mouse, polecat and red squirrel are all SPIs.

The following mammals are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended): wildcat, brown hare (Schedule 5A), mountain hare (Schedule 5A), pine marten and red squirrel.

Invertebrates

Fifty-seven terrestrial and freshwater invertebrate species (excluding molluscs) are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). These include Reddish buff, Norfolk hawk, Purple emperor, High brown fritillary, Northern brown argus, White-clawed crayfish, Pearl-bordered fritillary, DeFolin's lagoon snail, Chequered skipper, Fairy shrimp, Rainbow leaf beetle, New Forest cicada, Southern damselfly, Large heath, Small blue, Wartbiter, Fen raft spider, Ivel's sea anemone, Mountain ringlet, Ladybird spider, Marsh fritillary, Spangled diving beetle, Mole cricket, Field cricket, Duke of Burgundy, Silver-spotted skipper, Medicinal leech, Lesser silver water beetle, Moccas beetle, Wood white, Violet click beetle, Large copper, Freshwater pearl mussel, heath fritillary, Glanville fritillary, Glutinous snail, Starlet sea anemone, Large tortoiseshell, Brackish hydroid, Swallowtail, Bembridge beetle, Barberry carpet, Silver-studded blue, Adonis blue, Chalk hill blue, Fiery clearwing, Sandbowl snail, Black hairstreak, White-letter hairstreak, Black-veined moth, Sussex emerald, Brown hairstreak, Northern hatchet-shell, Lulworth skipper, Tadpole shrimp, New Forest burnet.

A total of 294 (excluding molluscs) invertebrates are Species of Principal Importance. These include: beetles (including stag beetle), butterflies (high brown fritillary, large heath, small blue, white-letter hairstreak, brown hairstreak, damselflies (southern damselfly), moths (marsh moth), ants, bees etc. Impacts to SPI must be considered by the LPA when assessing planning applications.

Higher and lower plants (rare/notable species)

Creeping marshwort, Lady's-slipper orchid, Early gentian, Fen orchid, Floating water-plantain, Slender naiad, Shore dock and Yellow marsh-saxifrage are listed under Schedule 5 of the Conservation of Habitats and Species Regulations 2017 (as amended) making it illegal to be in position or control, transport, sell or exchange or offer to sell or exchange any live or dead plant, or part of a plant.

105 higher plant species are listed under Schedule 8 of the Wildlife and Countryside Act 1981, as amended which makes it illegal for a person to intentionally pick, uproot or destroy any wild plant listed under Schedule 8.

145 higher plant species are listed as Species of Principal Importance.

Non-native invasive plant species

Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is a list of non-native plant species for which Section 14 of the Act applies. It is an offence to plant or otherwise cause to grow in the wild species listed under Schedule 9 of the act. These include, but are not limited to:

- Himalayan balsam
- Cotoneaster sp.
- Japanese knotweed
- Giant hogweed

Planning policy

National Planning Policy Framework (2023)

Details the Government's planning policies for England and how these should be applied, particularly to contribute to the Government's commitment to halt the decline of biodiversity. When assessing planning applications, LPAs should have regard to conserving and enhancing biodiversity by applying a number of principals, including:

- Avoiding impacts to biodiversity through appropriate site selection.
- Mitigating residual impacts.
- Encouraging the preservation and enhancement of biodiversity.
- Preventing the development of protected sites, such as SSSIs.
- Refusing permission where habitats that cannot be recreated, such as ancient woodland, would be lost.
- Encouraging clever design that limits light pollution.

Relevant paragraphs in the NPPF (2023) are detailed below.

Paragraph number	Detail
180	Planning policies and decisions should contribute to and enhance the natural and local environment by: (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; (c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; (d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; (e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental

Paragraph number	Detail
	conditions such as air and water quality, taking into account relevant information such as river basin management plans; and (f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
183	“When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development 64 other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of: (a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy; (b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and (c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.”
186	“When determining planning applications, local planning authorities should apply the following principles: (a) 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; (b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; (c) 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 67 and a suitable compensation strategy exists; and (d) development whose primary objective is to conserve or enhance biodiversity should be supported; while 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.”
187	“The following should be given the same protection as habitats sites: (a) potential Special Protection Areas and possible Special Areas of Conservation; (b) listed or proposed Ramsar sites 68; and (c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”
188	“The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

