

RMA 3: Ecology Mitigation and Management Plan

August 2026

**Phase 2 – Mowbray,
North Horsham**

Prepared by
CSA Environmental

On behalf of
Legal and General
(Strategic Land North Horsham) Ltd

Report No: CSA/7937/01

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/7937/01	-	08/04/2026	NS	TS	First Issue
	A	14/04/2026	NS	TS	Update following client review
	B	28/04/2026	NS	TS/CC	Further updates
	C	29/04/2026	NS	CC	Further minor updates
	D	13/08/2026	NS	CC	Update survey information



CONTENTS	Page
1.0 Introduction	1
Background	2
2.0 Aims And Objectives	3
Aims	3
3.0 Baseline Ecological Information	5
Previous Surveys	5
Ecological Constraints	5
4.0 Avoidance, Mitigation And Compensation	10
Identified Impacts	10
Avoidance, Mitigation and Compensation	12
5.0 Enhancement And Management Prescriptions	22
Protected Species	22
Retained Woodland and Trees	23
Native Hedgerows	24
Aquatic Habitats	25
Species Rich Wetland Meadow	26
Amenity Grass Areas/Verges	27
New Tree Planting	27
6.0 Lighting	28
7.0 Ecological Monitoring Programme	30
Reporting and Remedial Actions	30
8.0 Work Schedules	32
9.0 References	37

Appendices

Appendix A: Phase 2 Reserved Matters Area 3 Red Line Plan

Appendix B: Ecological Background Summary

Appendix C: Habitats Plan & Bat GLTA Plan – Phase 2 RMA 3

Appendix D: RMA 3 Ground Level Tree Assessment Plan

Appendix E: Bat Survey Report

Appendix F: Badger Survey Report

Appendix G: Dormouse Survey Report

Appendix H: Great Crested Newt

Appendix I: Reptile Survey Report

Appendix J: Invertebrate Survey Report

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. and sets out an Ecology Mitigation and Management Plan (EMMP) for Reserved Matters area (RMA) 3 situated within Phase 2 of a mixed-use development at 'Mowbray', North Horsham.
- 1.2 Strategic development at Mowbray, is subject to an outline planning permission (DC/16/1677), and will provide up to 2,750 dwellings alongside retail and business areas, leisure and education facilities, Public Open Space, and associating landscaping and infrastructure. Development is being delivered in three phases, with each phase being subject to RMAs for each sub-phase of development (See Appendix A for the Phase 2 Reserved Matters Areas Plan). This EMMP relates to Phase 2, RMA3 (hereafter referred to as 'the Site').
- 1.3 The EMMP has been prepared to address Condition 49 of outline planning permission (DC/16/1677) in relation to RMA3. The wording of the condition is as follows:
- 1.4 **Regulatory Condition 49:** *Any application seeking approval of Reserved Matters pursuant to the planning permission shall be accompanied by a detailed Ecological Mitigation and Management Plan (EMMP), which shall be in accordance with the approved Phase-wide EMMP, shall incorporate any additional or amended recommendations arising from the up to date Ecological Surveys relevant to that Reserved Matters Area and shall include details of protection of retained habitat and avoidance measures with regards to protected and notable species. The EMMP shall include details of pre-works, during works and post-works measures including any on-going management and maintenance necessary to ensure the effectiveness of the mitigation and enhancement measures. Any application seeking approval of Reserved Matters which includes a Proposed Primary Road, as shown on the Parameter Plan: Movement and Access reference 2153A-103P received by the LPA on 6th March 2017 shall be accompanied by detailed design proposals for those road(s), including all ecological mitigation, such as dark corridors, underpasses and bridges and drawings including cross sections and details of associated fencing and landscaping to guide wildlife. The development shall thereafter be carried out in accordance with the approved details.*
- 1.5 Production of this EMMP has been informed by update ecology survey work, as required under condition 14 of Outline Planning Permission DC/16/1677 (Non-Material Amendment ref: DC/19/0984):
- 1.6 **Pre-Commencement Condition 14:** *Prior to the submission of an Ecological Mitigation and Management Plan (EMMP) with an*

application seeking approval of Reserved Matters pursuant to the planning permission, up to date ecological surveys shall be carried out to provide up to date information regarding the potential of the area covered by the Reserved Matters application to support protected and notable species and inform the future design of measures that will be required to avoid, mitigate or compensate for impacts and to inform the Ecological Mitigation and Management Plan for that Reserved Matters application. These surveys shall be completed by suitably qualified ecologist(s), recognised by a relevant professional body such as CIEEM, and in accordance with current survey guidelines. The scope of these surveys shall be agreed in advance with the LPA, and may include advanced surveys for rare bat species. The surveys shall be completed in accordance with the agreed scope prior to the submission of the EMMP for that Reserved Matters area and the results and associated reports appended to the Ecological Mitigation and Management Plan for the Reserved Matters area.

Background

- 1.7 A suite of ecological surveys has been conducted across the wider Site, and specifically within Phase 2, from 2010 to 2023. Appendix B summarises the findings of previous ecological surveys and, where appropriate, this report will provide reference to survey information specific to the Site.
- 1.8 The Site encompasses the proposed infrastructure road in the east of Phase 2. The Site bisects Phase 2 connecting RMA 20 (Clarion Land) situated to the west of the Site and Employment Land to the south with proposed residential areas associated with Phase 2 surrounding the Site.
- 1.9 Detailed proposals for the Site have been produced by Broadway Malyan (Drawing Ref: MOW-BM-PH2-RMA3-3854-DR-A-02751 Rev 05 & MOW-BM-PH2-RMA3-3854-DR-A-02756 Rev SK02) which relate to the creation of an access road, drainage and services (which include two substations, attenuation storage ponds/SuDS infrastructure) and some areas of open space and bridleway connections which are to facilitate later development. These drawings should be viewed in conjunction with the mitigation and management prescriptions set out herein.
- 1.10 In addition to these drawings, a Landscape and Ecological Management Plan produced by David Jarvis Associates in March 2026 (2898-5-4-2004-S5-P1 RMA 3 Phase 2 Road LEMP 160326) and a SuDS Management and Maintenance Plan produced by Glanville (Ref: 267-8220858_CS_Drainage Statement_RMA3 - Appendix H) should also be viewed in conjunction with this report.

2.0 AIMS AND OBJECTIVES

Aims

- 2.1 The primary aim of this EMMP is to detail the mitigation and management to be enacted for the benefit of ecological features identified within or within the vicinity of the Site.
- 2.2 The overarching objectives for the mitigation and management detailed in this EMMP are derived from the following sources:
- Chapter 12 of the Environment Statement (dated July 2016) and its appendices, and the Environment Statement's subsequent addendum submitted in support of the OPP;
 - Outline Ecological Mitigation and Management Plan (Bioscan reference: E1585/OEEMP/R1) submitted in support of the OPP;
 - A great crested newt strategy produced for Phase 2 (Derek Finnie Associates, 2025)
 - A dormouse mitigation strategy produced for Phase 2 (Derek Finnie Associates, 2025)
- 2.3 This EMMP specific to the Site has also been informed by the EMMP produced for Phase 2 in its entirety by Derek Finnie Associates (2026), which recommended the following for Phase 2:
- Derogation licences are required to be sought for works involving great crested newts and hazel dormouse where necessary;
 - SuDS features, which will include open swales, are to be incorporated into the scheme in order to increase the quality of surface water discharge, and to provide additional features for great crested newts and for foraging bats;
 - The green infrastructure is to be managed for a range of species including for reptiles, badgers, great crested newts and bats;
 - A Landscape and Ecological Management Plan (LEMP) will be produced; this will include mowing regimes for areas of semi-natural grassland for the benefit of reptiles and cutting regimes for the hedgerows. The LEMP for RMA3 has been produced by David Jarvis Associated in March 2026.
 - Bat and bird boxes are to be mounted on retained trees;
 - The tree and scrub species for the creation of the landscape buffers will comprise native species of a composition present within the existing woodland and hedgerows;
 - Protected species compensation areas should be established and managed appropriately.

2.4 The key objectives of this EMMP specific to the Site are o:

- Detail avoidance and mitigation measures for ecological features identified in association with the Reserved Matters Area;
- Ascertain the requirement and scope of long-term protection measures for habitats and species to be protected;
- Ensure the scheme aims to retain connected and permeable habitats to allow wildlife dispersal across Phase 2 and the wider Site;
- Recommend measures to achieve an overall improvement of retained habitats post-development, such as sensitive planting regimes;
- Provide recommendations for bespoke measures to minimise disturbance and impacts upon protected species and supporting habitats post-development, such as public information resources;
- Detail a compliance and reporting schedule to be implemented long-term.

3.0 BASELINE ECOLOGICAL INFORMATION

Previous Surveys

- 3.1 Historic surveys related to Phase 2 of the development commenced in 2010 and are summarised in Appendix B. Full survey reports have been previously submitted to Horsham District Council in support of Outline Application DC/16/1677 and are available on the Planning Portal.
- 3.2 In light of previous ecological survey data as per Appendix B, an update ecological walkover survey of Phase 2, comprising red line areas for RMAs 3, 12, 13, 14, 15, 16, 17, 18, and 19 was conducted by CSA Environmental on 19 February 2026 to inform the requirement for additional surveys. The update survey was undertaken using UKHabs methodology by Clare Marlow-Caudwell CEcol MCIEEM, Sam Ashby ACIEEM, Theresa Stewart MCIEEM, and Nathaniel Scott.
- 3.3 This EMMP, specific to the Site, has been prepared based on previous ecological findings, as summarised in the Ecological Background Summary (see Appendix B), in addition to the following ecological surveys which have been carried out by CSA Environmental in 2026:
 - Update site walkover (February 2026)
 - Dormouse Habitat Quality Assessment (April 2026)
 - Badger survey (April 2026)
 - Ground-Level Tree Assessment (April 2026)
 - Breeding Bird Surveys (March – June 2026)
- 3.4 In addition to the above, biological records were obtained from Sussex Biodiversity Record Centre (SxBRC) and reviewed in March 2026 in preparation for this EMMP.
- 3.5 An Ecological Scoping Report (CSA/7937/02) has been prepared and submitted to Horsham District Council. This should be read in conjunction with this EMMP. Additional surveys proposed in 2026 will encompass all RMAs within Phase 2 (excluding RMA20). If the findings of these proposed surveys stipulate the need for amendments to the mitigation or compensatory measures for protected species within the Site, as detailed herein, a revision to this report may be deemed necessary.

Ecological Constraints

- 3.6 The update ecological walkover conducted in February 2026 confirmed habitats within the Site hold the potential to support protected species as summarised below. All references to habitat parcels are made in accordance with Habitats Plan – Phase 2 East (CSA/7937/106) found in Appendix C.

Bats

- 3.7 Habitats which are included within the scope of the Site include Hedgerows H46 to the west of the Site and H45 to the south-east of Owlcastle Farm, together with areas of deciduous woodland (W1 and W3) within the central and southern extent of the Site. These habitats provide suitable foraging habitat and commuting routes for bats.
- 3.8 All trees which are considered to be potentially affected by the proposed development were subject to Ground Level Tree assessments (GLTA) May 2026. A GLTA is a detailed inspection of the exterior of a tree from the ground to look for features that bats could use for roosting, i.e. Potential Roost Features (PRFs).
- 3.9 A total of 129 individual trees within the Phase 2 development areas were subject to a GLTA with 36 of these falling within or adjacent to the Site. Of these, 25 have been identified to either possess potential roosting features or require further surveying to determine their suitability to support roosting bats. See Appendix D for RMA 3 Ground Level Tree Assessment Plan and Appendix E for full results in the Bat Survey Report.

Badgers

- 3.10 Suitable habitat for badger *Meles meles* exists within the Site in the form of areas of grassland and deciduous woodland, providing opportunities for dispersal, foraging and sett building. The update walkover survey in February 2026 identified a badger sett comprising 12 entrances within an area of W1 which lies outside the redline of the Site, to the east. A badger latrine was also identified within the south-western corner of the arable land within the Site.
- 3.11 A subsequent badger survey conducted in April 2026 by CSA Environmental identified this sett to be Main Sett 2a (See Appendix F for Badger Survey Report). The closest entrance to this sett lies 45m to the east of the redline boundary associated with the Site.

Birds

- 3.12 Habitats within the Site which are suitable for a range of bird species include those previously mentioned including sections of hedgerow (H46 and H45), deciduous woodland (W1 and W3) and additional areas of arable land. These habitats are thought to offer suitable foraging and breeding habitat for a range of species including farmland specialists such as skylark *Alauda arvensis*, yellowhammer *Emberiza citrinella*, corn bunting *Emberiza calandra*, lapwing *Vanellus Vanellus*, and fieldfare *Turdus pilaris*. Both skylark and fieldfare were recorded within adjacent arable habitat within RMA 16/17 and 18 during an update walkover survey conducted by CSA in 2026.

- 3.13 Subsequent breeding bird surveys were undertaken March-June 2026. Based on initial analysis of results from these surveys, the findings are largely consistent with the above.
- 3.14 One ground nesting species, skylark, was recorded using the grassland/cropland within the Site and adjacent areas. Skylark are a resident ground-nesting species which favours open country, unmanaged grassland, or well-structured cropland. Skylark is on the Birds of Conservation Concern (BoCC5) Red List and is a Species of Principal Importance (SPI).
- 3.15 Other habitats within the Site, including sections of native hedgerow and areas of deciduous woodland were found to provide shelter and foraging habitat for a range of passerines including species of conservation interest dunnoek *Prunella modularis*, wren *Troglodytes troglodytes* and woodpigeon *Columba palumbus*, all of which are included on the BoCC5 Amber List. Song thrush *Turdus philomelos*, yellowhammer and linnet *Carduelis cannabina*, were also recorded within or adjacent to the Site and are all on the BoCC5 Red List. Dunnock and song thrush are also SPI.
- 3.16 Analysis of the results from the breeding bird surveys is ongoing. Should the findings of these surveys stipulate the need for amendments to the mitigation or compensatory measures for breeding birds within the Site (as detailed herein), a revision to this report may be deemed necessary.

Hazel Dormouse

- 3.17 Two areas of hedgerow (H46 and H45) together with two areas of woodland (W1 and W3) lie within the Site are thought to provide suitable habitat for hazel dormouse *Muscardinus avellanarius*.
- 3.18 Historic surveys did not confirm the presence of hazel dormice within or adjacent to the Site (see Appendix B). However, arboreal connectivity to Phase 1, where dormice were previously recorded, exists in the form of an extensive network of well-connected hedgerows, treelines, and areas of deciduous woodland (including areas of off-Site ancient woodland).
- 3.19 A Habitat Quality Assessment (HQA) undertaken in April 2026 within the Phase 2 development area (included the Site) and has been used to inform the scope of additional presence/absence surveys which are to be undertaken in the latter part of 2026 (see Appendix G for Dormouse Survey Report). The HQA indicated that woodland and hedgerows across the Site provide 'good' to 'excellent' habitat for dormice. As such, a nest-tube survey will be undertaken over a three month period from July to September to assess the presence / likely absence of dormice across the Phase 2 area.

- 3.20 To date, one survey has been undertaken within Phase 2 on 31 July 2026. No evidence of dormice was recorded during this survey.

Great Crested Newts

- 3.21 A total of four ponds lie within a dispersal distance (250m) of the Site with no ponds being identified within the Site. Suitable terrestrial habitat identified within the Site comprises hedgerow bases together with a potential hibernaculum identified within the north-west of the Site. The remaining existing habitat predominantly comprised short sward, well-managed grassland and arable land. Historic Surveys (Appendix B) did not identify great crested newt within the Site or within the surrounding area. As such, no mitigation for great crested newt is anticipated to be required as this species is considered likely absent within a dispersible distance.
- 3.22 Update surveys great crested newt surveys undertaken across Phase 2 carried out between May and June 2026 by CSA Environmental have included Habitat Suitability Index (HSI) Assessments and environmental DNA sampling (eDNA). These surveys targeted 24 waterbodies within 500m of the wider Phase 2 Site. Results from the eDNA indicated that the four ponds within a dispersal distance from the Site tested negative for the presence of great crested newt. See Appendix H for Great Crested Newt Survey Report.

Reptile

- 3.23 The modified grassland and arable habitats within the Site are largely deemed unsuitable for reptiles, due to lack of vegetation cover and regular management of grassland by grazing sheep.
- 3.24 A soil and rubble mound is situated within the Site to the north of the stream on the south-western corner of the field. This may have been deposited after dredging of the stream and offers suitable reptile refugia and hibernation suitability.
- 3.25 Surveys undertaken across the wider site in 2014 and 2015 indicated that low populations of slow worm *Anguis fragilis* and common lizard *Zootoca vivipara* within parts of Phase 2. Subsequent survey work in 2023 did not record any reptiles within the surveyed area.
- 3.26 Update reptile surveys undertaken in 2026 by CSA Environmental, within the Phase 2 development area (including the Site) did not record any reptiles within the Site or within any immediately adjacent areas. Low number of slow-worm and common lizard were recorded within other parts of the wider Phase 2 Site. See Appendix I for Reptile Survey Report.

Invertebrates

- 3.27 A notable invertebrate species assemblage was recorded within surveys of the wider site in 2015 and 2016, but full survey reports have not been

made available at the time of writing. The presence of notable species within the Site therefore, cannot be discounted. Sections of hedgerow and deciduous woodland within RMA may support notable species.

- 3.28 A subsequent invertebrate survey carried out on 13 June 2026 found Phase 2 (including the Site) to support a reasonable diversity of predominantly widespread and common invertebrate species associated with hedgerows and trees and the less homogenous flora found at field margins, small meadows, hedgerow bases and woodland edge. No habitats or resources were noted that had the potential to support important invertebrate assemblages. See Appendix J for Invertebrate Survey Report.