Local planning policy

Policy Reference	Policy number/Paragraph Number	Detail
Mid Sussex District Council		
(Mid Sussex District 2018)	DP4	The Habitats Regulations require that the competent authority (Mid Sussex District Council) assess the effects of land use plans on European sites to determine whether there will be likely significant effects (LSEs) on European sites as a result of the plan's implementation (either on its own or 'in combination' with other plans or projects). The European site of interest is Ashdown Forest, which is located in neighbouring Wealden district.
	DP7	Strategic Development at Burgess Hill: 1. Identify and respond to environmental, landscape and ecological constraints and deliver opportunities to enhance local biodiversity and contribute to the delivery of green infrastructure in and around the town in accordance with policies elsewhere in the Plan including DP38: Biodiversity.
	DP8	Strategic Development to the east of Burgess Hill at Kings Way: 1. Implement long-term management of the Ditchling Common Site of Special Scientific Interest (SSSI) and protect and enhance this adjoining area from the impacts of strategic development (on site provision together with appropriate mitigation measures). 2. Consider the close proximity of the South Downs National Park. 3. Provide additional informal open space on site. 4. Avoid unnecessary damage to the characteristic field pattern and historic hedgerow and tree lines.
	DP9	Strategic Development to the north and north-west of Burgess Hill: 1. Identify and take account of environmental, landscape and ecological constraints including where possible avoiding or minimising harm to sensitive receptors and appropriately responding to the landscape setting including retention of woodland, hedgerows and other important natural features wherever possible and appropriate landscaping and safe design of balancing ponds and water/drainage features; and deliver opportunities and requirements as set out in Policy DP7.
	DP10	Strategic Development to the east of Pease Pottage: 1. Provide appropriate mitigation to reduce the impact of the development on the landscape and to ensure, in particular, that development respects and where possible enhances the natural beauty and characteristics of the High Weald Area of Outstanding Natural Beauty. 2. Identify and respond to environmental and ecological constraints and deliver opportunities to enhance green infrastructure and local biodiversity, including the provision of an appropriate buffer to the Ancient Woodland to the east of the site.
	DP11	Strategic Development to the north of Clayton Mills, Hassocks: 1. Identify and respond to environmental and ecological constraints and deliver opportunities to enhance green infrastructure and local biodiversity.
	DP16	Development within the High Weald Area of Outstanding Natural Beauty (AONB), will only be permitted where it conserves or enhances natural beauty and has regard to the High Weald AONB Management Plan, in particular; • the identified landscape features or components of natural beauty and to their setting; • the traditional interaction of people with nature, and appropriate land management; • character and local distinctiveness, settlement pattern, sense of place and setting of the AONB; and • the conservation of wildlife and cultural heritage. Small scale proposals which support the economy and social well-being of the AONB that are compatible with the conservation and enhancement of natural beauty will be supported. Development on land that contributes to the setting of the AONB will only be permitted where it does not detract from the visual qualities and essential characteristics of the AONB, and in particular should not adversely affect the views into and out of the AONB by virtue of its location or design.
	D17	To protect valued landscapes for their visual, historical and biodiversity qualities, Policy DP17 sets out an avoidance and mitigation strategy to reduce the impact of recreational disturbance on Ashdown Forest Special Protection Area (SPA) and Special Area of Conservation (SAC). The District Council will monitor the effectiveness of this policy for the impacts on the Ashdown Forest SPA and SAC and review/amend the approach, including any mitigation requirements, set out in this policy, as necessary. 1. In order to prevent adverse effects on the Ashdown Forest SPA and SAC, new development likely to have a significant effect, either alone or in combination with other development, will be required to demonstrate that adequate measures are put in place to avoid or mitigate any potential adverse effects. Within a 400 metres buffer zone around Ashdown Forest, mitigation measures are unlikely to be capable of protecting the integrity of the SPA and, therefore, residential development will not be permitted. 2. Within a 7km zone of influence around the Ashdown Forest SPA, residential development leading to a net increase in dwellings will be required to contribute to mitigation through: 1) The provision of Suitable Alternative Natural Greenspace (SANG) to the minimum level of 8Ha per 1,000 net increase in population; or a financial contribution to SANGs elsewhere; or the provision of bespoke mitigation; and 2) A financial contribution to the Ashdown Forest Strategic Access Management and Monitoring (SAMM) Strategy. 3. Large schemes proposed adjacent or close to the boundary of the 7km zone of influence may require mitigation for the SPA. Such proposals for development will be dealt with on a case-by-case basis. 4. Where bespoke mitigation is provided, these measures will need to be in place before occupation of development and must be managed and maintained in perpetuity. The effectiveness of such mitigation will need to be demonstrated prior to approval of the development. Bespoke mitigation will need to be discussed and agreed by the District Council as the competent authority following advice from Natural England.
	DP18	Mid Sussex District Council works in partnership with the South Downs National Park Authority to protect and enhance the natural beauty of the South Downs National Park. The areas of land surrounding the South Downs National Park make a contribution to the setting of the South Downs National Park. 1. Development within land that contributes to the setting of the South Downs National Park will only be permitted where it does not detract from, or cause detriment to, the visual and special qualities (including dark skies), tranquillity and essential characteristics of the National Park, and in particular should not adversely affect transitional open green spaces between

Policy Reference	Policy number/Paragraph Number	Detail
		the site and the boundary of the South Downs National Park, and the views, outlook and aspect, into and out of the National Park by virtue of its location, scale, form or design. 2. Development should be consistent with National Park purposes and must not significantly harm the National Park or its setting. Assessment of such development proposals will also have regard to the South Downs Partnership Management Plan and emerging National Park Local Plan and other adopted planning documents and strategies.
	DP37	'Trees, Woodland and Hedgerows' The District Council will support the protection and enhancement of trees, woodland and hedgerows, and encourage new planting. In particular, ancient woodland and aged or veteran trees will be protected. Development that will damage or lead to the loss of trees, woodland or hedgerows that contribute, either individually or as part of a group, to the visual amenity value or character of an area, and/ or that have landscape, historic or wildlife importance, will not normally be permitted. Proposals for new trees, woodland and hedgerows should be of suitable species, usually native, and where required for visual, noise or light screening purposes, trees, woodland and hedgerows should be of a size and species that will achieve this purpose. Trees, woodland and hedgerows will be protected and enhanced by ensuring development: • incorporates existing important trees, woodland and hedgerows into the design of new development and its landscape scheme; and • prevents damage to root systems and takes account of expected future growth; and • where possible, incorporates retained trees, woodland and hedgerows within public open space rather than private space to safeguard their long-term management; and • has appropriate protection measures throughout the development process; and • takes opportunities to plant new trees, woodland and hedgerows within the new development to enhance on-site green infrastructure and increase resilience to the effects of climate change; and • does not sever ecological corridors created by these assets. Proposals for works to trees will be considered taking into account: 4 Policies Adopted District Plan 92 • the condition and health of the trees; and • the contribution of the trees to the character and visual amenity of the local area; and • the amenity and nature conservation value of the trees; and • the extent and impact of the works; and • any replanting proposals. The felling of protected trees will only be permitted if there is no appropriate alternative. Where a protected tree or group of trees is felled, a replacement tree or group of trees, on a minimum of a 1:1 basis and of an appropriate size and type, will normally be required. The replanting should take place as close to the felled tree or trees as possible having regard to the proximity of adjacent properties. Development should be positioned as far as possible from ancient woodland with a minimum buffer of 15 metres maintained between ancient woodland and the development boundary.
	DP38	'Biodiversity' Biodiversity will be protected and enhanced by ensuring development: • Contributes and takes opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity, including through creating new designated sites and locally relevant habitats, and incorporating biodiversity features within developments; and • Protects existing biodiversity, so that there is no net loss of biodiversity. Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances); and • Minimises habitat and species fragmentation and maximises opportunities to enhance and restore ecological corridors to connect natural habitats and increase coherence and resilience; and • Promotes the restoration, management and expansion of priority habitats in the District; and • Avoids damage to, protects and enhances the special characteristics of internationally designated Special Protection Areas, Special Areas of Conservation; nationally designated Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty; and locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland or to other areas identified as being of nature conservation or geological interest, including wildlife corridors, aged or veteran trees, Biodiversity Opportunity Areas, and Nature Improvement Areas. Designated sites will be given protection and appropriate weight according to their importance and the contribution they make to wider ecological networks. Valued soils will be protected and enhanced, including the best and most versatile agricultural land, and development should not contribute to unacceptable levels of soil pollution. Geodiversity will be protected by ensuring development prevents harm to geological conservation interests, and where possible, enhances such interests. Geological conservation interests include Regionally Important Geological and Geomorphological Sites.

Appendix 2: Desk study

Desk study

- 7.1.1 Delta-Simons completed an initial desk study as part of the PEA completed in 2021, for the wider WCRN planning application. This desk study included an assessment of statutory and non-statutory designated sites and records of protected and notable species (Delta-Simons, 2021).
- 7.1.2 For the purposes of this report, an update desk study was completed for Statutory Designated Sites, and issued European Protected Species Licenses, the data for which is publicly available on MAGIC (Department for Environment, Food and Rural Affairs, n.d.)
- 7.1.3 The desk study comprised:
- Statutory designated SPAs, SACs, and RAMSAR sites within 10km of the survey area.
 - Statutory designated SSSIs and LNRs within 2km of the survey area.
 - BOAs and AONB within or adjacent to the survey area.
 - Parcels of Habitats of Principal Importance and parcels of ancient woodland within 250m of the survey area.
 - A review of waterbodies and watercourses within 250m/500m of the survey area using aerial imagery and publicly available information.
 - Mitigation licences that have been issued within 2km of the survey area
 - Local plan, as detailed in Appendix 1.