Invasive species

- 3.29 Himalayan balsam *Impatiens glandulifera* was recorded in the south of RMA 18 along the northern boundary of W3. The western most section of this area falls within the defined area of the Site.

4.0 AVOIDANCE, MITIGATION AND COMPENSATION

Identified Impacts

- 4.1 Reserved Matters Area (RMA) 3 (the Site) relates to the proposed infrastructure in association with Phase 2. RMA3 bisects Phase 2 connecting RMA 20 (Clarion Land) situated to the west of the Site and the Employment Land parcel to the south, with proposed residential development associated with Phase 2 to be access via RMA3.
- 4.2 An iterative process regarding the masterplan for Phase 2 has been employed to ensure that avoidance, mitigation, and compensation measures have been incorporated into the scheme. Detailed proposals for the Site have been produced (Drawing Ref: MOW-BM-PH2-RMA3-3854-DR-A-02751 Rev 05 & MOW-BM-PH2-RMA3-3854-DR-A-02756 Rev SK02) which relate to the creation of an access road, two substations, attenuation storage ponds/SuDS infrastructure and some areas of open space and bridleway connections. These drawings should be viewed in conjunction with the mitigation and management prescriptions set out herein.
- 4.3 Input from the Project Ecologist has been incorporated from the project inception to ensure that ecological constraints to development have been minimised through scheme design. As per the Phase 2 EMMP (Derek Finnie Associates, 2026), the retention of hedgerows, woodland belts, mature trees, and woodland, forms part of the design here possible, to minimise impacts.
- 4.4 In addition to the above, the following reports and drawings should also be viewed in conjunction with this report:
 - Landscape and Ecological Management Plan (2898-5-4-2004-S5-P1 RMA 3 Phase 2 Road LEMP 160326), David Jarvis Associates 2026.
 - General Arrangement landscape plans (2898-5-2-17-DR-2001-S0-S5-P4), David Jarvis Associates 2026.
 - Landscape Statement (2898-5-4-LS-2002-S5-P2 Employment Road Landscape Statement), David Jarvis Associates 2026.
 - SuDS Management and Maintenance Plan (Ref: 267_8220585_CS_RMA3_Drainage_Statement – Appendix H, Glanville 2026)
- 4.5 It is, however, acknowledged that impacts to existing habitats will occur as a result of the development of the Site. Seven key areas have been identified in accordance with the Arboricultural Impact Assessment & Method Statement (David Jarvis Associates, March 2026) which are detailed in turn below with relevant impacts identified and as relevant:

Pegasus/Culvert Area

- 4.6 This area is situated in the south of the Site and will see the provision of a new section of road and pedestrian access which will bisect the existing byway north to south. Works to an existing culvert of Chennells Brook will also be required.
- 4.7 The proposed development of this area will result in impacts to the western edge of W3 (c. 0.022ha) which is to include the loss of three mature trees together with impacts to the existing hazel *Corylus avellana* and goat willow *Salix caprea* understorey. Works will impact the eastern edge of W2 which is to include the loss of mature trees (see Arboricultural Impact Assessment & Method Statement, David Jarvis Associates, March 2026). Whilst impacts to this woodland strip cannot be avoided; compensatory habitat creation (semi-natural broadleaved woodland) will be provided within the wider Phase 2 scheme (as detailed herein).

Proposed Pond 9a Area/Access

- 4.8 This area is situated to the south of Owlcastle Farm and will see the further development of pedestrian access to facilitate later development together with grading of ground levels for a proposed attenuation pond.
- 4.9 The proposed development of pedestrian access and the attenuation pond/ SuDS basin will result in the loss of a section (c. 12m) of existing native hedgerow (hedgerow H45) together with complete loss of hedgerow H54 and the loss of areas of modified grassland.

Area West of Pond 9a

- 4.10 Situated to the west of the proposed attenuation/ SUDS pond (Pond 9a) this development area refers to an additional culvert.
- 4.11 The construction of an additional culvert will have impacts on several mature trees leading to their subsequent removal (G813 and T812) as well as impacts to the existing modified grassland.

Pond 9a Outfall

- 4.12 This area of development is situated to the west of the proposed pond 9a and will allow for the provision of its outfall route.
- 4.13 Outfall route 'B' will result in impacts to a number of mature trees within hedgerow H36 but will avoid impacts to the adjacent deciduous woodland (W2) which lies to the south.

Second Culvert

- 4.14 An area (c. 0.2ha) of deciduous woodland (W1) is to be lost to facilitate road creation and associated infrastructure including pedestrian walkways/cycleways. A culvert is also proposed within this area which will result in the modification of the existing stream which passes through W1. Woodland W1 has been previously identified to be ancient in

origin within the Phase 2 EMMP (Derek Finnie Associates, 2026). Ancient woodland ground flora was confirmed to be present during the update site walkover survey carried out by CSA on 19 February 2026. Whilst impacts to this woodland strip cannot be avoided; compensatory habitat creation (semi-natural broadleaved woodland) will be provided within the wider Phase 2 scheme (as detailed herein).

Proposed Pond 10a outfall

- 4.15 Situated within the south-western corner of the northern extent of the Site this area of development will include the development of a new headwall to support the outfall of proposed Pond 10a to an existing stream to the south.
- 4.16 This development will result in the minor loss of existing individual trees which form part of the existing deciduous woodland (W1) to the south.

Additional impacts

- 4.17 Outside of the aforementioned areas, the proposed development will have other general impacts to existing habitats and protected species which include:
- Losses to hedgerows H45 (c. 47m including two oak *Quercus* sp. trees), H46 (c. 90m), and H54 (c. 10m) to enable access and internal road construction;
 - Losses and fragmentation of areas of modified grassland to facilitate the access road and SuDS/attenuation infrastructure (c. 2.79ha);
 - Losses of arable habitat within the south of the Site to facilitate the access road (c. 0.94ha);
 - Losses of individual trees (see Arboricultural Survey, David Jarvis Associates Ltd March 2026);
 - The development of the Site risks causing harm and disturbance to protected species during the operational phase, including via increased artificial light disturbance and recreational activity.

Avoidance, Mitigation and Compensation

- 4.18 The construction phase of the Site infrastructure risks causing disturbance and harm to protected species comprising bats, dormice, reptiles, birds through the direct removal of supporting habitat and indirect associated effects. As such detailed avoidance, mitigation and compensation measures, are detailed below.

Hedgerows

- 4.19 Retained hedgerows will be subject to protection measures during construction including the installation of protective Tree Protection Fencing (TPF) demarcating Root Protection Areas (RPAs) as defined by

the Arboricultural Survey (David Jarvis Associates, 2023) and in accordance with BS 5837:2012.

- 4.20 The development of the Site will require the removal of c. 154m existing hedgerow to enable construction access, including H46 situated within the north of the Site along its western boundary with RMA 20, together with H45 and H54 which are situated within the south of the Site, to the south of Owlcastle Farm.
- 4.21 Currently, no compensation for the loss of hedgerows within the Sites redline is proposed, however there is significant scope within the wider Phase 2 areas for appropriate compensation (i.e. planting of new native species rich hedges), to includes areas within the strategic landscape buffers. Planting within the strategic landscape buffers will be at a 1:1.25 ratio and will include an area of at least c. 200m of new hedgerow planting.
- 4.22 To improve connectivity across the Site, retained hedgerows will be subject to enhancement measures including the planting of whips and shrubs to fill hedgerow gaps. A sensitive management regime, as detailed herein, will also act to improve the ecological function of retained hedgerows within the Site.

Woodland

- 4.23 Retained areas of woodland will be subject to protection measures during construction including the installation of protective Tree Protection Fencing (TPF) demarcating Root Protection Areas (RPAs) as defined by the Arboricultural Survey (David Jarvis Associates, 2023) and in accordance with BS 5837:2012. Deciduous woodland near or adjacent the boundaries are to remain inaccessible to the public.
- 4.24 Woodlands W2 and W3 will be subject to some tree removal to facilitate the proposed road construction. The protection of retained woodland and trees will be implemented through installation of tree protection fencing to be maintained in situ throughout the works. Indirect impacts from dust from the earth works will be minimised through the installation of dust-proof sheeting affixed to the fencing to prevent excessive pollution of the woodlands.
- 4.25 No compensation for the loss of deciduous woodland within the Site is proposed, however there is significant scope within the wider Phase 2 areas and strategic landscape buffer (e.g. Ph2C to the east) to deliver compensatory semi-natural deciduous woodland planting. Where any deciduous woodland is lost, it is to be replaced with suitable alternative new planting at a ratio of 1:1.25 and where possible translocation of woodland soils from W1 to new areas of woodland planting should be implemented to facilitate the establishment of a diverse woodland ground flora. Based on the above ratio a minimum of c. 0.28ha of

deciduous woodland is to be implemented within the strategic landscape buffer.

Grassland

- 4.26 It is anticipated that c. 2.79ha modified grassland will be lost to the development within the Site.
- 4.27 Habitat creation of 0.2ha amenity grassland, 0.52ha species rich grassland with 0.8ha of species rich wet/marshy grassland within proposed attenuation basins is proposed (total creation 1.52ha). As for woodland, there is scope for the delivery of further semi-natural grassland habitats within the strategic buffer areas (e.g. P2C). The LEMP and the SuDs Maintenance Strategy will detail appropriate management of these habitats post habitat creation/project completion.

Individual Trees

- 4.28 The development of the Site will result in the loss of 19 individual trees and four groups of trees together with impacts including partial clearance to two additional individual trees and four groups of trees (see Arboricultural Impact Assessment, David Jarvis Associated Ltd March 2026).
- 4.29 Where mature trees are to be retained standard protective fencing and ground protection will be implemented in accordance with BS 5837:2012, ensuring all trees are protected and safeguarded throughout all stages of development.
- 4.30 A total of 58 new trees will be planted throughout the Site and subject to a suitable management regime as detailed herein.

Watercourses

- 4.31 Watercourse manipulation is proposed in relation to the development of two culverts and straitening of the stream in the north of the Site and creation of SuDS/attenuation features.
- 4.32 Adequate avoidance and mitigation measures in respect of potential pollution and siltation from the construction phase will be delivered through standard pollution prevention procedures, secured through the production of a bespoke Construction Environmental Management Plan (CEMP).
- 4.33 The LEMP details appropriate management of the existing ditches and marginal aquatic planting post development.

Bats

Commuting/Foraging Opportunities

- 4.34 Unmitigated, the development of the Site risks causing disturbance to commuting and foraging bats frequenting linear habitats and woodland within and adjacent to the Site. Common pipistrelle *Pipistrellus pipistrellus* and *Myotis* sp. have been recorded foraging along H46 with common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus*, and Daubenton's bat *Myotis daubentonii* recorded in association with W1. The eastern hedgerow H54 is proposed for removal which will result in the loss of the commuting route along the trackway in this location, however, the hedgerow to the west of the track in this location will be retained as a linear habitat feature. Where possible linear habitats and woodland blocks and woodland edge habitat is being retained to ensure continuity of habitat corridors across the site for use by bats post development.
- 4.35 The creation of additional hedgerows will compensate for the loss of hedgerow features as a result of the development. Additional foraging opportunities will be created with the Site in the form of a SUDS feature and wildflower planting.

Roosting Opportunities

- 4.36 Any trees subject to removal or modification have been subject to further assessment for bat roost suitability. An updated Ground-level Tree Assessment was conducted by CSA Environmental in May 2026. A total of 129 individual trees within the Phase 2 development areas were subject to a GLTA with 36 of these falling within or adjacent to the Site. Of these, 25 have been identified to either possess potential roosting features or require further surveying to determine their suitability to support roosting bats (see Appendix E for Bat Survey Report).
- 4.37 Of the 25 trees previously identified to have suitability for roosting bats, 14 will be impacted by the proposed development. Trees which are to be impacted, and the GLTA summary is provided in Table 1 below.

Table 1. RMA 3 impacted trees

Tree Number	GLTA Category	Recommendation
T277	FAR	Rope climb – to confirm roost potential
T359	FAR	Rope Climb – to confirm roost potential
T454	PRF-M	Rope climb – 3x surveys to confirm roost pres/abs
T455	FAR	Rope climb – to confirm roost potential
T456	FAR	Ground assessment – to confirm roost potential
T460	FAR	Ground assessment – to confirm roost potential
T460a	PRF-M	Rope climb - 3x surveys to confirm roost pres/abs
T460b	FAR	Rope climb - to confirm roost potential
T460c	FAR	Ground assessment – to confirm roost potential
G460a	FAR	Rope climb – to confirm roost potential
T461a	FAR	Rope climb – to confirm roost potential
T461b	FAR	Ground assessment – to confirm roost potential

T482	FAR	Rope climb – to confirm roost potential
T882	FAR	Rope climb – to confirm roost potential

- 4.38 Two of these trees have been assessed as being PRF-M and shall be subject to further climbing surveys (and/or emergence surveys) to determine the presence / likely absence of any roosts. The other 12 trees also require further aerial inspection to confirm their roost potential (as could not be accurately assessed from ground level) prior to works taking place.
- 4.39 Should further surveys indicate that roost bats are present, then felling works shall be subject to European Protected Species (EPS) licencing requirements. Mitigation measures pertaining to the loss of confirmed bat roosts will be detailed in full within corresponding licence documentation but will likely include, at a minimum, the creation of alternate roosting opportunities such as bat boxes upon suitable retained trees onsite.
- 4.40 A sensitive lighting strategy will be created to ensure the avoidance of any directional light spillage onto any sensitive, retained habitats or adjoining areas such as areas of deciduous woodland, hedgerows, or mature trees. The lighting strategy will be designed according to Condition 62:

Regulatory Condition: Any Reserved Matters application which includes areas to be externally illuminated, including by street lighting, security lighting and flood lighting, shall be accompanied by a sensitive lighting strategy to reduce impacts on foraging and commuting bats and on 'dark skies' of the High Weald AONB. The sensitive lighting strategy shall be based on up to date ecological survey information (including advanced surveys for rare species where necessary) and the Ecological Mitigation and Management Plan for that Reserved Matters area, and prepared in consultation with the Applicant's ecology consultant who shall be a suitably qualified ecologist(s) recognised by a relevant professional body such as CIEEM. The development shall thereafter be carried out in accordance with the approved details.

- 4.41 Significant scope within the wider Phase 2 areas which includes an identified strategic landscape buffer has been identified for habitat improvement and creation. In addition to this, additional roosting opportunities will be created through the installation of a range of bat boxes within retained trees and upon constructed units throughout Phase 2.

Badgers

- 4.42 During a Site walkover assessment in February 2026, a badger sett comprising 12 entrances was identified within an area of woodland W1 approximately 45m east of where the Sites redline area intersects with the woodland W1. A subsequent badger survey conducted in April 2026

by CSA Environmental identified this sett to be Main Sett 2a (See Appendix F for Badger Survey Report). The closet entrance to this sett lies 45m to the east of the redline boundary associated with the Site. No evidence of sett building was identified within the Site although activity in the form of a latrine was identified within the south-west of the arable field. As such, no direct mitigation for badgers is required. However, given the that badgers are known to be in close proximity to the Site, precautionary measures will be adopted to ensure that they are not directly affected by any of the proposed works, these are detailed below.

- 4.43 A pre-commencement badger check should be carried out by a suitably qualified ecologist to check for any evidence of badger sett building activity within the RM area. Where new setts are identified during this walkover then an appropriate mitigation strategy will need to be defined before commencement.
- 4.44 During the construction phase it is possible that badgers may become trapped within any trenches, foundations of pipework installed in association with the proposed development. As such, the following measures will be taken during the construction phase of the development:
- All excavations are to be covered overnight or have appropriate escape ramps placed within them at the end of each working day.
 - Sections of piping ($\geq 15\text{cm}$) should be blocked to prevent any badgers which may become trapped from entering any pipework.
- 4.45 The removal of area of modified grassland and arable land may result in a loss of foraging and commuting opportunities post-development; the creation of SuDS features, to be enclosed by native marginal and neutral grassland and wildflower planting will create additional opportunities for badgers within the RM area.

Birds

- 4.46 The Site contained a range of habitats which are suitable for foraging and nesting birds including arable land, neutral grassland, hedgerows, woodland and mature trees. Arable land that may support farmland species, including skylark and yellowhammer as previously recorded, will be subject to mitigation measures to avoid impacts to ground nesting species as detailed within the Phase 2 EMMP (Derek Finnie Associates, 2026) including the avoidance of vegetation clearance during typical the nesting season (March to August inclusive).
- 4.47 The removal of arable and grassland pasture habitat, hedgerow and woodland edge habitat will result in fewer opportunities for nesting birds in the Site post-development. Compensatory opportunities will be provided in the form of additional native hedgerows, tree-mounted bird nesting boxes. The provision of a SUDS features and areas of neutral

grassland and wildflower will aim to provide foraging opportunities for a range of species.

- 4.48 Mitigation for breeding birds will be necessary given the loss of suitable nesting habitat for a range of ground nesting species including skylark. Appropriate mitigation is to be confirmed following the completion of the breeding bird survey analysis which is currently being undertaken. This mitigation will be provided outside of the RMA3 area.

Hazel Dormouse

- 4.49 Historic surveys did not confirm the presence of hazel dormice within or adjacent to the Site (see Appendix B). However, arboreal connectivity to Phase 1, where dormice were previously recorded, exists in the form of an extensive network of well-connected hedgerows, treelines, and areas of deciduous woodland (including areas of off-Site ancient woodland). However, evidence of a dormice (a nest) was recorded along the shelterbelt adjacent to the A264 (within the Sports Sub Phase; located c.850m south-west of RMA3) in 2024, and in June 2026 further east along this shelter belt (as part of survey undertaken by EcoSupport in relation to the Employment Phase; located c.680m south-west of RMA3).
- 4.50 Following a Habitat Quality Assessment (HQA) undertaken in April 2026, update surveys across Phase 2 are scheduled for July to September 2026. These surveys are ongoing; but no evidence to indicate the presence of dormice was recorded during the July survey. As such, whilst there is some habitat connectivity to land to the south-west, this is not continuous and the result of further surveys are required to determine if European Protected Species (EPS) licencing will be required to facilitate the implementation of RMA3.
- 4.51 Given the local records it is considered that the implementation of the proposed works will need to be subject to a EPS licence from Natural England; and appropriate mitigation and compensation measures secured under this mechanism.
- 4.52 RMA3 (and development across the wider Phase 2 area) will aim to retain areas of hedgerow and deciduous woodland where possible, minimising direct and indirect impact upon dormouse. However, the development of the RMA3 Site will comprise the removal of c. 154m hedgerow including H45, H46, and H54 and a total loss of 0.22ha of deciduous woodland. While these areas of the Site have not been confirmed to support dormice during previous survey efforts, their loss will be compensated through the creation of suitable alternative habitat within the wider Site to retain suitability for dormice and connectivity to suitable off-Site areas. This compensation is to be provided in the form of suitable alternative new planting at a ratio of 1:1.25 as per the agreed Phase 2 Site Wide EMMP. A significant area of new semi-natural

woodland planting will be provided within the RMA2C Strategic Landscape Buffer, which has direct connectivity to existing woodland habitat along the Chennel's Brook (bisected by RMA3) and will provide additional connectivity to extensive off-site woodland to the north of the Phase 2 Site.

- 4.53 To improve connectivity across the Site, retained hedgerows will be subject to enhancement measures including the planting of whips and shrubs to fill hedgerow gaps.

Great Crested Newts

- 4.54 A total of four ponds lie within a dispersible distance (250m) of the Site with no ponds being identified within the Site. In this case, suitable terrestrial habitat identified within the Site comprises hedgerow bases together with a potential hibernaculum identified within the north-west of the Site. The remaining existing habitat predominantly comprised short sward, well-managed grassland and arable land. Historic Surveys (Appendix B) did not identify great crested newt within the Site or within the surrounding area. As such, no mitigation for great crested newts is anticipated.
- 4.55 Update surveys across Phase 2 carried out May-June 2026 by CSA Environmental in relation to great crested newts has included Habitat Suitability Index Assessments (HSI) and environmental DNA sampling (eDNA). These surveys targeted 24 waterbodies within 500m of the wider Phase 2 Site. Results from the eDNA indicated that the four ponds within a dispersal distance from the Site tested negative for the presence of great crested newt.
- 4.56 As great crested newt are likely absent from the four identified ponds which lie within a dispersible distance from the Site, a non-licensed approach to habitat clearance is deemed appropriate (i.e. the potential for direct and/or long-term impacts to GCN is considered to be very low). A precautionary working methods statement in relation to GCN will be implemented during the commencement of works within RMA3.
- 4.57 The precautionary working methods statement will include appropriate timing of the works and habitat manipulation to minimise the risk of harm to great crested newts should they be present. Works which will affect likely newt hibernacula may only be undertaken during the active period for amphibians (generally mid-February to mid-October).
- 4.58 To improve connectivity across the Site, retained hedgerows will be subject to enhancement measures including the planting of whips and shrubs to fill hedgerow gaps.
- 4.59 Formally identified strategic landscape buffers together with retained and created ponds will continue to provide appropriate habitat for

great crested newt within the wider the Phase 2 scheme. Additional compensatory ponds have been included within the Hillside area of development, to compensate for the loss of suitable great crested newt habitat within Phase 2 of the development).

Reptiles

- 4.60 Historically, no reptiles have been identified within the Site. As such, no specific mitigation for reptiles is anticipated to be required at present.
- 4.61 However, suitable habitat for reptiles is present, in the form of hedgerow bases in association with hedgerows H45, H46 and H54 and potential hibernacula within the north-west of the RM area. Update surveys across Phase 2 have been undertaken in 2026 which has included the installation of 150 reptile refugia in April 2026. A total of four surveys have been undertaken to date between May and June 2026, with a further three scheduled for summer 2026. To date, no reptiles have been found within the Site or within any immediately adjacent areas. See Appendix I for Reptile Survey Report.
- 4.62 Should the remaining surveys demonstrate that reptiles are present within areas to be impacted by the proposed development, then Reasonable Avoidance Measures (RAMs) and suitable mitigation will be put in place.
- 4.63 Subsequent reptile surveys undertaken in 2026 within the Phase 2 development area (including the Site) which included the installation of 150 reptile refugia on 27 April 2026. Following a 2-week 'bedding-in' period, a total of four surveys were undertaken between May and June 2026. No reptiles were found within the Site or within any immediately adjacent areas. See Appendix I for Reptile Survey Report.
- 4.64 If required, RAMs will be employed to avoid the killing/injury of reptiles during any habitat manipulation carried out during pre-commencing or during the construction phase. The scope of this will be agreed with the LPA but should include;
- A toolbox talk prior to the commencement of works within the Site which is to include details of precautionary measures outlined within the Reptile Mitigation Strategy and what to do should reptile be found during the works.
 - The timing of works, which is to be undertaken outside nesting bird season (March to August inclusive) and outside the hibernation period (November to February) for reptiles.
- 4.65 Suitable reptile habitat which is to be retained will be subject to mitigation to ensure its protection during the construction phase of the development (see Hedgerows section above). Enhancement of reptile habitat is to take place within the wider Phase 2 area where there is significant scope within an identified strategic landscape buffer.

Invertebrates

- 4.66 Aside from the loss of areas of hedgerow and deciduous woodland, the development of the Site may provide an increase in opportunities for invertebrates through the creation of SuDS features and neutral grassland planting.
- 4.67 A subsequent invertebrate survey carried out on 13 June 2026 found Phase 2 (including the Site) to support a reasonable diversity of predominantly widespread and common invertebrate species associated with hedgerows and trees and the less homogenous flora found at field margins, small meadows, hedgerow bases and woodland edge. No habitats or resources were noted that had the potential to support important invertebrate assemblages and no further surveys have been recommended in this case, see Appendix J for Invertebrate Survey Report.
- 4.68 Survey results have indicated that hedgerows, scrub and trees which were sampled yielded a reasonable number of arboreal invertebrates. To support this assemblage of invertebrates existing boundary trees and shrubs will be retained where possible to ensure the provision of linear wildlife corridors and host resources for phytophagous and saproxylic species are maintained.
- 4.69 Any existing dead and decaying wood features will be retained where safe to do so. During any tree clearance in association with the development, a proportion of any arisings should be retained within the Site in a variety of situations. These might include log piles, brash piles, dead hedges, or long lengths of trunk or entire felled trees.

Invasive species

- 4.70 The Site is known to support Himalayan balsam. In order to prevent this species from spreading further within the Site and wider area, an invasive species treatment plan is ongoing, and this will need to be regularly monitored in future to ensure the appropriate management and control of invasive species.

5.0 Enhancement And Management Prescriptions

Protected Species

- 5.1 As discussed above, the following will be implemented into the post-development design to mitigate for the loss of habitats with the potential to support protected species:

- Installation of SUDs basins with marginal aquatic and wetland meadow planting.
- Planting of individual trees in association with the SUDs areas and street trees along the road, overlying amenity grassland.
- Bat boxes installed on trees and residential units outside of RMA3 area

- 5.2 A Construction Environmental Management Plan (CEMP) will be prepared to cover Phase 2 to satisfy Condition 10:

Pre-Commencement Condition: Prior to the commencement of each of the accesses hereby permitted, a detailed Construction Environment Management Plan document, specific to that access, shall be submitted to and approved in writing by the Local Planning Authority.

- 5.3 A Landscape and Ecological Management Plan (LEMP) will detail management prescriptions throughout the operational phase of the development as outlined in condition 35:

Pre-Occupation Condition: Prior to the initial occupation of any Reserved Matters Area, a detailed Reserved Matters Area-Specific Landscape and Ecological Management Plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority. The Reserved Matters Area-Specific LEMP shall include the following:

- a) Details of the landscape components of that Reserved Matters Area*
- b) A description of existing and proposed ecological, drainage and landscape components within that Reserved Matters Area;*
- c) Details of how each component will be managed and maintained;*
- d) Details of maintenance operations including timing and frequency of when those measures will be carried out;*
- e) Details of the parties / organisation who will manage and maintain the site, to include a plan delineating the areas that they will be responsible for;*
- f) Coordination with the approved Ecological Mitigation and Management Plan for that Reserved Matters Area.*

- 5.4 The management prescriptions set out herein are in line with those recommended within the SuDS Management and Maintenance Plan (Glanville 2026) and Landscape and Ecological Management Plan, Arboricultural Impact Assessment & Method Statement, Landscape Statement and Landscape General Arrangement Plan produced by David Jarvis Associates Ltd (March, 2026).
- 5.5 The landscape areas shall be managed and maintained in accordance with the approved details by the assigned management company.

Retained Woodland and Trees

- 5.6 Where woodland losses cannot be compensated for within the Site this will need to be incorporated within the wider Phase 2 area with potential within the strategic buffers and the extension of Woodland W3 Along Channell's Brook, north into the field F1 will be considered though adjacent RMA parcels as they come forwards.
- 5.7 The enhancement and maintenance prescriptions of the woodland will be covered within the associated RMAs respective EMMP. General objectives and management prescriptions for retained woodland and trees are set out below.

Objectives

- 5.8 To maintain and enhance existing biodiversity and green ecological corridors throughout the Site and the wider area. To manage and enhance a mosaic of habitat types that will ensure future longevity. To ensure health and safety requirements to all publicly accessible habitats and to prevent the spread of invasive species.

Management prescriptions

- 5.9 Retained trees will be subject to preliminary remedial work as detailed by Duckworth Arboriculture Consultancy (November 2023), which includes but is not limited to, the following prescriptions:
- Removing deadwood
 - Crown cleaning
 - Cut and remove ivy
 - Pruning basal tree growth
 - Target pruning
- 5.10 Further remedial work is to be carried out as appropriate following annual review.
- 5.11 As stated in the Landscape and Ecological Management Plan (David Jarvis Associates Ltd, March 2026), the management of retained trees will generally be non-intervention unless there are reasons to cut trees for health and safety considerations, in which case arboricultural advice will be sought and followed. Prior to any felling or tree work, the tree(s)

will be assessed for their suitability to support roosting bats by a suitably qualified ecologist. If suitable features are identified, then the tree(s) will be subject to the requisite number of bat surveys in line with the Bat Conservation Trust (BCT) guidelines (BCT, 2024). Should any evidence of roosting bats be found then a derogation licence application will be submitted to Natural England before the works can be permitted.

- 5.12 Retained trees and hedgerows and their root protection zones will be protected from disturbance during the construction phase and post-development in accordance with the Arboricultural Statement (David Jarvis Associates Ltd, March 2026) and BS5837.

Native Hedgerows

Retained Hedgerows

- 5.13 The west section of hedgerow (H54) which lies within the Site is to be retained under the proposals.

Objectives

- 5.14 To protect and enhance existing linear habitat features for local wildlife, including bats and dormice and to maintain the screening value of existing hedgerows.

Prescriptions

- 5.15 Retained hedgerows will be subject to protection measures during construction including the installation of protective Tree Protection Fencing (TPF) demarcating Root Protection Areas (RPAs) as defined by the Arboricultural Survey (David Jarvis Associates, 2023) and in accordance with BS 5837:2012.
- 5.16 All tree works (including work to dead, dying and diseased trees) shall be carried out by an Arboricultural Association approved contractor (arboricultural contractor or arborist) to the latest version of BS3998: Recommendations for Tree Work, whom, unless by agreement to the contrary shall be responsible for obtaining all necessary felling licences pertaining to the prescribed work. All contractors should be aware of the legal protection afforded to breeding birds, amphibians, dormouse and bats.
- 5.17 To improve connectivity across the Site, retained hedgerows will be subject to enhancement measures including the planting of whips and shrubs to fill hedgerow gaps. Only native species of local provenance as set out within the planting schedule will be planted.
- 5.18 Infill planting will be conducted into well-prepared ground. New transplants will be protected with proprietary spiral rabbit guards or shrub shelters.

- 5.19 The existing hedgerows will be monitored for any sign of defects or poor health annually or after severe weather. Any signs of ill health or damage will be noted and remedial action taken when required.
- 5.20 Established sections of the hedgerows will be managed with a cut every three years in January to February. The trimming of hedgerows will not take place more than once every three years.
- 5.21 Where possible, the height of each trim should be increased by about 10cm high (and wide) compared to the previous cut.
- 5.22 Dead wood will be kept on site to form log piles within the woodlands and thicket areas to form habitat that can be used by saprophytic organisms and hibernating fauna.

Aquatic Habitats

Proposed SuDS Systems/swales

- 5.23 A series of drainage features will be provided as part of the development of the Site. These will comprise a number of shallow detention basins and linear swales to attenuate flows before releasing back into the wider drainage system at a controlled rate. The aquatic habitats will be planted with a range of aquatic and marginal plants.
- 5.24 Gullies, gully connections and other surface water drainage infrastructure solely serving highway land are to be adopted by West Sussex County Council in its role as highway authority and will therefore bet their responsibilities to maintain.

Objectives

- 5.25 The basin grassland shall be managed less intensively in order to provide a more diverse sward with greater biodiversity value and habitat potential. To maximise the multi-functional value of surface water attenuation features for biodiversity and amenity use.

Prescriptions

- 5.26 As per the LEMP (David Jarvis Associates Ltd, March 2026), the SuDS basins will be subject to annual maintenance visits in July/August to monitor vegetation and remove undesirable weeds by hands. Any dead or dying stock will be replaced with equivalent stock and planting during the next planting season. During the third year of the management period the process of colonisation of the permanently wet areas by the proposed emergent planting shall be reviewed when a more predictable seasonal pattern of water levels is known.
- 5.27 Every third year, sections of emergent/marginal planting should be cleared between September and November, where necessary.

- 5.28 The basins and linear swales will be seeded with the specified wet wildflower grassland seed mix to form grassland areas that provide opportunities for wildlife.
- 5.29 The ponds will be designed with scalloped edges and a varied profile, incorporating marginal shelves at varying depths to maximise habitat opportunities. In addition, the ponds will be planted with native aquatic and marginal vegetation.
- 5.30 Marginal pond vegetation will be monitored to ensure development of a diverse aquatic community of plants and to prevent dominance of more aggressive species. Vegetation may need to be cut to prevent the pond becoming clogged with plants or dead organic matter.
- 5.31 The SuDS features will be inspected at regular intervals, minimum every quarter or as required, for the presence of litter and general debris that may obstruct the water and/or provide pollutants to the water. Litter and debris should be removed by hand and taken off-site.
- 5.32 Additional management prescriptions are set out within the SuDS Management and Maintenance Plan (Glanville 2026) which should be viewed in conjunction with the above prescriptions.

Species Rich Wetland Meadow

- 5.33 As indicated by the Landscape General Arrangement Plan (David Jarvis Associates Ltd, March, 2026) areas of species rich wetland meadow are proposed abutting the proposed SuDS features.
- 5.34 A locally appropriate wildflower meadow seed-mix will be nectar-rich and will be sown onto pre-prepared seed beds in accordance with the planting specification. No nutrient improvement to the existing soil will be undertaken prior to sowing or during management and where feasible, topsoil and subsoil should be mixed through deep ploughing to reduce fertility.
- 5.35 In all cases, special care should be taken to ensure the seed beds are as free from weeds as possible, through continued cultivation and herbicide applications with the aim of creating a 'stale seed' bed prior to seeding.

Objectives

- 5.36 To provide suitable opportunities for a range of protected species.
- 5.37 To promote the occupation of the proposed SuDS feature by wildlife by creating suitable terrestrial habitat adjacent.

Management prescriptions

- 5.38 General management prescriptions of grassland areas are detailed within the LEMP (David Jarvis Associates Ltd, March, 2026). Additional prescriptions are set out below.
- 5.39 Ongoing management of wildflower planting and neutral grassland will include the following
- Year 1 – Following establishment, once the sward has reached 100mm, it should be maintained at this height between April and October through regular cuts (minimum monthly) for the first growing season to control weed growth and allow for the slower growing perennial wildflowers to establish.
 - Year 2 – Regular cutting to maintain a grass height of approximately 100mm should continue from April till May, at which point the sward should be left to establish to a greater height, before 2 further cuts in late July and Sept down to 100mm.
 - Year 3 onwards - A standard hay meadow cutting regime will be implemented with the grassland cut to a height no lower than 200mm in July and September to maximise vascular plant vitality.
- 5.40 The wildflower areas will be hand-weeded, or spot swiped for any perennial weeds such as docks *Rumex* sp., nettles *Urtica* sp. and ragwort *Senecio jacobaea*.

Amenity Grass Areas/Verges

Objectives

- 5.41 To facilitate passive and active recreation on site within amenity grassland associated with the residential development and to provide an attractive setting for the residential area.

Prescriptions

- 5.42 Establish and maintain all amenity grassland areas/verges to a height of between 25mm and 35mm by cutting as necessary through the growing season. In practice, cuts every 2 – 3 weeks are likely to be required. Cuttings are to be removed at the first cut of the season, with arisings spread evenly over the cut area at all other times.
- 5.43 Where grass areas have become worn or have failed to establish, areas should be over-seeded with appropriate grass seed of a similar mix.

New Tree Planting

Objectives

- 5.44 New tree planting to provide structure, colour and seasonal interest and create an attractive setting for the new development and soften the built environment.