Limitations

- 7.1.4 An updated data search for species records from the local record centre has not been completed for this element of the development. In 2021, Delta-Simons completed a data search for species records. This was for the wider WCRN planning application, and these results are available in the PEA report (Delta-Simons, 2021).
- 7.1.5 This is not considered to have a significant impact on the findings of this report as the proposed development has a small footprint with the habitats present urban in nature with limited suitability for most notable/protected species; and as a full assessment of the suitability of the survey area and the Zol of the proposed development, has been completed based on previously collected survey data, the habitats present at baseline, and the habitats within the Zol of the development.

Results

- 7.1.6 The following tables present assessment results:
- Table 7 for the statutory and non-statutory designated sites.
 - Table 8 for habitats.
 - Table 9 for protected species and species of conservation concern.
- 7.1.7 The survey area is within the High Weald AONB.
- The survey area is not within or adjacent to any BOAs.
 - The survey area is not within or adjacent to any Important Bird Areas.

Table 6: Statutory and non-statutory designated sites desk study results

Type of designation	Site name	Reasons for designation	Distance from survey area (m)	Within impact risk zone	Scope in for further assessment
Statutory	Ashdown Forest SAC	Designated for Annex I habitats; Northern Atlantic wet heaths with <i>Erica tetralix</i> and European dry heaths. Annex II species GCN is present as a qualifying feature.	6km east	Yes*	No
	Ashdown Forest SPA	Designated as it supports Annex I species Dartford warbler <i>Sylvia undata</i> .	6km east	Yes*	No
	Wakehurst and Chiddingly Woods SSSI	Contains nationally rare habitats and supports a range of breeding birds and rare invertebrates	0.17km north	Yes*	No
	Philpots & Hook Quarries SSSI	Designated for geological features.	1.8km northeast	Yes	No
	Ardingly Reservoir LNR	Supports a range of habitats and protected species.	1.7km south	No	No
Non-statutory	Five LWS within 2km of the survey area.	There are five locally important non-statutory designated sites related to biodiversity within 2 km of the Site, all of which are Local Wildlife Sites (LWS), the closest of these is over 600 m south of the Site.	0.6km south	No	No
* Natural England's SSSI IRZs tool was accessed to assess the development proposals with the SSSI Impact Risk Zones (Natural England, n.d.) The Impact Risk Zones for SSSIs indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial SSSIs and the SACs or SPAs that they underpin. Therefore, Natural England does not require consultation on the likely impacts of development.					

Table 7: Habitats of ecological consideration identified in the desk study

Habitat type	Number	Closest distance to survey area	Situated within survey area	Situated within 15m of survey area	Situated within impact risk zone	Scope in for further assessment?
Ancient woodland	The survey area does not lie within or adjacent to any area of ancient woodland. The nearest ancient woodland is West Wood Copse, located 160m to the south.	0.16km south	No	No	No	No
Veteran trees	There are no ancient or veteran trees within or adjacent to the survey area. The nearest ancient/veteran tree is located 200m to the south.	0.2km south	No	No	No	No
Lowland mixed deciduous woodland HPI	The survey area lies adjacent to an area mapped as deciduous woodland on the Priority Habitat Inventory (England).	5m south of the survey area.	No	Yes	Yes	Yes
Waterbodies within 250/500m of the survey area	There are five water bodies within 250m of the survey area. - WB1 - located 60m east of the survey area. - WB2 - located 80m west of the survey area. - WB3 - located 200m southeast of the survey area. - WB4 - located 200m southeast of the survey area. - WB5 - located 250m east of the survey area. There are a further four water bodies within 500m of the survey area. - WB6 - located 275m east of the survey area. - WB7 - located 280m south of the survey area. - WB8 - located 300m south of the survey area. - WB9 - located 350m south of the survey area.	60m east	No	No	No	No
Watercourses within 250/500m of the survey area	There is one water course within 250m of the survey area: - WC1 - located 80m west of the survey area. There are a further two watercourses within 500m of the survey area: - WC2 - located 315m south of the survey area - WC3 – located 400m northwest of the survey area.	80m west	No	No	No	No

Table 8: Protected or notable species recorded in the desk study and for which suitable habitat occurs in the survey area

Species/Species group	Recorded in the 2021 desk study	Mitigation licences recorded within 2km of the survey area
Invertebrate	Not applicable	No
Amphibian	Yes	No
Reptiles	No	No
Birds	Yes	No
Bats	Yes	None recorded on the MAGIC website (Department for Environment, Food and Rural Affairs, n.d.), however a known NE bat licence (reference: 2022-61412-EPS-MIT) is in place for the re-development of the Mansion as part of a different project within the same landholding.
Hedgehog	Yes	No
Other mammals	Not applicable	No
Higher and lower plants	Not applicable	Not applicable
Invasive, non-native species	Not applicable	Not applicable