Prescriptions

- 5.45 All planting should be maintained in accordance with good horticultural practice in order to ensure the thriving of individual species.
- 5.46 In late autumn of each year the site will be inspected, and a programme of work for the next twelve months will be agreed. Actions required might include prescriptions such as formative pruning and replacement of stock as well as those listed below.
- Avoid the use of peat-based composts and minimise the use of the pesticides in the implementation and maintenance of any landscape scheme.
 - Inspect stakes and ties to trees and shrubs, twice yearly or after severe weather. Test for soundness in early and late winter and replace tight or ineffective ties. Ties should be replaced in slightly different position. Remove stakes and ties as soon as trees are self-supporting to benefit tree establishment. Ensure that stake(s) are wholly removed from the ground and that the remaining hole is filled with clean topsoil.
 - Re-firm trees in ground after strong winds, frost heave or other disturbances.
 - Trees should be routinely inspected for pests and diseases.
 - Crown prune young trees by removing dead branches and reducing selected side branches, ensuring development of a single strong leader. Pruning should be carried out in accordance with BS 7370-4.
 - Maintain a mulch layer at the base of all trees and to all shrub beds by regular topping up to a depth of 75mm.
- 5.47 The long-term management of the newly planted trees will include continued monitoring to ensure the above objectives are met with the implementation of works where necessary to ensure this.

6.0 LIGHTING

- 6.1 A lighting strategy has been produced by Glanville (X-PH2-RMA3-LAYOUT 160326) which specifies lighting columns along the road.

Objectives

- 6.2 Prevent excessive illumination of potential wildlife habitat with particular regard to bats including commuting corridors, foraging areas and roost features.

Prescriptions

- 6.3 Lighting should be considered with regard to the Bat Conservation Trust's Bats and Lighting in the UK guidance. Products should be selected and sited to limit potential impacts on semi-natural habitats. The following principles will be applied to the lighting design for the Site:
- Avoidance and reduction of light spill onto potential bat flight lines and foraging habitats such as green corridors, hedgerows, woodland edges, and SuDS features
 - Avoidance and reduction of light spill onto potential bat roosting features such as individual mature trees within field boundaries
 - Directional, low UV lighting products to be used wherever possible
 - Products with passive infra-red sensors used as appropriate to reduce the duration of lighting impacts
- 6.4 Where possible the retained boundary hedgerows and adjacent woodland and proposed treelines around the Site are not subject to any direct lighting, particularly along the existing wooded streams through the centre of the parcel, and where the road passes through woodland parcels in the south and centre of the Site, to retain dark corridors for bats.

7.0 ECOLOGICAL MONITORING PROGRAMME

- 7.1 A programme of monitoring has been proposed in order to assess the efficacy of proposed landscaping and management works in increasing biodiversity and opportunities for local wildlife at the Site. This monitoring will also ensure that management is being undertaken in accordance with prescriptions set out herein.
- 7.2 It is proposed that a five-year timeframe would provide a reasonable opportunity to detect habitat/species changes and to therefore allow any remedial action to be taken.
- 7.3 As per the Phase 2 EMMP (Derek Finnie Associates, 2026), the following ecological surveys will be conducted to ascertain the future use of the habitats within Phase 2 including the Site:
- Bat activity surveys
 - To be conducted in Year 1, 3, and 5
 - One survey per season (Spring, Summer, Autumn)
 - SuDS inspection
 - Inspection visits in Years 1 and 2 will ascertain the success of marginal vegetation planting
 - Hedgerow inspection
 - Walkover surveys in Years 1, 3 and 5 to determine planting success and identify requirement for remedial action, such as filling gaps or replacing failed whips
- 7.4 In addition, grassland will be monitored alongside the above (in years 1, 3 and 5) to confirm establishment and condition. A simple, repeatable grassland monitoring regime is proposed which assesses herb and grass diversity (count no. species and % cover), and presence of undesirable 'weed' cover (species and % cover).

Thresholds

- 7.5 It is proposed that a positive outcome for hedgerow and grassland monitoring would be represented by an increase / establishment of a diversity of native species, as well as the reduction or absence of undesirable weed cover.

Reporting and Remedial Actions

- 7.6 In order to provide a standardised monitoring report, an ecological monitoring form, which will be completed on each monitoring visit in order to allow information and recommendations to be disseminated effectively.
- 7.7 It is proposed that the completed monitoring form and summary text will be sent via collective email communications to the following parties for

their information and to inform any relevant changes in habitat management prescriptions:

- Developer and/or the third-party management company
- Sussex Biodiversity Record Centre
- Any local interest groups/forums (as appropriate)

7.8 Where monitoring highlights any negative trends, or where the above parties have concerns over the result of monitoring, remedial action will be triggered to ensure any required changes to management. It is proposed that, as the local planning authority, Horsham District Council may enforce any remedial action in consultation with the relevant parties. This could include some of the following actions:

- Change in habitat management where habitat degradation occurs
- Compensatory measures for habitat damage/loss, and/or
- Further monitoring requirements

8.0 WORK SCHEDULES

- 8.1 A schedule of work has been provided in the LEMP by David Jarvis Associates which sets out a timetable for management actions for all retained and proposed habitats (See Landscape and Ecological Management Plan, David Jarvis Associates March 2026).
- 8.2 A general schedule of works is provided in the following tables in line with the LEMP, giving a timetable for management actions for the first fifteen years. These management actions will be undertaken by the management company. Before the end of this Management Plan period the management company will review these prescriptions, in consultation with interested parties and provide an updated Management Plan for on-going management.

Table 1. Grassland

Feature	Initial works	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 - 15
Species Rich Meadow Grassland.	Seeded with specified meadow seed mix	Monthly cuts to maintain 100mm sward height Apr-Oct.	Regular cuts to maintain 100mm sward height Apr-May. 2 further cuts late July & Sept to 100mm	Twice annual cuts to 200mm in July & Sept	Twice annual cuts to 200mm in July & Sept	Twice annual cuts to 200mm in July & Sept	Twice annual cuts to 200mm in July & Sept
Amenity Grass	Mown weekly or fortnightly to 25mm with a maximum allowable height of growth of 50mm, but with cuttings removed.	Time of first cut - Mar/Apr after Autumn sowing or Jun/Jul after Spring sowing. Then cut regularly between April and November	between April and November	between April and November	between April and November	between April and November	between April and November

Table 2. Trees

Feature	Initial works	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 - 15
Retained Trees	Annual review to determine any required tree work	Annual visit in October	Annual visit in October	Annual visit in October	Annual visit in October	Annual visit in October	Annual visit in October

Table 3. Native Hedgerows and Lines of Trees

Feature	Initial works	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 - 15
Retained Hedgerows	Hedgerow margin maintenance through strimming, cutting or mowing to maintain rough grassland habitat.	Seasonal visits October and March	Seasonal visits October and March	Seasonal visits October and March	Seasonal visits October and March	Seasonal visits October and March	Seasonal visits October and March
	Annual cut of hedgerow adjacent to paths	November - February	November - February	November - February	November - February	November - February	November - February
	3-5 year rotational trim to allow plants to fruit	November - February	November - February	November - February	November - February	November - February	November - February
	Plant up gaps as required	As required between October and March	As required between October and March	As required between October and March	As required between October and March	As required between October and March	As required between October and March
	Laying/trimming/coppicing to reduce gaps and prevent turning into a line of trees	As required between January and February	As required between January and February	As required between January and February	As required between January and February	As required between January and February	As required between January and February

Table 4. Aquatic Habitats

Feature	Initial works	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 - 15
SuDS	Remove litter from within basin. Clear inlets and outlets and inspect headwalls and banks for damage.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.
	Monitor vegetation and remove undesirable weeds by hand.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.	Annual maintenance visit in July/August.
	Marginal pond vegetation – clear sections of the marginal vegetation by mechanical means.	Every 3 years between November to March.	-	Every 3 years between November to March.	-	-	Every 3 years between November to March.
	Permanent open water. Clear a third of the permanent open water.	Annually in winter.	Annually in winter.	Annually in winter.	Annually in winter.	Annually in winter.	Annually in winter.

Table 5. Monitoring Schedules

Feature	Initial works	Year 1	Year 2	Year 3	Year 4	Year 5
Wildflower Grassland	-	Survey of grassland prior to annual cut to assess establishment of wildflowers, and to recommend any changes to management regime.	-	Survey of grassland prior to annual cut to assess establishment of wildflowers, and to recommend any changes to management regime.	-	Survey of grassland prior to annual cut to assess establishment of wildflowers, and to recommend any changes to management regime.
Hedgerows	-	Survey to determine planting success and identify remedial action requirements	-	Survey to determine planting success and identify remedial action requirements	-	Survey to determine planting success and identify remedial action requirements
SUDs	-	Survey to determine success of marginal vegetation planting	Survey to determine success of marginal vegetation planting	-	-	-
Bat Surveys	-	One bat activity survey (NTW / statics) per season (spring / summer / autumn)	-	One bat activity survey (NTW / statics) per season (spring / summer / autumn)	-	One bat activity survey (NTW / statics) per season (spring / summer / autumn)

9.0 REFERENCES

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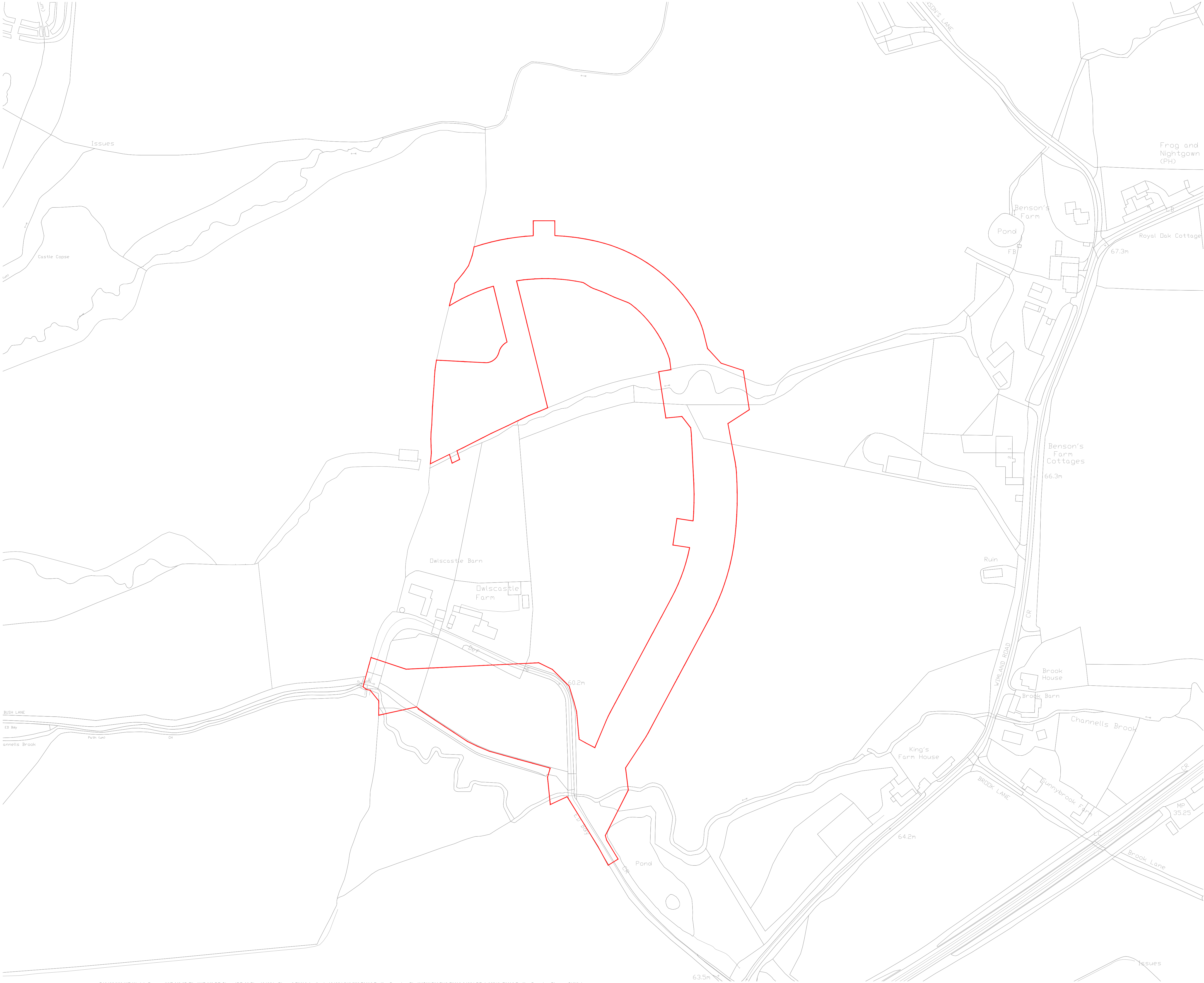
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Appendix A

Phase 2 Reserved Matters Area 3 Red Line Plan

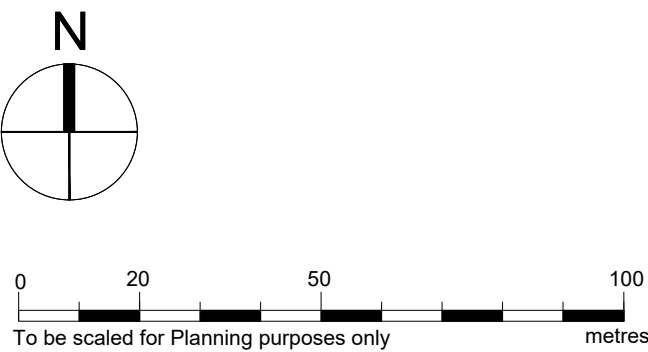


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Key

— RMA3 Boundary



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Client Legal & General (Strategic Land North Horsham) Ltd		
Project Mowbray (Land North of Horsham)		
Description RMA3 Redline Boundary Plan		
Status Preliminary		
Scale 1:1250@A1	Drawn By AMK	Date Mar 2026
Drawing Number MOW-BM-PH2-RMA3-34854-DR-A-02749	Revision 05	
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Appendix B

Ecological Background Summary

1.0 Introduction

- 1.1 This appendix summarises findings from existing ecological survey data collected from Development Phase 2 at Land North of Horsham, Mowbray from 2010 to 2025. It should be noted that results specific to Reserved Matters Areas within Phase 2 have been extracted from site-wide, i.e. comprising Phases 1-3, surveys and corresponding reports where applicable.

2.0 Results

Habitat Survey

- 2.1 Site-wide Phase 1 Habitat Classification surveys (JNCC, 2012) were conducted by Bioscan in 2010, 2011, 2014, and 2018. Bioscan also conducted National Vegetation Classification (NVC) surveys in 2015 and 2016. The habitat surveys comprised searches for habitats of 'Principal Importance' or BAP Priority Habitats, in addition to invasive non-native species and any plants listed on the Sussex Rare Plant Register (Briggs, 2001).
- 2.2 A summary of baseline habitat survey findings is provided herein, with habitat descriptions provided per phased Reserved Matters Application (RMA). The results of the most recent Phase 1 Habitat Classification survey, conducted site-wide by Bioscan in 2018, are shown in Figure 1 at the end of this document.

RMA 3 - Infrastructure

- 2.3 When surveyed in 2018, the RMA 3 area was found to comprise predominantly arable cropland and improved grassland, with smaller parcels falling within deciduous woodland plantation as identified in RMA 14.

RMA 12 - Residential

- 2.4 Following habitat surveys undertaken between 2010 to 2018, the RMA 12 area was found to be dominated by arable cropland. Habitat surveys in 2014 recorded a linear parcel of game cover crop, dominated by reed canary grass *Phalaris arundinacea* and maize *Zea mays*. The south-western extent of RMA 12 was classified as arable cropland in 2015, but 2018 surveys reclassified the same parcel as semi-improved grassland dominated by cock's-foot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus*, and soft brome *Bromus hordaceus* amongst other grassland species.
- 2.5 Hedgerows H2 and H3 demarcating the western boundary of the arable field that dominated RMA 12 were classified as native species-poor and native species-rich hedgerows, respectively, in 2015. Phase 1 surveys conducted in 2018 reclassified H2 as a species-rich hedgerow with trees, while H3 was considered a species-poor hedgerow.

RMA 13 – Residential

- 2.6 In surveys undertaken in 2018, improved grassland was identified as the dominant habitat type within RMA 13. Grassland was identified as species-poor and dominated by common grasses such as common bent *Agrostis capillaris* and crested dog's-tail *Cynosurus cristatus* amongst herbaceous species including white clover *Trifolium repens* and creeping buttercup *Ranunculus repens*. Fencing divided RMA 13 into five sheep-grazed fields. A pond was identified to the western extent of RMA 13, surrounding by native scrub.

RMA 14 – Residential

- 2.7 Deciduous woodland plantation upon semi-improved grassland was identified in the RMA 14 area in 2015 and 2018 Phase 1 surveys, containing ash *Fraxinus excelsior*, sweet chestnut *Castanea sativa*, pedunculate oak *Quercus robur*, alder *Alnus glutinosa*, and hazel *Corylus avellana*.

RMA 15 – Residential

- 2.8 Improved grassland, comprising a similar species composition as identified in RMA 13, was recorded in RMA 15 in all previous habitat surveys.

RMA 16/17 – Residential

- 2.9 In 2018, the area encompassing RMAs 16 and 17 was found to consist of arable cropland to the east with residential buildings and associated gardens at Owlcastle Farm to the west. Improved or amenity grassland was formed of residential gardens, in addition to a single pond, areas of hardstanding, and numerous buildings.

RMA 18 – Residential

- 2.10 RMA 18 was found to comprise predominantly arable cropland bound by scrub and hedgerows in 2018, with improved grassland and built-up areas to the north associated with Benson's Farm. A watercourse was found running through broadleaved semi-natural woodland at the northern extent of RMA 18. This woodland parcel was subject to an NVC survey in 2015, recording *Primula vulgaris* (W8a) and *Teucrium scorodonia* (W8g) sub-communities.

RMA 19 – Residential

- 2.11 Arable cropland was found to dominate RMA 19 during all previous Phase 1 Habitat classification surveys, bound by deciduous woodland to the northwest. This woodland parcel was found to support W8 and W10 (*Quercus robur* - *Pteridium aquilinum* - *Rubus fruticosus*) NVC communities in 2015.