Appendix 3: Habitat survey

Methods

UK habitat classification survey

- 7.1.8 Habitats in the survey area were mapped using the UK habitat classification survey methodology (UKHab Ltd, 2023).
- 7.1.9 UK habitat classification survey is a comprehensive system for classifying and mapping habitats within the UK. The aim of the survey is to identify and map habitats using aerial imagery and ground-truthing the information in a consistent and unified way such that this can be used for ecological impact assessment and habitat metrics.
- 7.1.10 The whole survey area was walked by an experienced ecologist and habitats identified, classified and mapped. Each habitat is coded in line with the survey methodology, using secondary codes to define specific features, such as management measures, land use and other specific features. Where these secondary codes are used in the report, the definitions are also provided.
- 7.1.11 Within each habitat type a record of the vascular plant species was made and an assessment of their abundance recorded. Abundances of each vascular plant species within each habitat type are based on the DAFOR scale, presented below.
- D – Dominant
 - A – Abundant
 - F – Frequent
 - O – Occasional
 - R – Rare
- 7.1.12 The survey included an assessment of the habitats present to determine their suitability for protected species and species of conservation concern. A record was made of any signs of protected species, or species of conservation concern, such as runs, droppings and/or foraging remains.
- 7.1.13 A record was also made of any fauna that was incidentally recorded.
- 7.1.14 The presence of any non-native invasive species was noted, and their location and distribution mapped.
- 7.1.15 Nomenclature of vascular plants followed (Stace, 2019). Common names are presented in the text, with scientific names detailed in Appendix 5.
- 7.1.16 The date and weather conditions are detailed in the table below. The survey was undertaken by Daniel Lock BSc (Hons), MSc – Ecologist.

Table 9: Survey dates and weather conditions

Surveyor	Date	Time	Temperature	Cloud (%)	Rain	Wind ³
Daniel Lock	30.09.24	12:00	17°C	100%	Moderate rain (2.5-7.6mm/hour)	1 - Light air

³ Beaufort scale

Limitations

- 7.1.17 Habitat surveys can be undertaken at any time of year, with the optimal season being between March and September, when most plant species are visible. Where feasible, all efforts were made to schedule the habitat survey in optimal weather conditions and time of year. Nevertheless, field surveys usually fail to record all species present for several reasons, including the seasonal absence of some species, and brief survey duration. Rare or cryptic species are often missed in short surveys.
- 7.1.18 Based on the above, a full appraisal of the plant species and habitats present could be undertaken at the time of the survey, and the survey was conducted within the optimal timeframe.

Results

UK habitat classification

- 7.1.19 The UK habitat classification survey results are detailed in the table below. Target notes from the survey are detailed in Table 12 below.

Table 10: UK habitat classification survey results

Habitat and code	Compartment number	Description	Condition	HPI	Photograph
u1b5: Buildings	1	There is one building present on site, building B2. There was previously another building present (building B1) which has been demolished.	Not applicable	No	
u1b: Developed land; sealed surface	2	There is hard-standing across the survey area, largely consisting of concrete.	Not applicable	No	
u1b5: Buildings 842-Ground based green wall BNG Code: <i>BNG1121: Ground based green wall</i>	4	The southeastern face of building B2 is covered with the creeper false Virginia creeper, this is a schedule-9 non-native invasive.	Poor	No	

Table 11: Target notes recorded during the survey

Target note reference	Description	Photograph
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TN1	A bird's nest was identified within B2, it is considered likely to be from a pigeon or corvid species.	
TN2	TN2 is the location in which bat droppings were collected from building B2 on the 30 th of September 2024. eDNA analyses has confirmed that these droppings were from brown long eared bat. The location is in the same building structure as Roost 1 (R1)	N/A

Appendix 4: Bat survey

Methods

Preliminary roost assessment (building, built structures and underground sites)

- 7.1.20 A PRA was completed on the 4th of November 2021 by Delta-Simons, there were two buildings present within the survey area B1 and B2. B1 was assessed as having low suitability for roosting bats and B2 was assessed as having moderate suitability for bats, the full methodology and results are given in the PEA report (Delta-Simons, 2021).
- 7.1.21 Since the initial PRA was completed B1 has been demolished and there is now only one building, B2, in the survey area.
- 7.1.22 Prior to the update bat P/LA survey on the 30th of September 2024, an internal search was completed within the Barn area of B2, to look for any bat droppings or other field signs of bats. This search was completed by Harriet Fisher BSc (Hons) ACIEEM – Senior Ecologist
- 7.1.23 Bat droppings were found and these were sent to Swift Ecology for eDNA analysis on the 11th of October 2024, with results received on the 17th of October 2024, these are given in Appendix 6.
- 7.1.24 During the UK Habitat survey completed by Daniel Lock BSc (Hons), MSc – Ecologist on the 30th of September 202, the habitats in the survey area were assessed for the suitability for foraging and commuting bats.

Assigning roosting, foraging and/or commuting suitability

- 7.1.25 The aim of the assessment was to determine suitability of the survey area for bats, and to advise on the appropriate next steps to inform the Ecological Impact Assessment. Habitat suitability was defined in line with the tables below for buildings/built structure/underground sites or trees (Collins ed, 2023).
- 7.1.26 Suitability is assessed irrespective of whether bats are confirmed as present, as it is based on suitability of Potential Roosting Features for various bat roosts. Where a roost is confirmed, this is recorded as a separately.

Table 12: Habitat suitability roosting in structures, foraging and commuting bats

Suitability	Roosting suitability in buildings/built structure/underground sites ⁴	Foraging and commuting habitat suitability
None	No habitat features present that could be used by bats at any time of the year.	No suitable habitat present.
Negligible	No obvious features present suitable for use by roosting bats, however a small amount of uncertainty remains.	No obvious habitat, but some uncertainty present
Low	A structure with one or more potential roost sites that could be used by a small number of bats opportunistically for summer and winter roosts. However, features do not provide enough space,	Habitat that could be used by small numbers of bats as flight-paths, such as gappy hedgerow or unvegetated streams, generally not well connected to the landscape. Also, where there is a

⁴ Adapted from (Collins ed, 2023).

Suitability	Roosting suitability in buildings/built structure/underground sites ⁴	Foraging and commuting habitat suitability
	shelter, protection or environmental conditions to be used on a regular basis or by larger number of bats (i.e. unlikely to be a maternity or large hibernation roost).	small, isolated tree or isolated habitat patch that could be used by a small number of foraging bats.
Moderate	A structure or tree that supports one or more potential roost sites that could be used by bats due to their size and conditions, but unlikely to support a roost of high conservation status with respect to roost type and irrespective of species conservation status.	Continuous habitat connected to the wider landscape. Likely to be used regularly for foraging and commuting. E.g. river valleys, streams, hedgerows, lines of trees, woodland edge and larger areas of grassland/scrub
High	A structure or tree which supports one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time, due to their size, shelter, protection, condition and / or surrounding habitat. These structures have the potential to support high conservation status roosts (e.g. maternity or classic cool/stable hibernation site)	Continuous, high-quality habitat present. Well connected. Likely to be extensively used by commuting and foraging bats. E.g. broadleaved woodland, tree-lined watercourses, grazed parkland. Close to and connected to known roosts.

Presence/likely absence survey

Summer roost

7.1.27 Once roosting suitability is established, further presence/likely absence surveys are required (Collins ed, 2023). The recommended minimum number of surveys is dependent on the suitability assigned during the habitat assessment and is detailed in the table below.

Table 13: Minimum number of surveys to determine presence/likely absence of summer roosting bats

Suitability	Number of further surveys ⁵	Timings
Low (buildings/built structure/underground sites)	1	May - August
Moderate (buildings/built structure/underground sites)	2	May – September, at least one between May - August
High (buildings/built structure/underground sites)	3	May – September, at least two between May - August

7.1.28 The total number of visits undertaken is dependent on sufficient information collected to inform the Ecological Impact Assessment. Where insufficient information, or roosts need to be characterised, additional survey visits may be necessary. This is particularly the case for low suitability structures and PRF-I trees. In these instances,

⁵ Adapted from (Collins ed, 2023).

the justification must be provided to confirm that the appropriate level of survey effort has been undertaken.

- 7.1.29 Three presence likely absence surveys of B2 were undertaken on the 12th and 25th of March and 21st of September 2022, to inform the EclA. During the survey on 25th of March 2022, a roost of a single brown long-eared was identified (R1) and this was assessed as being an occasional or transitional roost of a single brown long-eared bat (Delta-Simons, 2022).
- 7.1.30 As two years had passed since the initial bat P/LA surveys an additional update P/LA was completed of B2 in September 2024.
- 7.1.31 The survey effort was sufficient because the three surveys completed in 2022 presented good baseline data, and confirmed the presence of a single occasional or transitional roost of a single brown long-eared bat (Delta-Simons, 2022), and the 2024 update survey provided more up to date information, and confirmed the presence of a further common pipistrelle day roost of one bat.
- 7.1.32 Dusk emergence surveys began 15 minutes before sunset and continued until 1.5 hours after sunset.
- 7.1.33 Surveyor locations were selected to view all potential roosting and access features identified in the bat preliminary roost assessment (Delta-Simons, 2021). Surveyor locations are provided in Figure 2 and their view in Table 16 below. During the survey, surveyors continuously surveyed the potential access and roosting features using Elekon Batlogger M2 bat detectors, recording any bats emerging/returning to roost and general bat activity. The survey was also supported visually through the use of Canon XA11 Infrared cameras and Guide 19mm thermal pro scopes (Bat Conservation Trust, 2022). The data were analysed using Bat Explorer.