Strategic Landscape Buffer RMA Phase 2C

- 2.12 Hedgerows H11 and H22 demarcated the western boundary of RMA 13, both classified as native species-poor hedgerows in 2015 but species-rich in 2018. Hedgerows H28 and H10, along the northern RMA boundary, were categorised as native species-rich hedgerows in both 2015 and 2018.
- 2.13 Semi-improved grassland situated to the west of RMA 14 was subject to an NVC survey in 2015, which classified the parcel as NVC community Mesotrophic Grasslands (MG1) with *Festuca rubra* subcommunity (MG1a).

Linear Features

- 2.14 Hedgerow classifications were generally consistent across previous habitat surveys, with a few minor discrepancies. Hedgerow H2, for instance, was categorised as 'native species-rich' in 2016 but 'native species-rich hedgerow with trees' in 2018. RMAs within Phase 2 were found to support the following hedgerow types, as per Phase 1 Habitat Classification (Bioscan, 2016a):
- 'Native species-rich hedgerow'
 - 'Native species-rich hedgerow with trees'
 - 'Native species-poor hedgerow'
 - 'Native species-poor hedgerow with trees'
 - 'Native species-poor defunct hedgerow'

Bat Activity Survey

- 2.15 A single walked transect survey conducted across Phase 1 in September 2011 found common pipistrelle *Pipistrellus pipistrellus* to be the most frequently recorded species onsite, followed by soprano pipistrelle *P. pygmaeus*. While this survey did not encompass Phase 2, walked transects surveyed Hedgerows H2 and H3 at the western extent of RMA 12. Common and soprano pipistrelle activity was recorded in associated with these linear features.
- 2.16 Bat activity surveys comprising walked transects and automated static monitoring surveys conducted across Phase 1 in 2014 and 2018 recorded common pipistrelle, soprano pipistrelle, brown long-eared *Plecotus auritus*, barbastelle *Barbastella barbastellus*, and *Myotis* sp. activity adjacent to RMA 12.
- 2.17 Additional bat activity surveys were conducted in 2014 and 2015, encompassing Phases 1, 2, and 3 of the Site. These surveys recorded at least 10 species, an assemblage of 'County' level importance including Annex II listed barbastelle.

2.18 Site-wide surveys conducted in 2014 and 2015 found the following results, summarised per RMA in Phase 2:

- RMA 12: *Myotis* sp. (likely whiskered *M. mystacinus*, Brandt's *M. Brandtii*, or Bechstein's *M. Bechsteinii*) activity associated with the eastern boundary, with soprano pipistrelle frequent at the north-eastern corner of the RMA, and common pipistrelle frequent along the western RMA boundary.
- RMA 13: Unidentified *Pipistrellus* sp. were recorded most frequently in this RMA, associated with the northern RMA boundary.
- RMA 14: Soprano and common pipistrelle, in addition to noctule *Nyctalus noctula*, were recorded at the eastern extent of RMA 14. *Myotis* sp. were recorded to the northern extent of RMA 14 in June 2014, thought to be Daubenton's *M. Daubentonii*.
- RMA 15: The area encompassing RMA 15 saw common and soprano pipistrelle and *Myotis* sp. activity recorded, predominantly to the western and northern extents of the RMA. Notable common pipistrelle foraging was recorded in these areas.
- RMA 16/17: Activity was limited in these areas, in comparison to the other RMAs, with the exception of common pipistrelle foraging to the northern extent of the residential gardens.
- RMA 18: Similar to RMA 16/17, activity was limited to common pipistrelle foraging at the RMA boundary.
- RMA 19: Habitat within and adjacent to RMA 19 saw notable common and soprano pipistrelle foraging in addition to brown long-eared *Plecotus auritus* and *Myotis* sp. activity.
- RMAs 2C & 3: Generally, activity in these RMAs resembled that recorded in adjacent RMAs. However, it should be acknowledged that notable common and pipistrelle foraging was recorded in association with Ponds P1 and P2 within RMA 2C. Nathusius' pipistrelle *P. nathusii* foraging was also recorded adjacent to P2. In 2015, *Myotis* sp. foraging was recorded at P1.

2.19 Bat activity walkover and static detector surveys were conducted across Phase 2 between May and September 2022. Detailed results of these surveys have not been made available but are understood to be consistent with previous activity survey results (Derek Finnie Associates, 2026).

2.20 Figures 2-4 at the end of this Appendix are extracted from the previous activity surveys as discussed above.

Building Roost Assessment and Emergence Survey

2.21 Buildings at Owlcastle Barn (OB1 and OB2), within RMA 16/17, were inspected for their potential to support bat roosts in September 2014.

Buildings at Owlcastle Farm (OF1-4), also within RMA 16/17, were assessed in October 2015. Buildings at Benson's Farm (BF1-3) were assessed in September 2015, of which BF1 and BF3 fall within RMA 18.

- 2.22 Both OB1 and OB2 were deemed to hold 'low' roost potential, but the collection of *Pipistrellus* sp. droppings indicated the presence of roosts. These buildings were subject to emergence surveys in September 2014 which found a 'probable' common pipistrelle roost in OB1 and confirmed *Pipistrellus* sp. roost in OB2.
- 2.23 Building OF1 was deemed of 'medium/high' potential for bat roosts, with a probable external roost indicated by *Pipistrellus* droppings on the building exterior. Both OF2 and OF3 were confirmed to support *Plecotus* sp. roosts with numerous (over 250 in OF3) droppings found in internal loft voids alongside feeding remains. Building OF4 was found 'negligible' for bat roosts in 2015. Emergence surveys of OF1-4 were not conducted in 2015 due to access limitations.
- 2.24 Buildings BF1 and BF3 were found to hold 'negligible' roost potential in 2015. Figure 5 provides the results of historic emergence surveys.

Bat Tree Roost Assessment

- 2.25 A tree roost assessment encompassing Phase 1 of the wider development was conducted in 2011 (see Figure 6). Three trees of 'medium' and one of 'high' potential were identified adjacent to RMA 12 to the west.
- 2.26 Additional tree assessment surveys were conducted across all three Phases of the Site in 2014 and 2015, followed by climbing inspections in 2016. Of the 42 individual trees or tree groups surveyed within or adjacent to Phase 2, only two were considered to hold 'high' potential for roosting bats (T18 and T24). Six trees (T19, T21, T28, T78, T80, and T84) held 'medium' roost potential, and three 'low/medium' roost potential (T208, T22, T25). Of these, T78 and T80 were subject to climbing surveys but no evidence of bat roosts was found. All remaining trees surveyed in Phase 2 held 'low' or 'negligible' roost potential (see Figure 7).

Badger Survey

- 2.27 A badger *Meles meles* survey conducted in 2014 found a main sett (B5) situated adjacent to RMA 12 to the east, including a badger sighting. During 2011 surveys, Sett B5 consisted of at least 23 active entrances in addition to 15 inactive entrances, connected to numerous mammal paths and with evidence of recent digging. The 2014 survey confirmed these results and the sett was still deemed active.
- 2.28 In 2014, Sett B4 comprising six entrance holes and a large spoil mound was categorised as a potential subsidiary sett, although the presence of rabbit *Oryctolagus cuniculus* droppings suggested it may not have been actively used by badgers. Sett B4 was found c. 45m south of the Phase

2 boundary and c. 58m southwest of RMA 14. Setts B3, also categorised as a potential subsidiary sett in 2014, was found c. 132m south of the Phase 2 boundary. Target Note 2a, as per 2014 survey plans, indicated a large entrance hole that could have been made by a badger but with no evidence of a sett present.

- 2.29 Setts B1 and B2, c. 263m and c. 200m south of Phase 2 respectively, were categorised as potential annex or subsidiary setts. No additional evidence of badger setts was recorded within the vicinity of Phase 2 during 2010-11 or 2014 surveys.
- 2.30 It is acknowledged that an update badger survey was undertaken by Derek Finnie Associates, including in 2025, however survey data have not been published. However, as per the Phase 2 EMMP (Derek Finnie Associates, 2026), activity was found to be largely consistent with previous surveys. Badger survey results obtained from 2014 are shown in Figure 8.

Hazel Dormouse Survey

- 2.31 Site-wide surveys conducted between April and October 2014 found dormouse nests in survey parcels L and N, both of which fall within Phase 1 of the development (see Figure 9). No evidence of dormice was found in survey parcels within Phase 2.
- 2.32 However, additional surveys to inform the development of Phase 1 found a potential dormouse nest to the south of RMA 2C adjacent to Pond P2 in 2019 (Figure 10).
- 2.33 Additional surveys were conducted in 2022 to provide monitoring data for mitigation licences granted for the development of Phase 1 (Licences 2019-42626-EPS-MIT-1, 2019-44250-EPSMIT and 2021-51422-EPS-MIT). Nest tubes were deployed across all RMAs within Phase 2, but no evidence of dormice was recorded (Figure 11). Dormouse nests were identified in Phase 1 to the southwest of RMA 14 during habitat clearance under licence in February and September 2024.
- 2.34 A mitigation licence (2025-72928-EPS-MIT) has been issued for the removal of suitable dormouse habitat and to enable the extension of Bailey Road to the south of RMA 12 (Figure 12).

Breeding Bird Survey

- 2.35 Breeding bird survey visits conducted in April, May, and June 2014 recorded skylark *Alauda arvensis* (BoCC Red-listed) to the northern extent of RMA 12 and yellowhammer *Emberiza citrinella* (BoCC Red-listed) to the western boundary of RMA 12 (Figure 13). Mallard *Anas platyrhynchos* (BoCC Amber-listed) and dunnoek *Prunella modularis* (BoCC Amber-listed) were recorded within the vicinity of the Phase 2 boundary adjacent to RMA 14. In 2014, it was estimated that 5-7 skylark and 3-4 yellowhammer breeding territories occupied cropland within

RMA 12. No other breeding bird territories were recorded within the Phase 2 boundary.

Great Crested Newt Survey

- 2.36 Aquatic great crested newt surveys to inform the development of Phase 1 recorded great crested newts in Ponds P2, P18, P27, and P30 in 2014 and 2019 (Figure 14). Additional eDNA surveys conducted in 2015, 2016, and 2018 found GCN presence in P2, P18 P20, P27, and P30. Ponds P1 and P6 were also subject to eDNA surveys in 2015, but the results did not indicate great crested newt presence at the time of survey. All of these waterbodies lie within 250m of the Phase 2 boundary.
- 2.37 Update surveys in 2023 confirmed great crested newt presence in P2, P30, P18, and P31. Additional surveys in 2025 found presence in P2, but eDNA analyses did not confirm presence in P1, P25, nor P29.
- 2.38 Following the aforementioned surveys conducted to inform the development of Phase 1, great crested newt mitigation licences were sought from Natural England. Licence 2019-44385-EPS-MIT encompassed areas of Phase 1 adjacent to RMA 13 and RMA 12 to the west, while Licence 2025-72835-EPSMIT encompassing Pond P2, RMA 14, and adjacent parcels within RMA 2C has been granted to cover a newt translocation exercise following the removal of Ponds P2 and P30 (Derek Finnie Associates, 2025; 2026). Figure 15 shows a summary of previous great crested newt survey information in relation to this licence.

Reptile Survey

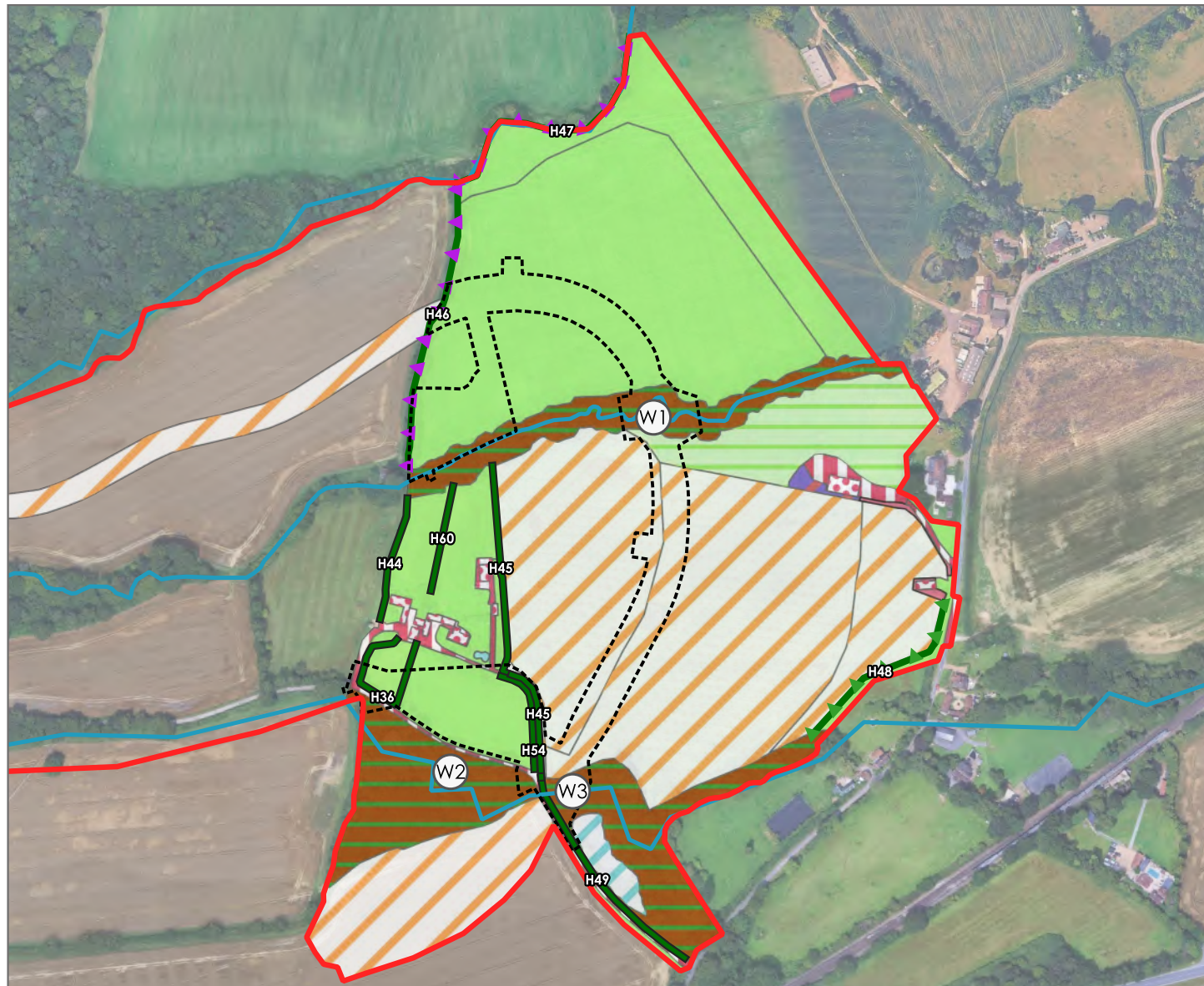
- 2.39 Reptile presence/absence surveys conducted across Phase 1 in 2014 also comprised survey areas in RMA 12 and RMA 14; a single slow worm *Anguis fragilis* and two common lizard *Zootoca vivipara* were identified in or adjacent to RMA 14 (see Figure 16). No reptiles were recorded in RMA 12.
- 2.40 A reptile survey of Phase 2 was conducted in 2022 but found no reptiles (Derek Finnie Associates, 2026). However, survey locations have not been disclosed.

Invertebrate Survey

- 2.41 It is understood that invertebrate surveys were undertaken in 2015 and 2016, but the associated reports have not been made available at the time of writing. The following summary has been informed by the site-wide Ecological Statement chapter, but detailed results could not be obtained.
- 2.42 The Site, comprising Phases 1-3 inclusive, was deemed of 'Parish' importance for invertebrates due to the presence of notable species including stag beetle *Lucanus cervus*, white admiral *Limenitis camilla*, dingy skipper *Erynnis tages*, and brown hairstreak *Thecla betulae*.

Appendix C

Habitats Plan & Bat GLTA Plan – Phase 2 RMA 3



- Phase 2 boundary
- RMA 3 Boundary
- Habitat reference
- Other neutral grassland (g3c)
- Modified grassland (g4)
- Lowland mixed deciduous woodland (w1f)
- Dense scrub (h3)
- Arable and horticulture (c1)
- Developed land, sealed surface (u1b)
- Buildings (u1b5)
- Rivers and lakes (r)
- Standing open water and canals (r1)
- Native hedgerow (h2a)
- River or stream
- Native species-rich hedgerow (h2a6)
- Native species-rich hedgerow with trees (h2a6 11)

0 100 200 m



Appendix D

RMA 3 Ground Level Tree Assessment Plan



Phase 2 boundary

RMA 3 Boundary

Roost Suitability

- Further Assessment Required - FAR
- Potential Roost Assessment - Individual (PRF-I)
- Potential Roost Feature - Multiple (PRF-M)

Further Surveying Work

- Ground inspection
- Ladder climb
- Pre-fell climb
- Rope climb



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Project	Land north of Horsham, Mowbray	Date	August 2026	Drawing No.	CSA/7937/149
Drawing Title	RMA 3 Ground Level Tree Assessment Plan	Scale	Refer to scale	Rev	-
Client	Legal and General (Strategic Land Horsham) Ltd.	Drawn	NS	Checked	CC

Appendix E

Bat Survey Report

Bat Survey Report

August 2026

**Land north of Horsham
Mowbray**

Prepared by
CSA Environmental

On behalf of
Legal and General (Strategic Land
Horsham) Ltd.

Report No: CSA/7937/14

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/7937/14	-	10/08/2026	PW/WC	CC	



CONTENTS	Page
Executive Summary	1
1.0 Introduction	2
2.0 Legislation	4
3.0 Methods	5
Daytime Bat Walkover	5
Preliminary Roost Assessment (PRA)	6
Ground Level Tree Assessment (GLTA)	8
Roost Surveys	9
Activity Surveys	11
4.0 Results	16
Data Search	16
Daytime Bat Walkover	17
Preliminary Roost Assessment (PRA)	17
Ground Level Tree Assessment (GLTA)	17
Roost Surveys	18
Activity Surveys	18
Bat static monitoring	18
5.0 Summary	19
Historic Survey Data	19
Current Survey data (2026)	19
6.0 References	20

Appendices

Appendix A: Bat Activity plan

Appendix B: Bat Emergence Survey Plan

Appendix C: Ground level tree Assessment (East and West)

Appendix D: Ground Level Tree Assessment Table (East and West)

EXECUTIVE SUMMARY

This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. to inform Horsham District Council of updated bat survey work at Land North of Horsham, Mowbray. The report relates to Phase 2 Reserved Matters Applications for the mixed-use development and supports the preparation of Ecological Mitigation and Management Plans required under Condition 14 of Outline Planning Permission DC/16/1667 (Non-Material Amendment ref: DC/19/0984) and to provide updated information for the preparation of Ecological Mitigation and Management Plans (EMMPs).

The Site forms part of a wider strategic development and contains habitats of value to bats, including woodland edges, hedgerows, watercourses, ponds, grassland margins and buildings or trees with roosting potential.

This report draws on historic bat survey information (from between 2014 /2015 and 2023) and 2026 survey work undertaken in accordance with current Bat Conservation Trust guidance.

Historic surveys identified evidence of bat use in five buildings (OB1, OB2, OF1, OF2 and OF3), with pipistrelle activity associated with OB1, OB2 and OF1, and more substantial evidence of long-eared bat use within OF2 and OF3. Previous emergence and re-entry surveys (in 2014) confirmed pipistrelle roosts associated with timber cladding at OB1 and OB2.

Daytime bat walkover in 2026 confirmed that the Site continues to provide commuting and foraging opportunities for bats. The Ground Level Tree Assessment (GLTA) identified potential bat roost features with (including loose bark, woodpecker holes, cavities, splits, desiccated limbs and stem cavities) within a total of 21 trees, with a further 52 requiring further assessment. Potential roost features were recorded across both eastern and western parts of the Phase 2 site, with a notable concentration in the eastern part of the Site.

At the time of reporting, analysis of the 2026 Preliminary Roost Assessment (PRA), bat emergence surveys, night-time bat walkover surveys and static monitoring is ongoing. The final results will be presented in an update report and used to inform phase-specific mitigation, management and licensing requirements where necessary.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. It sets out the findings of the Bats and related Surveys at Land North of Horsham, Mowbray (hereafter referred to as 'the Site'), in regard to Reserved Matter Applications (RMAs) pertaining to Phase 2 of a mixed-use development.

Background

- 1.2 Strategic development at Mowbray is subject to an outline planning permission (DC/16/1667) and will provide up to 2,750 dwellings alongside retail and business areas, leisure and education facilities, Public Open Space, and associating landscaping and infrastructure. Development is being delivered in three phases, with each phase being subject to Reserved Matters Applications for each sub-phase of development.
- 1.3 This report is provided to inform Horsham District Council of update survey work in relation to bats at Phase 2 and to inform and support Ecological Mitigation and Management Plans (EMMPs) specific to Phase 2 as per condition 14 and 49 of Outline Planning Permission DC/16/1677 (Non-Material Amendment ref: DC/19/0984):

Condition 14

- 1.4 **Pre-Commencement Condition:** *Prior to the submission of an Ecological Mitigation and Management Plan (EMMP) with an application seeking approval of Reserved Matters pursuant to the planning permission, up to date ecological surveys shall be carried out to provide up to date information regarding the potential of the area covered by the Reserved Matters application to support protected and notable species and inform the future design of measures that will be required to avoid, mitigate or compensate for impacts and to inform the Ecological Mitigation and Management Plan for that Reserved Matters application. These surveys shall be completed by suitably qualified ecologist(s), recognised by a relevant professional body such as CIEEM, and in accordance with current survey guidelines. The scope of these surveys shall be agreed in advance with the LPA, and may include advanced surveys for rare bat species. The surveys shall be completed in accordance with the agreed scope prior to the submission of the EMMP for that Reserved Matters area and the results and associated reports appended to the Ecological Mitigation and Management Plan for the Reserved Matters area.*

Condition 49

- 1.5 **Regulatory Condition:** Any application seeking approval of Reserved Matters pursuant to the planning permission shall be accompanied by a

detailed Ecological Mitigation and Management Plan (EMMP), which shall be in accordance with the approved Phase-wide EMMP, shall incorporate any additional or amended recommendations arising from the up to date Ecological Surveys relevant to that Reserved Matters Area and shall include details of protection of retained habitat and avoidance measures with regards to protected and notable species. The EMMP shall include details of pre-works, during works and post-works measures including any on-going management and maintenance necessary to ensure the effectiveness of the mitigation and enhancement measures. Any application seeking approval of Reserved Matters which includes a Proposed Primary Road, as shown on the Parameter Plan: Movement and Access reference 2153A-103P received by the LPA on 6th March 2017 shall be accompanied by detailed design proposals for those road(s), including all ecological mitigation, such as dark corridors, underpasses and bridges and drawings including cross sections and details of associated fencing and landscaping to guide wildlife. The development shall thereafter be carried out in accordance with the approved details.

- 1.6 Previous bat surveys have been carried out in 2014 and 2015 Bioscan (UK) Ltd and in 2023 by Derek Finnie Associates in relation to the Site, including all three phases. Historic survey results have been reviewed and are summarised herein.

2.0 LEGISLATION

- 2.1 All British bat species are legally protected under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended). These Regulations make it an offence to:
- Deliberately capture, injure, or kill a bat
 - Deliberately disturb bats, impairing their ability to survive, breed, reproduce or rear/nurture their young, or which significantly affects the local distribution or abundance of the species
 - Damage or destroy a breeding site or resting place used by bats
- 2.2 All bats and their roosts in the UK were previously fully protected under the Wildlife & Countryside Act 1981 (as amended). Amendments to the Act have removed most provisions as they relate to bats, however it remains an offence to:
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection
 - Intentionally or recklessly obstruct access to any structure or place used for shelter or protection
- 2.3 It is important to note that bat roosts are protected throughout the year, regardless of whether or not bats are present at the time. Under the Regulations, the offence of damaging or destroying a breeding site or resting place is subject to 'strict liability', i.e. an offence is committed irrespective of whether the causal act was deliberate or otherwise.
- 2.4 Where development is proposed that would result in an offence under the Regulations, a European Protected Species (EPS) statutory derogation licence (often termed 'EPS Mitigation Licence') will need to be secured from Natural England to permit an act that would otherwise be unlawful. Such a licence can only be granted following receipt of planning permission with all relevant conditions discharged, and where it has been demonstrated that specific statutory derogation tests have been met.

3.0 METHODS

- 3.1 The following survey methods, design, data analysis and interpretation have been undertaken with due consideration of the Bat Conservation Trust (BCT) guidelines 4th edition (Collins, 2023).

Desk Study

- 3.2 An ecological desk study was undertaken in March 2026 comprising a review of online resources and biological records centre data as detailed below.
- The Multi-Agency Geographic Information for the Countryside (MAGIC) online database was reviewed to identify nature conservation designations within the following search radii:
 - Bat-related Special Areas of Conservation (SAC) within 10km of the Site (including possible/proposed sites)
 - Review of Core Sustenance Zones for Bats
 - Other relevant data e.g. EPS licences relating to bats within 2km of the Site
- 3.3 A review was undertaken of such designations (if present and recent), including their distance from and connectivity with the Site. This information was used to determine whether they may be within the proposed development's Zone of Influence (Zoi).
- 3.4 Sussex Biological Records Centre (SxBRC) was contacted for records of bats. This information was requested for an area encompassing the Site and adjacent land within c. 2km of its central grid reference. This search area was selected to include the likely zone of influence upon bats.

Daytime Bat Walkover

- 3.5 A Daytime Bat Walkover (DBW) was undertaken on 19 February 2026 by Clare Marlow-Caudwell CEcol CIEEM (Natural England WML-CL18 - level 2, Registration Number 2015-15070-CLS-CLS) Sam Ashby ACIEEM (western part of the Phase 2 Site), Theresa Stewart MCIEEM (Natural England Class Licence WML-CL20, Registration Number 2020-85314-CLS-CLS) and Nathaniel Scott (eastern part of the Phase 2 Site) in fine and dry weather conditions. The aim of the survey is to observe, assess and record any habitats suitable for bats to roost, commute and forage on-site and within the surrounding area.
- 3.6 As part of the survey, surveyors identified any structures, trees or other features that could be suitable for bats to roost in, and habitats that could be suitable for bats to use to commute, forage or swarm. Assigning potential to roosting features is discussed in the relevant sections below.

3.7 Following the survey, suitability of commuting and dispersal habitats are assigned under the following categories:

3.8 *Either:*

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

Preliminary Roost Assessment (PRA)

3.9 A detailed external and internal inspection of all buildings on-site (buildings OB1, OB2, OF1, OF2 and OF3 as shown on the Bat Emergence Survey Plan provided in Appendix B) was completed on 02 April 2026, using high-powered torches, binoculars, ladder and endoscope as appropriate. The survey was carried out by Theresa Stewart MCIEEM (Natural England Class Licence WML-CL20, Registration Number 2020-85314-CLS-CLS), Lydia Galbraith ACIEEM and Corie Lee.

3.10 External inspection focused on identifying potential bat access points to the interior of each structure and any external features that could potentially be used by crevice-dwelling species. Particular attention was given to window sills, window panes, weatherboarding, and pitch/ridge tiles; as evidence is typically found in these locations.

- 3.11 The internal inspection involved a systematic search for bats or any evidence of their activity, in particular droppings and/or feeding remains within the building/loft spaces of the buildings.
- 3.12 A description of the structures was made, including construction, condition (in respect of roosting, rather than building or structural integrity) and age (where known).
- 3.13 The aim of this inspection is to record direct (i.e. actual roosting bats) or indirect evidence of roosting bats (e.g. droppings), as well as the nature and number of features with 'potential' to support roosting bats. This includes consideration of structures to support bats whilst in hibernation.

Assessing 'Potential' of Building/s to Support Roosting Bats

- 3.14 All structures were assigned to one of five categories in respect of their 'potential' to support roosting bats, or the confirmation of any bat roosts identified. 'Potential' in this context is taken to be the broad suitability of features to support roosting bats, based upon the nature, condition or structure of such features, in the absence of confirmed evidence of roosting.
- 3.15 Assigning the following categories is intended to determine the effort of any further targeted survey or inspections which are necessary to prove presence or likely absence of roosting bats, rather than to assign importance to such features.
- 3.16 The following categories are assigned to structures and/or trees herein, Either:
- **High** – A structure with 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, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/ stable hibernation site.
 - **Moderate** – A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation made at this stage is irrespective of species conservation status, which is established after presence is confirmed).
 - **Low** – A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e.

unlikely to be suitable for maternity and not a classic/cool hibernation site, but could be used by individual hibernating bats).

- **Negligible** – No obvious habitat features on site likely to be used by roosting bats. However, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
- **None** – No habitat features on site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels).

3.17 These categories above are allocated irrespective of the presence of a roost. If a roost is confirmed to be present then the categorisation still stands (because other roosts may be present but undiscovered) but 'confirmed roost' should be added, e.g. Low – confirmed roost; Medium – confirmed roost; High - confirmed roost.

3.18 The potential of a structure to support roosting bats is often influenced by its age and construction, thermal stability, lighting and levels of human activity. Furthermore, the proximity to foraging habitat - particularly woodland, parkland and wetland- as well as the presence of navigational routes (e.g. hedgerows, treelines and watercourses) influence both the potential for bats to roost, as well as the species which may roost. Professional judgement is therefore applied, based upon known factors which affect the potential of features to support roosting bats, insofar as determining the need or scope of further surveys or inspections. Consideration has also been given to the potential of a feature to support hibernating bats and any further works needed to confirm this.

Ground Level Tree Assessment (GLTA)

3.19 A GLTA is a detailed inspection of the exterior of a tree from the ground to look for features that bats could use for roosting, Potential Roost Features (PRFs).

3.20 All trees potentially affected by development were inspected from ground level, using binoculars, high-powered torches, as appropriate. The survey was completed on 07/08th May 2026 by Charlie Vaughan Jones ACIEEM (Natural England Class Licence WML-CL18, Registration Number 2025-12120-CLS-CLS).

3.21 Unless the tree was not in the arboricultural report, specific information on the tree such as height and girth and species was taken from the Arboricultural Impact Assessment (AIA) by David Jarvis Associated Ltd .

3.22 The aim of this inspection was to look for PRFs from ground level and give a preliminary description of each (such as type of PRF, height, size and location on tree). The surveyor also recorded direct (i.e. actual roosting bats) or indirect evidence of roosting bats (e.g. droppings), as well as

the nature and number of features with 'potential' to support roosting bats.

3.23 Following the GLTA, each tree was assigned one of the following categories:

- **PRF** – A tree with at least one PRF.
- **FAR** – Further assessment required to establish if PRFs are present in the tree.
- **None** – Either no PRFs in the tree or highly unlikely to be any.

Assessing 'Potential' of Trees to Support Roosting Bats

3.24 Each PRF was assigned to one of the following categories:

- **PRF-I** – Tree with a Potential Roost Feature (PRF) that is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surroundings.
- **PRF-M** – PRF is suitable for multiple bats and may therefore be used by a maternity colony.

3.25 The categories above are intended to provide initial guidance on whether further inspections are necessary to prove presence or likely absence of roosting bats, rather than to assign importance to such features.

3.26 The potential of a tree to support roosting bats is often influenced by its age, thermal stability, lighting and levels of human activity. Furthermore, the proximity to foraging habitat - particularly woodland, parkland and wetland- as well as the presence of navigational routes (e.g. hedgerows, treelines and watercourses) influence both the potential for bats to roost, as well as the species which may roost. Professional judgement is therefore applied, based upon known factors which effect the potential of features to support roosting bats, insofar as determining the need or scope of further surveys or inspections.

Roost Surveys

3.27 Three dusk emergence surveys were undertaken on OB1, OB2, OF2 and OF3 (high roost potential) with two dusk emergence surveys undertaken on OF1 (moderate roost potential). The surveys occurred between May and July to confirm the presence/likely absence of roosting bats in association with the on-site buildings. In addition, the surveys aim to determine the character of any identified roosts, namely species present, number of roost bats and roost type (i.e. day, night feeding, maternity and transitory).

3.28 The dusk emergence surveys were undertaken for approximately 1.5/2 hours following British Summer Time (BST) sunset, with due consideration

for the BCT good practice guidelines. The surveys were carried out by Theresa Stewart MCIEEM (Natural England Class Licence WML-CL20, Registration Number 2020-85314-CLS-CLS), Jeff Turton ACIEEM (Natural England Class Licence WML-CL18, Registration Number 2025-85314-CLS-CLS), Lydia Galbraith ACIEEM, Corie Lee, William Campbell, Nathaniel Scott, Jasmine Cacioppo and Amia Chalk in suitable weather conditions (see Table 1).

Table 1. Bat roost survey timings and weather conditions

Survey Date	Sunset Time	Start Time	End Time	Temp. (°C)		Cloud Cover (oktas)		Wind (Beaufort Scale)		Precipitation
				Start	End	Start	End	Start	End	
12/05/26	20:40	20:25	22:10	12	8	1	0	2	1	None
18/05/26	20:49	20:34	22:19	11	11	8	8	1	1	Light rain at 21:30
08/06/26	21:13	20:58	22:43	13	9	1	0	2	0	None
16/06/26	21:18	21:03	22:48	22	19	1	0	1	0	None
06/07/26	21:17	21:02	22:47	25	21	3	1	1	0	None
15/07/26	21:10	20:55	22:40	25	22	2	1	0	0	None

- 3.29 During the survey, the surveyors watched for any bats leaving or entering parts of the buildings, and using key flight lines. Surveyors were equipped with Batlogger M/M2 detectors which allowed for recording and analysis of bat contacts. A note was made of all bat passes, along with the time, species and any information regarding behaviour, including direction of flight, and activity e.g. foraging/commuting.
- 3.30 To assist surveyors and allow for reliable observations of the building for the duration of the survey, Night Vision Aids (NVA) were used to film any bats emerging from OB1, OB2, OF1, OF2 and OF3. Six NVAs comprised of a combination Canon XF100 HD camcorders and Canon XA10 Camcorders, Nightfox Monocular cameras and Pixfar Monocular Thermal Cameras each illuminated by a 96 LED infrared illuminator lamp and two Nightfox XB5 infrared torches used to provide additional IR illuminance. Batlogger M/M2 detectors were attached to these rigs to record calls and assist with later species identification.
- 3.31 NVAs were deployed around the building to ensure that all aspects were recorded. A still shot from each NVA was taken at the end of the survey to provide evidence of the camera coverage/field of view at the darkest point of the survey and appropriate level of illuminance, as required in line with best practice guidance.
- 3.32 The positions of the surveyors and the Night Vision Aids around the building during the survey are illustrated on the Bat Roost Survey Plan (CSA/7937/) at the end of this report.

Activity Surveys

Night-time Bat Walkover

- 3.33 Night-time Bat Walkover (NBW) surveys were undertaken in May and July (with a further survey scheduled for September) 2026. On each occasion, surveyors were stationed at specific points within the Site prior to sunset, and stationed on potential flight lines close to potential roost sources such as groups of buildings or woodland. Locations were predetermined by the results of the Daytime Bat Walkover (see Figure 1).