Table 14: Summer bat PLA survey dates and weather conditions

Date	Survey times	Temperature	Cloud Cover	Rain	Wind ⁶
30/09/24	Start: 18:25 Sunset: 18:40 End: 20:10	Weather at start			
		15°C	100%	Dry	4 – Moderate breeze
		Weather at end			
		11°C	100%	Dry	5 – Fresh breeze

Table 15: Surveyor locations and field of view

Surveyor	Surveyor location	Field of view
Jess Drage	L1	

⁶ Beaufort scale

Surveyor	Surveyor location	Field of view
Harriet Fisher	L2	
Elliot Hope-Ross	L3	
Laura Ashfield	L4	
Marcus Turley	L5	Not provided
Sean Stone	L6	
Location of darkest viewpoint		Darkest view point
Harriet Fisher	L2	
Elliot Hope-Ross	L3	

Harriet Fisher	L2	
Elliot Hope-Ross	L3	

Table 16: Camera locations and darkest view

Camera /surveyor location	Darkest view photograph
IR1/L1	
IR3/L2	
T1/L4	

Camera /surveyor location	Darkest view photograph
T2/L5	

Characterising bat roosts

7.1.34 Where a roost was identified, this was characterised in line with best practice guidance (Collins ed, 2023), as shown in the table below.

Table 17: Bat roost type

Roost Type	Natural England Definition
Day roost	A place where individual bats, or small groups of males, rest or shelter in the day during the summer.
Night roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
Feeding roost	A place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
Transitional	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
Maternity roost	A place where females give birth and raise their young to independence. In some species males may be present.
Hibernation roost	A place where bats may be found individually or together during the winter. They have a constant cool temperature and high humidity.
Satellite roost	An alternative roost found in close proximity to the main nursery colony, used by a few individuals to small groups of breeding females throughout the breeding season.

Limitations

Preliminary roost assessment (building, built structures and underground sites)

7.1.35 The PRA was completed by Delta-Simons, who reported that at the time of the survey, they were not able to access the interior of all of the buildings on Site. Thus, any observations and results relating to inaccessible buildings were made from external assessments only (Delta-Simons, 2021).

7.1.36 No other limitations were reported from the PRA assessment.

Presence/likely absence survey

Summer roost surveys

- 7.1.37 Surveys were undertaken in line with best practice guidance, at the optimal time of year and in optimal weather conditions.
- 7.1.38 Whilst every effort has been made to provide a comprehensive survey, no investigation could ensure the complete characterisation and prediction of the natural environment. Notwithstanding this, the surveys were undertaken in accordance with best-practice guidance (Collins ed, 2023) and this is considered sufficient to conclude on presence or likely absence of bats within the structure or tree surveyed.
- 7.1.39 It is not always possible to identify individuals to species level from bat call analysis, due to production of similar calls at overlapping frequencies with other species (particularly those within the same genus). Some examples of this are *Myotis* species, and *Plecotus* (or long-eared) species, *Nyctalus/Eptesicus* species and *Pipistrellus* species. Where bats are not identified to species level, they are identified to their genus, with the exception of noctule/serotine/Leisler's (*Nyctalus/Eptesicus*) which is denoted as "NSL" where full species identification is not possible.

Results

Habitat assessment

- 7.1.40 Habitats recorded in the survey area and their suitability for bats are presented in the table below.

Table 18: Habitats in the survey area suitable for use by bats

Habitat	Suitable use for bats
Building B2	Roosting
u1f: Sparsely vegetated urban land (Ephemeral / ruderal vegetation)	Foraging

- 7.1.41 Habitats in the survey area were assessed as being of low suitability for foraging bats and commuting bats as the habitats present offer limited foraging opportunities and as there are no linear green features within the survey area that provide a commuting network

PRA Assessment

- 7.1.42 Building B2 was assessed as having moderate suitability for roosting bats (building B1 was assessed as having low suitability for roosting bats but has been demolished following bat presence/likely absence surveys in 2022 that confirmed roosting bats are likely absent from the building).
- 7.1.43 There are no trees present within the survey area (only saplings) and as such, no trees with bat roosting suitability within the survey area.

eDNA analysis results.

- 7.1.44 Bat droppings were identified in the barn area of building B2, analyses confirmed that the droppings were from brown long eared. The full results report is given in Appendix 6.

Presence/likely absence survey - summer roosts

7.1.45 As detailed in the table below, a roost of a single brown long-eared (R1) was identified during the 2022 survey (Delta-Simons, 2022). A further bat roost of a single bat was identified during the update bat survey in September 2024. No bat calls were picked up from this emerging bat, but owing to the early time of its emergence, it was identified as being a common pipistrelle, and the roost was assessed as being a day roost of a single common pipistrelle (R2). Roost locations are presented in Figure 2.