Stationed Surveyor Locations  SSL1  SSL2  SSL3  SSL4

Figure 1. Stationed surveyor locations (SSL) during the Night-time Bat Walkover Surveys undertaken in May and July 2026.

- 3.34 The surveys were led by Theresa Stewart MCIEEM (Natural England Class Licence WML-CL20, Registration Number 2020-85314-CLS-CLS), Dave Barker (Natural England Class License WML-CL18, Registration Number 2026-90088-CL18-BAT), Lydia Galbraith ACIEEM, Corie Lee and William Campbell in suitable weather conditions (see Table 2).

Table 2. Night-time Bat Walkover survey timings and weather conditions

Survey Date	Sunset Time	Start Time	End Time	Temp. (°C)		Cloud Cover (oktas)		Wind (Beaufort Scale)		Precipitation
				Start	End	Start	End	Start	End	
21/04/26	20:08	20:08	22:08	10	8	2	0	3	2	None
22/07/26	21:01	21:01	23:01	19	17	6	2	0	0	None
16/09/26	19:13	19:13	21:13	TBC						

- 3.35 Surveyors remained in position to count, observe behaviour and make acoustic recordings of commuting (or foraging) bats for up to an hour after sunset. Any observations of bat activity such as feeding or commuting behaviour was noted, or identification of key flightlines (such as height, direction of travel, numbers of bats and response to weather or other features on-site). Alternatively, if streams of commuting bats were noted elsewhere on-site, surveyors used back-tracking methods to move towards a roost, responding to live observations. Surveyors were equipped with BatLogger M/M2 bat detectors and Nightfox monocular/binocular cameras to allow any bat contacts to be recorded.
- 3.36 As part of the stationed observation, whilst surveyors are positioned across the Site at the start of the survey, stationary observations were undertaken, including notes on early emerging/high-flying bats such as noctule. Notes made on behaviour include flight height, numbers of bats and direction of travel.
- 3.37 Following 30 minutes of stationed observations, surveyors walked a single transect route, which aimed to cover all accessible areas, features and habitats at the Site. Each transect route was repeated at least once during each survey to minimise temporal bias and walked at a moderate and consistent speed with qualitative observations of bat behaviour made by the surveyor.
- 3.38 Transect surveys are intended to gather data on the spatial distribution of bat activity across the Site, identifying areas of relative importance for bats, including key flight lines. In addition direct observation of bats allows for qualitative assessments of how bats use the Site to be made complementing quantitative data collected through remote monitoring.

Automated/Static Surveys

- 3.39 Six Wildlife Acoustics Songmeter (SM4) detectors were deployed monthly from April to July 2026 to provide 20 data sets. Statics will be deployed in August to October, creating an additional 15 datasets. The position of these Monitoring Locations (ML) are shown on Figure 2 below.



Monitoring Locations

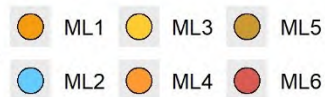


Figure 2. The position of each Monitoring Location (ML) surveyed during remote monitoring surveys between April - July.

- 3.40 The detectors were setup to automatically record ultrasonic signals for the period from half an hour before sunset to half an hour after sunrise each night, with each monitoring period spanning at least five consecutive nights.
- 3.41 Static detectors were deployed across the Site to provide a representative sample of all habitats in the survey area that could be impacted by the proposals. This includes many of the boundary features within the Site such as the central woodland and stream on the eastern parcel.
- 3.42 Weather conditions were obtained for each night surveyed using historic weather data from the World Weather Online website, with weather observations taken from the nearest weather station in Horsham. The five nights showing the most optimal weather conditions (in terms of

temperature, precipitation and wind speed, see Table 3) were taken forward for analysis.

Table 3. Static monitoring timings and weather conditions

Survey Date	Sunrise Time	Sunset Time	Temp. (°C)		Cloud Cover (%)		Wind (Km/h)		Precipitation
			Low	High	Low	High	Low	High	
17/04/26	20:00	06:00	8	14	35	98	8	21	None
18/04/26	20:01	05:58	3	13	4	70	10	17	None
19/04/26	20:03	05:56	4	13	22	51	4	10	None
20/04/26	20:05	05:54	3	7	0	92	11	17	None
21/04/26	20:06	05:52	6	7	0	0	19	26	None
01/05/26	20:23	05:32	8	13	8	75	4	8	None
02/05/26	20:24	05:31	10	14	55	100	9	17	2.0mm 18:00-21:00
03/05/26	20:26	05:29	9	15	16	89	3	17	None
04/05/26	20:27	05:27	10	15	60	91	8	12	None
05/05/26	20:29	05:25	7	14	49	100	12	16	None
02/06/26	21:07	04:50	11	15	33	73	14	27	3.5mm 18:00-21:00
03/06/26	21:08	04:50	13	16	53	100	26	39	0.1mm 18:00-21:00
04/06/26	21:09	04:49	9	15	41	74	15	27	0.2mm 18:00-21:00
05/06/26	21:10	04:48	10	15	15	100	10	30	0.1mm 03:00-06:00
06/06/26	21:11	04:48	9	13	29	100	12	37	None
24/07/26	20:59	05:16	14	26	23	30	9	17	None
25/07/26	20:58	05:18	15	27	8	100	9	27	None
26/07/26	20:56	05:18	13	25	0	27	9	25	None
27/07/26	20:55	05:19	16	26	7	14	3	20	None
28/07/26	20:53	05:20	17	26	3	6	1	16	None

- 3.43 Recordings are triggered when a bat echolocation call is detected and will contain a variable number of call 'pulses'. Each file containing call pulses by a bats is designated as a 'bat contact' for each species present. The maximum recording duration is 15 seconds after which time a new recording file, and thus a new bat contact, is generated if echolocation calls are still being detected. This means that periods of prolonged bat activity near a detector is represented as multiple bat contacts, rather than a single one.

Analysis of Data

Call Analysis

- 3.44 Bat calls were recorded using Elekon Batlogger M/M2 detectors. This detector automatically records ultrasonic signals with a one second delay between recordings. Recordings of bat contacts were subsequently analysed using BatExplorerPro software, with sonograms reviewed to confirm bat identification to genera, or where possible, species level.
- 3.45 Each of the recorded files, which contain a variable number of call 'pulses', was designated a 'bat contact'. At the point of contact, each sound file is assigned a GPS location.

- 3.46 For analysis of data recorded during static monitoring, quantitative analysis of bat activity was then undertaken by calculating the average bat contacts per hour on each night monitored, for each species.
- 3.47 Bat activity can show considerable inter-night variability and is dependent on a number of variables, including temperature, wind, and seasonality, amongst others. To account for this variability the median values for the average hourly bat contacts per night are reported, rather than a mean value which would misrepresent the average activity.

Reviewing Video Footage

- 3.48 Wildlife Imaging Systems (WIS) was employed as an aid to the analysis of the collected video footage. WIS is a specialist AI software developed to identify motion, specifically bat flight. The output is a series of snapshot images capturing motion within the video footage. Using VLC Media Player to review the raw video footage alongside the WIS output, these images are then manually interrogated by CSA Ecologists to confirm whether these correspond with emerging/re-entering bats.

Limitations

- 3.49 It should be noted that the findings described herein for remote monitoring surveys are based on the bat activity recorded at the location immediate to each detector, and therefore only describe localised activity at the Site. Where possible, in line with best practice guidance static detectors have been placed c. 1.5m from any nearby vegetation however due to the potential for disturbance from the public, this has not always been possible. Where needed to be located within hedgerows, surrounding foliage has been removed to prevent interference from vegetation covering the microphone.
- 3.50 In addition, comparisons drawn on the number of detector activations by different species/genera can only give an indication of relative species abundance at the Site, as detectability varies between species.
- 3.51 It is acknowledged that the quantum of bat contacts recorded during a survey may not give a true reflection of the abundance of bats using the Site. For example, a single bat foraging close to a detector may trigger several hundred activations in the course of one night. However, this activity level does provide a proxy for the level of use by bats, and therefore its relative importance.
- 3.52 During the stationary observations, surveyors sought to achieve comprehensive coverage of on-site habitats. However, due to the size of the Site and the extent of vegetation present, complete visual coverage was not always possible. Notwithstanding this limitation, the majority of the Site was surveyed, including those areas considered to provide the greatest potential for bat commuting activity.

4.0 RESULTS

Data Search

- 4.1 The Site lies within no core sustenance zone for bats. The data from SxBRC revealed previous records of common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Nathusius' pipistrelle *Pipistrellus nathusii*, Bechstein's bat *Myotis bechsteinii*, Daubenton's bat *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, Leisler's bat *Nyctalus leisleri*, *Myotis* sp. and brown long-eared bat *Plecotus auritus*.
- 4.2 Historical bat surveys, including PRAs, bat emergence surveys, GLTAs, night-time bat activity surveys, and static bat detector surveys, have previously been undertaken within Phase 2 and the wider survey area. These surveys were completed by Bioscan Ltd in 2014 and 2015. In addition, static bat monitoring surveys were undertaken in 2023 by Derek Finnie Associates.
- 4.3 Activity surveys undertaken in 2014 and 2015 confirmed that habitats within Phase 2 are used by a range of bat species, including common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, serotine, *Myotis* species, daubenton's bat, whiskered/alcahloe/brandt's bat *Myotis mystacinus*, *M. alcahloe* and *M. brandtii*, and noctule *Nyctalus noctula*. Bat activity was concentrated primarily along woodland edges and hedgerows, with a high level of common pipistrelle foraging activity recorded south of the off-site ancient woodland located in the north-west of the Site. A total of eight bat species were recorded along Chennels Brook, which runs east to west through the Phase 2 Site. The species listed above were also recorded during static monitoring surveys, although only one static detector location was situated within the northern part of the eastern section of the Site.
- 4.4 PRAs undertaken in 2014 of buildings OB1, OB2, OF1, OF2 and OF3 identified a range of features suitable for roosting bats, including gaps beneath roof coverings, hanging tiles, timber cladding and access points to roof voids. Evidence of bat use was recorded in all five buildings in the form of bat droppings. Small numbers of droppings consistent with pipistrelle bats were recorded beneath external timber boarding on OB1 and OB2. A single pipistrelle dropping was identified on an external windowsill of OF1, whilst the roof void of OF2 contained numerous droppings, together with moth wing remains, indicative of long-eared bat use. OF3 supported the greatest evidence of bat activity, with approximately 250 droppings consistent with long-eared bat recorded within the roof void and a further pipistrelle dropping identified externally. Consequently, all five buildings were assessed as having bat roost potential, with OF2 and OF3 supporting confirmed evidence of bat roosting.

- 4.5 Emergence and re-entry surveys undertaken at Owlcastle Barn (OB1 and OB2) confirmed the presence of a pipistrelle roost associated with the timber cladding of both buildings. At OB1, surveyors recorded pipistrelles roosting beneath external timber boarding on the southern elevation, with a probable common pipistrelle roost identified on the eastern side of the building. At OB2, a single pipistrelle was confirmed roosting beneath timber boarding on the southern elevation. No emergence or re-entry surveys were undertaken at Owlcastle Farm buildings OF1, OF2 and OF3 due to access constraints late in the survey season.

Daytime Bat Walkover

- 4.6 The daytime survey undertaken in 2026 confirmed that the Site provides extensive foraging and commuting opportunities for bats, particularly along woodland edges, hedgerows and other linear habitats. The eastern part of the Site supports a more diverse range of habitats, including a pond within woodland to the south and a stream (Chennel's Brook) running through a woodland belt in the central area. In contrast, the western part of the Site is dominated by improved grassland and arable fields, although valuable edge habitats are present along the boundary with off-site ancient woodland to the east and within the hedgerows present on Site. Roosting opportunities were identified throughout the Site within residential buildings and monolith trees.

Preliminary Roost Assessment (PRA)

- 4.7 Full details of the PRA undertaken in 2026 will be provided in an update report following the completion of analysis of data. However, findings were broadly consistent with the historic surveys with buildings OB1, OB2, OF2 and OF3 being assessed as holding high roost potential, with building OF1 assessed as holding moderate roost potential.

Ground Level Tree Assessment (GLTA)

- 4.8 A total of 129 trees were included within the assessment; the survey findings are summarised herein. The full survey results are provided in Appendix D, together with a map provided in Appendix C showing the location of trees with bat roosting potential.
- 4.9 Due to the size of the Site, the mapping and associated tables produced for the GLTA were divided into eastern and western sections. Within the western portion of the Site, 27 trees were assessed for roost suitability, comprising five trees categorised as Negligible, 16 as Features of Roosting Potential (FAR), two as Potential Roost Features (PRF-I), and four as Potential Roost Features (PRF-M). Within the eastern portion of the Site, 102 trees were assessed, of which 51 were categorised as Negligible, 36 as FAR, six as PRF-I, and nine as PRF-M.

- 4.10 Numerous features with the potential to support roosting bats were identified across the Site, with a particularly high concentration recorded within the eastern section. These included loose bark, woodpecker holes, desiccated limbs, stem cavities, and other features. A full list of trees surveyed from ground level, together with the features recorded and their assessed bat roost potential, is provided in Appendix D.
- 4.11 Appendix D contains separate tables for the eastern and western sections of the Site, distinguishing trees assessed as having negligible bat roost potential from those identified as having bat roost potential or requiring further assessment. This approach was adopted due to the large number of trees assessed during the two-day survey.
- 4.12 During the survey, several trees were identified that had not been included within the arboricultural assessment. To avoid confusion with the original arboricultural numbering system, which extended to T746, these additional trees were assigned unique reference numbers commencing from T800 onwards.

Roost Surveys

- 4.13 Bat emergence surveys have been completed for OF1, OF2, OF3, OB1 and OB2. The results of these surveys will be reported separately, as analysis of the survey data is currently ongoing. Of the buildings which have been analysed, two emergences of common pipistrelle have been observed from OF3, emerging beneath the tile on the western gable end of the building. Further reporting of evidence of emergences will follow upon completion of the analysis.

Activity Surveys

Night-time Bat Walkover

- 4.14 Night-time activity surveys are ongoing, with full results to be provided following completion of the survey programme in autumn 2026. Interim observations from the walkover surveys indicate that activity was generally limited during the first 45 minutes after sunset, both from the vantage point and during the initial walking period. Recorded species included common pipistrelle, soprano pipistrelle, *Myotis* sp. and serotine. During the July summer transect, higher levels of serotine activity were noted near H48, located in the eastern part of the Site, south of the arable field.

Bat static monitoring

- 4.15 Static monitoring surveys are ongoing. Full results will be provided following completion of the survey programme in autumn 2026.

5.0 SUMMARY

Historic Survey Data

- 5.1 Historic bat surveys undertaken between 2014 and 2023 confirmed that the Site supports a diverse bat assemblage, including common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, serotine, daubenton's bat, brown long-eared bat and several Myotis species. Activity was concentrated along woodland edges, hedgerows, watercourses and other well-connected linear habitats, demonstrating the importance of these features for commuting and foraging bats.
- 5.2 Historic PRA's (2014) identified bat roosting opportunities within buildings OB1, OB2, OF1, OF2 and OF3. Evidence of bat use, including bat droppings, was recorded within all five buildings. Pipistrelle droppings were recorded at OB1, OB2 and OF1, while OF2 and OF3 supported more substantial evidence of long-eared bat use, including numerous droppings and feeding remains. Emergence and re-entry surveys confirmed a pipistrelle roost associated with the timber cladding of OB1 and OB2, whilst building inspections confirmed bat roosting activity within OF2 and OF3.

Current Survey data (2026)

- 5.3 The 2026 daytime bat walkover confirmed that the Site continues to provide extensive opportunities for commuting and foraging bats. Woodland belts, hedgerows, ponds, streams and other edge habitats provide strong connectivity across the Site and the wider landscape. The eastern section of the Site was found to offer the greatest habitat diversity, whilst the western section, although more agricultural in character, retained valuable boundary habitats associated with hedgerows and adjacent woodland.
- 5.4 The Ground Level Tree Assessment identified numerous trees with potential roost features across the Site, particularly within the eastern parcels. Features recorded included cavities, woodpecker holes, loose bark, splits, desiccated limbs and stem cavities, indicating that a range of trees have the potential to support roosting bats.
- 5.5 At the time of reporting, analysis of the 2026 Preliminary Roost Assessments, bat emergence surveys, night-time bat activity surveys and static monitoring surveys is ongoing. The results of these surveys will be presented in an update report; however, initial results indicate current bat roosts within OF2 and activity across the Site from at least four bat species.

6.0 REFERENCES

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Appendix A

Bat Activity Plan



-  Site boundary
-  Night-time Bat Walkover (NBW) transect
-  Static device

0 250 m



Appendix B

Emergence Survey Plan



Site Boundary

Roost Potential*

Confirmed Roost

Probable Roost

Negligible

Surveyor Position

- - - Surveyor Perspective

*As per 2014/15 emergence survey results.
Preliminary Roost Assessment to be conducted in 2026.