7.1.46 During the summer surveys the following species were recorded:

- Myotis species
- Leislers'
- Noctule
- Common pipistrelle
- Soprano pipistrelle
- Brown long eared.

7.1.47 During the bat survey, a single bat was seen from surveyor location three, emerging from a section of ridge tiles in the north-west of B2 at 18:54 (R2). The bat was not calling during the emergence, and so there are no associated bat calls to determine the species of the bat. However, owing to the early time of the emergence, and as a common pipistrelle was seen commuting from this location very shortly after the time of emergence at surveyor location four (c.30m to the south), this roost has been assessed as being a common pipistrelle day roost of one bat.

7.1.48 Foraging and commuting activity was concentrated around the woodland block that lies to the south of the survey area.

Table 19: Summary results of bat P/LA survey

Surveyor location	Roost present	Bat species recorded	Time of first call
1	No	Noctule	18:56:00
		Common pipistrelle	19:01:00
		Soprano pipistrelle	19:10:00
		Leisler's	19:13:00
		Myotis sp.	19:22:00
		Brow long ear	19:29:00
2	No	Noctule	18:56:00
		Common pipistrelle	19:01:00
		Soprano pipistrelle	19:10:00
		Brown long ear	19:21:00
		Myotis sp.	19:50:00
3	Yes – A bat was seen emerging from a section of ridge tiles at 18:54 in the northwest of B2 (R2).	Noctule	18:56:00
		Common pipistrelle	19:27:00
		Myotis sp.	19:51:00

Surveyor location	Roost present	Bat species recorded	Time of first call
4	No	Common pipistrelle	18:53:00
		Noctule	19:13:00
		Soprano pipistrelle	19:11:00
5	No	Common pipistrelle	18:42:00
		Noctule	18:56:00
		Soprano pipistrelle	19:10:00
6	No	Common pipistrelle	19:26:00
		Soprano pipistrelle	19:29:00

Appendix 5: Vascular plant species recorded during the survey

Scientific name	Common name	Status	Abundance
<i>Rumex crispus</i>	Curled dock	-	LA
<i>Urtica dioica</i>	Common nettle	-	LA
<i>Acer pseudoplatanus</i>	Sycamore	-	LF
<i>Chamaenerion angustifolium</i>	Rosebay willowherb	-	LF
<i>Plantago major</i>	Greater plantain	-	LF
<i>Epilobium hirsutum</i>	Great willowherb	-	LF
<i>Buddleja davidii</i>	Butterfly-bush	Invasive	LF
<i>Polygonum aviculare</i>	Knotgrass	-	LF
<i>Cirsium arvense</i>	Creeping thistle	-	LF
<i>Rubus fruticosus</i> agg.	Bramble	-	LF
<i>Trifolium repens</i>	White clover	-	LF
<i>Geranium molle</i>	Dove's-foot crane's-bill	-	LF
<i>Geranium robertianum</i>	Herb-Robert	-	LF
<i>Parthenocissus inserta</i>	False Virginia-creeper	Sch9	LA



Appendix 6: eDNA analysis results

Samples submitted

Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/ post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-3143-1	Yes	Faecal	30/09/2024	C. Bats	RH17 6TN	Barn	
SEL-3143-2	Yes	Faecal	30/09/2024	C. Bats	RH17 6TN	Toilet block loft space	

Analysis Results

Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match
SEL-3143-1	EG-2024-2244	Plecotus auritus (Brown long-eared bat) Note: All UK bat species tested for - only a single species detected in this sample.	qPCR	21	
SEL-3143-2	EG-2024-2245	Sorex minutus (Pygmy shrew) Note: All UK bat species tested for -	qPCR	25	

		none detected in this sample. Screened against small mammal qPCR panel.			
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Appendix 7: Survey calendar

This survey calendar should be used as guidance only and is based on current industry best-practice.

Survey type	January	February	March	April	May	June	July	August	September	October	November	December
Habitat				UK habitat classification survey and National Vegetation Classification (habitat dependant for specific survey months)								
				Habitat condition assessment (habitat specific suitable month)								
Invertebrate												
Amphibian (including great crested newt)	Habitat suitability index											
				eDNA presence/absence								
			Presence/absence and population size class assessment									
Reptiles												
Birds	Wintering birds		Migratory/b reeding birds	Breeding birds					Migratory birds		Wintering birds	
Badger		Bait marking and sett search							Bait marking and sett search			
Bats	Preliminary Roost Assessment (all year); Preliminary Ground Level Tree Roost Assessment (optimal between November and March)											
	Winter roost presence/likely absence				Presence/likely absence summer survey and activity survey						Winter roost presence/likely absence	
Hazel Dormouse				Nest tube (nut search from September to December)								Nut search
Otter			Preferable survey season									
Water Vole												
Rare/notable plant or invasive species												
	Survey sub-optimal			Survey optimal			Survey outside acceptable season					