0 25 m

Appendix C

Ground Level Tree Assessment Plans (East and West)



Site boundary

Roost Suitability

- Further Assessment Required - FAR
- Potential Roost Assessment - Individual (PRF-I)
- Potential Roost Feature - Multiple (PRF-M)

Further Surveying Work

- Ground inspection
- Ladder climb
- Pre-fell climb
- Rope climb



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Project	Land north of Horsham, Mowbray	Date	July 2026	Drawing No.	CSA/7937/146
Drawing Title	GLTA Plan - West	Scale	Refer to scale	Rev	-
Client	Legal and General (Strategic Land Horsham) Ltd.	Drawn	PW	Checked	CC



Site boundary

Roost Suitability

- Further Assessment Required - FAR
- Potential Roost Assessment - Individual (PRF-I)
- Potential Roost Feature - Multiple (PRF-M)

Further Surveying Work

- Ground inspection
- Ladder climb
- Pre-fell climb
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Project	Land north of Horsham, Mowbray	Date	July 2026	Drawing No.	CSA/7937/146
Drawing Title	GLTA Plan - East	Scale	Refer to scale	Rev	-
Client	Legal and General (Strategic Land Horsham) Ltd.	Drawn	PW	Checked	CC

Appendix D

Ground Level Tree Assessment Results

Ground Level Tree Assessment _West_Negligible Trees

Photo	Tree ID	Species	PRF
	T012	Goat willow	Neg
	T009	Oak	Neg
	T407	Alder	Neg
	T408	Elder	Neg
	T421	Horse chestnut	Neg

Photo	Tree ID	Species	PRF	Feature 1	Feature 2	Feature 3	Feature 4	Feature 5	Feature 6	Feature 7	Recommendation
	T195	Oak	FAR	Old partially healed tear out 10m up SE aspect	Short dead limb stub with partial collar 13m up NE aspect	Dead branch with collar 11m up W aspect					Climb
	T137	Ash	FAR	Two stem cavities on S leaning subservient stem, 14m up							Climb
	T018	Oak	FAR	Small dead stub SW aspect 10m up with tiny entrance at base							Climb
	T10	Oak	FAR		Dead small limb pointing NE 10m up	Small dead stub in high canopy - visibility not great	Bird box on SW as per	Nest/dray in canopy			Climb
	T147	Ash	FAR	Nice cavity from old tear out 13m up at base of fork facing W							Climb
	T195	Oak	FAR / potentially PRF-M	Tear out 6.5m up facing SE. Enters cavity potentially PRF-M	Knot hole 3.5m up NW aspect main stem.						Climb
	T67	Ash - dead	FAR / potentially PRF-M	Basal cavity - potential stem cavity	Upward facing knothole 10m up facing N.	Burl about 8m up facing N. Needs closer inspection.					Climb

	T166	Oak	FAR / potentially PRF-M	Large fracture down main stem leading to shadowed cavity	Tear out facing west, 7m up	Tear out W, 13m up	Snapped limb 10m up, NE aspect				Climb
	T013	Oak	FAR / potentially PRF-M	Knot hole on elbow of small limb crossing larger. Cavity - potential bird nest NE facing 6.5m up.	2FN bat box SE aspect	Cannot access SW aspect due to school grounds.					Climb
	T11	Oak	FAR / potentially PRF-M		Cavity in limb facing NE 5m up	Rot cavity at terminal end of same limb	Rot and splits in terminal end of central stem				
	T113	Larch	FAR / PRF-I	Splits and cracks across entire stem - thin monolith	Lifted bark on entire stem, low suitability						Climb
	T89; T90 & T92	Larch	FAR / PRF-I	The two larch significantly leaning N contain splits and cracks, some ground level some higher on stem. Low amounts of lifted bark.							Climb
	T132	Oak - dead	FAR / PRF-I	Multiple healed over wounds - some partially open and require closer inspection	Dead limbs with cracks facing S, 10-13m up.						Climb
	T136	Ash	FAR / PRF-I	Small area of lifted bark 11m up, SW on fork of subservient stem							Climb

	T179	Oak	FAR / PRF-I	Thick ivy all over - no noticeable PRFs check prior to fell							Pre-fell climb
	T004	Oak	FAR / PRF-I		Thick ivy all over, cannot see	No noticeable features, likely fell with pre inspection					Pre-fell climb
	T117	Birch	PRF-I	0.5m crack in north aspect 3m up							Ladder
	T187	Field maple	PRF-I	Small splits at base. Endo prior to fell.							Ground level
	T191	Ash	PRF-M	Large basal cavity that progresses up main stem	Snapped limb facing SE, 8m up						Climb
	T153	Ash	PRF-M	Basal cavity NE, likely enters stem							Ground level
	T017	Oak	PRF-M		Huge lightening strike wound on E aspect of main stem. Multiple fissures and bark collar around entire wound.	Tear out on E pointing limb 6m up	Three central dead limbs with potential hollows on NE aspect of tree	Delaminated bark in central fork 10m up	Compression fracture on NW pointing limb on N aspect 8m up	Snapped branch with potential cavity on N aspect of main stem 3m up	Climb

	T014	Oak	PRF-M	Large amount of delaminated bark on central stem and W leaning limb	Large collar around dead stem leaning SW	Large tear out on limb pointing SW 5m up	Large tear out on limb pointing W 5m up	Two small dead stubs with collars on limb pointing S	Tear out at terminal end of same limb	Cavity with delaminated bark (triangular shape) on main stem facing SE	Climb
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Ground Level Tree Assessment _East_Negligible Trees

Photo	Tree ID	Species	PRF	Feature 1
	T845	Goat willow	Neg	
	T846	Blackthorn	Neg	
	T844	Oak	Neg	Bird box
	No ID	Goat willow	Neg	
	G360b	Alder	Neg	Few snapped off branches that don't lead to any internal cavity
	T878	Alder	Neg	
	T877	Alder	Neg	
	T876	Alder	Neg	
No pic	T874	Alder	Neg	
No pic	T873	Alder	Neg	
No pic	T872	Silver birch	Neg	
No pic	T870	Oak	Neg	
No pic	T871	Alder	Neg	
No pic	T868	Alder	Neg	

Ground Level Tree Assessment _East_Negligible Trees

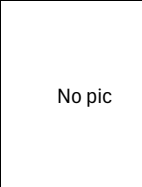
No pic	T865	Alder	Neg	
No pic	G866	Alder group	Neg	
No pic	T864a	Alder	Neg	Missed of tree plan
No pic	T862	Alder	Neg	
No pic	T864	Alder	Neg	
No pic	T862	Oak	Neg	
No pic	T861	Oak	Neg	
No pic	T863	Ash	Neg	
No pic	T860	Crack willow	Neg	
No pic	T859	Crack willow	Neg	
No pic	T858	Alder	Neg	
No pic	T856	Alder	Neg	
No pic	T854	Goat willow	Neg	
No pic	T855	Ash	Neg	
No pic	T853	Ash	Neg	

Ground Level Tree Assessment _East_Negligible Trees

No pic	T852	Oak	Neg	
No pic	T851	Ash	Neg	
No pic	T849	Weeping willow	Neg	
No pic	T850	Silver birch	Neg	
No pic	T847	Alder	Neg	
No pic	T848	Alder	Neg	
No pic	G883	Hazel	Neg	
No pic	T884	Hazel	Neg	
No pic	G885	Holly	Neg	
No pic	T887	Alder	Neg	
No pic	T888	Alder	Neg	Few snapped branches and knot holes but do not lead to features
No pic	T890	Holly	Neg	
	T387	Willow	Neg	
	X	Elm	Neg	Unmapped
No pic	X	Ash	Neg	Unmapped

Ground Level Tree Assessment _East_Negligible Trees

No pic	X	Goat willow	Neg	Unmapped
	T461b	Ash two stems	Neg	
	T274	Ash 2 stem - partially collapsed.	Neg	
	T504	Oak	Neg	
	T514	Oak	Neg	
No pic	T589	Oak	Neg	
	T289	Oak	Neg	

Photo	Tree ID	Species	PRF	Feature 1	Feature 2	Feature 3	Feature 4	Feature 5	Recommendation
	G360c	Alder	FAR	Thick ivy, needs climbing to inspect					Climb
	T366	Willow	FAR	Split stem with active nest in it at 1.8m.	Tear out with lifted heartwood 6.5m up on south aspect.				Climb
	T857	Willow	FAR	Two hangers with potential hazard beams. Cannot access due to pond. Likely require climbing inspection.					Climb
No pic	T857a	Hornbeam	FAR	Small hornbeam, unmapped, adjacent to willow on pond island. Cannot access. Not likely to have PRFs but cannot check base stem.					Climb
	G431	Ash x5	FAR	Series of tear outs - unsure of access as says off site. Inspected from distance and contains PRFs.	One ash grounded in east, looks like large trunk cavity				Climb
	T455	Ash	FAR	Basal cavity on S aspect.	Tear out 5m up facing west				Climb

Ground Level Tree Assessment _East_PRF-I, PRF-M and FAR Trees

		T460	Ash - four stem	FAR	Basal cavities - inspect with endoscope from ground					Ground inspection
		T461c	Ash - dead lvy clad	FAR	Basal cavities - inspect from ground					Ground inspection
		G460a	Hawthorn group	FAR	Fluting and stem rot - small PRF-I crevices					Climb
		T460c	Ash	FAR	Basal cavities					Ground level
		T464	Ash	FAR	Basal cavities - inspect from ground					Ground level
		T473	Ash - 4 stem	FAR	Knot hole 10m facing south.					Climb

Ground Level Tree Assessment _East_PRF-I, PRF-M and FAR Trees

		T482	Ash 2.5 stem	FAR	Tear out on S facing stem 4m up	Nest on north leaning stem				Climb
		T483	Oak	FAR	Knot holes 3m 4.5m north aspect.	Cavity in limb pointing NE 3.5m up.				Climb
		T527	Oak	FAR	Small tear outs on underside of south facing limbs 3m up. Likely PRF-I					Climb.
		T448	Oak	FAR	Tear outs and snapped limbs 5m up facing south into field.					Climb
		T456	Ash	FAR	Two basal cavities on N aspect					Ground inspection
		T461a	Ash three stems	FAR	Upward facing knot hole 8m up west aspect.					Climb

	T460b	Field maple	FAR	Split in trunk leaning north. Potential PRF-M.					Climb
	T357	Oak	FAR / likely PRF-I	Knot hole NE on S pointing limb 5m up.					Climb
	T439	Ash	FAR / potential PRF-M	Tear out wound facing south 6m up with bark collar.	Second tear out on same stem with open collar at top.	Knot hole on limb hanging in field. Small secondary limb.	Third tear out facing west 12m up.		Climb
	T279	Oak	FAR / potential PRF-M	Loose bark at apex of stem 13m up.	Collar around dead limb facing SE 4m up.	Two collars 0.6m apart on SE aspect of main stem. Potential cavities behind.	Cavity facing SE on S leaning stem 6m up.	Loose bark on E pointing limb 8m up.	Climb
	T875	Ash	FAR / PRF-I	No obvious features but Ivy clad and few snapped limbs. Would benefit from closer climbing inspection if impacted.					Climb
	G360d	Ash	FAR / PRF-I	Ivy clad, cannot see stem					Climb

Ground Level Tree Assessment _East_PRF-I, PRF-M and FAR Trees

	G360e	Oak	FAR / PRF-I	Ivy clad					Climb
	T359	Ash	FAR / PRF-I	No noticeable features from groundnut clad in very leafy ivy and obscuring vision.	Could be mewp from lane	Active pigeon nest northern aspect 2.5m up			Climb / MEWP
	T882	Ash	FAR / PRF-I	Crack in stem leaning southeast over road, 10m up.	Cat-U tree				Climb
	T889	Willow	FAR / PRF-I	Tear out next to sign on SSE aspect 2m up. Endo from ground.	Snapped limbs leaning north with cracks and fissures 1.5m from ground.	Bark inclusion on SSW aspect 4m up stem private road sign.			Ladder / climb
No pic	T389	Alder	FAR / PRF-I	No noticeable features but ivy foliage obscuring. Likely fell with pre-inspection.					Climb
	T453	Group	FAR / PRF-I	Small knot holes. Unlikely to go into cavity. Check before felling.					Climb pre-fell

Ground Level Tree Assessment _East_PRF-I, PRF-M and FAR Trees

	T466	Ash - four stems	FAR / PRF-I	Ivy clad- check pre fell					Climb pre-fell
	T283	Ash	FAR / PRF-I	Two knot holes facing W 2.5m up.	Dead short limb pointing W, small crevice down side, 4m up.	Ivy clad on two main stems			Climb
	T383	Ash	FAR / PRF-I	Ivy clad, inaccessible due to scrub and stream for close inspection. Tear out on low almost grounded limb over stream NW.	Can likely be inspected on day of felling				Climb
	T1277	Ash	FAR / PRF-I	Split in cut limb facing east 5.5m up. Likely PRF-I.	Knot hole at base of same branch facing south 5.5m up.	Thick clad Ivy on both stems.			Climb
	T278	Oak	FAR /PRF-I	Desiccated limb collar facing south on east pointing limb 5.5m up.	Large tear out 10m up on main stem facing NE.	Severed limb with collar facing west 6m up.			Climb
	G360a	Goat willow	PRF-I	Hazard beam NE 2m up. Can be inspected from ground with endoscope.					Ground

Ground Level Tree Assessment _East_PRF-I, PRF-M and FAR Trees

	T886	First willow	PRF-I	Small 5x5cm knot hole on NW aspect 0.8m from ground. Enters stem by 10cm in tube shape. Suitable for single bat.	Dray				Ground
	T388	Alder	PRF-I	Dropped small limb on S aspect 6m up. Split in base.					Climb
	T390	Alder	PRF-I	Basal cavity at ground level. Slight upward return.	Ivy obscuring main stems				Climb
	T529	Oak	PRF-I	Small hazard beam 2.5m up SW aspect					Climb
	T867	Goat willow (down as blackthorn on AIA)	PRF-I	Small knot hole on south facing aspect 1.5m front ground. Suitable for single bat.					Climb
	T446	Ash	PRF-I FAR	No noticeable features. Small amount of ivy. Check before felling. Unlikely PRF-M.					Climb pre-fell

Ground Level Tree Assessment _East_PRF-I, PRF-M and FAR Trees

		T471	Ash	PRF-M	Large basal cavity. Endo from ground					Ground level
		T879	Oak	PRF-M	Snapped branch facing south east 7m up	Dead limb facing NE 7m up. Contains small fissures, tear out and knot hole.	Squirrel hole on north aspect 6m up.			Climb
		T167	Willow	PRF-M	Veteran willow with large woodpecker hole on northeast aspect 4m up	Dropped limbs on all aspects. With splits and fissures.	Woodpecker hole 10m up on north aspect.			Climb
		T454	Field maple	PRF-M	Large stem cavities in east and west leaning stems. 3-4m up.					Climb
		T460	Ash - four stemmed	PRF-M	Knot hole 6m up on north aspect.	Basal cavity south aspect				Climb
		T460a	Hazel	PRF-M	Large tear out with cavity on northern aspect					Ground level

		T464a	Oak	PRF-M	Large stem cavity					Climb
		T279a	Adjacent oak	PRF-M	Woodpecker hole 11m up on NE aspect main stem. Active woodpecker nest.	Tear out SW facing 11m up main stem with cavity at apex	Downward facing cavity on elbow of S pointing limb. Bird dropping around entrance.			Climb
		T354	Dead	PRF-M	Large stem cavity at 2.5m, 2.7m and 3m on SE aspect. Stem likely hollow. Owl potential.					Ladder / climb



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Appendix F

Badger Survey Report

Badger Survey Report

August 2026

**Land North of Horsham,
Mowbray – Phase 2**

Prepared by
CSA Environmental

On behalf of
Legal and General
(Strategic Land Horsham) Ltd.

Report No: CSA/7937/08

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/7937/08	-	10/08/2026	NS/WC	TS/CC	First issue



CONTENTS		Page
	Executive Summary	1
1.0	Introduction	2
	Background	2
2.0	Legislation	4
3.0	Methods	5
5.0	Results	7
	Historic Results	7
	2026 Badger Survey Results	7
6.0	Summary	10
7.0	References	11

Appendices

Appendix A: Badger Survey Plan

Appendix B: Historic badger survey results (Bioscan Ltd, 2016)

Appendix C: Photographs

EXECUTIVE SUMMARY

This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. It presents the findings of update badger *Meles meles* survey work undertaken at Land North of Horsham, Mowbray, in relation to Reserved Matters Applications for Phase 2 of the consented mixed-use development.

The wider Mowbray development is subject to outline planning permission and will deliver up to 2,750 dwellings together with retail, business, leisure, education, public open space, landscaping and associated infrastructure. Condition 14 of the outline permission requires up-to-date ecological surveys to inform Ecological Mitigation and Management Plans for each Reserved Matters area.

Historical surveys undertaken in 2010, 2011, 2014, 2023 and 2025 recorded a number of badger setts within the Phase 2 Site, details of which are summarised herein and have been used to inform update badger survey work undertaken by CSA Environmental in 20226.

The 2026 badger survey confirmed badger setts in two locations, a main sett main sett (S5) within off-site woodland adjacent to the eastern boundary of RMA 12 and 13, and another large sett (possible main sett) (S2a) onsite within a woodland shaw (W1) along Chennels Brook between RMA15 and RMA18 within the eastern section of the Site. A number of disused outlier setts have also been identified within the off-site woodland close to S5 and within woodland associated with the Gatt Pond in the south-eastern corner of the Site (within RMA2C_W3). Further off-site subsidiary and outlier setts are known to the present within land to the south-west of the Phase 2 Site; and evidence of badger in the form of foraging signs (snuffle holes) and latrines have been noted across the survey area.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf Legal and General (Strategic Land Horsham) Ltd. It sets out the findings of a Badger Survey at Phase 2 Land North of Horsham, Mowbray (hereafter referred to as 'the Site'), in regard to Reserved Matter Applications (RMAs) pertaining to Phase 2 of a mixed-use development.

Background

- 1.2 Strategic development at Mowbray is subject to outline planning permission (DC/16/1667) for a mixed-use strategic development to include housing (up to 2,750 dwellings), business park (up to 46,450 m²), retail, community centre, leisure facilities, education facilities, public open space, landscaping and related infrastructure.
- 1.3 This report is provided to inform Horsham District Council of update badger survey work undertaken across Phase 2 to inform Ecological Mitigation and Management Plans (EMMPs) specific to Phase 2 as per condition 14 and 49 of Outline Planning Permission DC/16/1677 (Non-Material Amendment ref: DC/19/0984):

Condition 14

- 1.4 **Pre-Commencement Condition:** *Prior to the submission of an Ecological Mitigation and Management Plan (EMMP) with an application seeking approval of Reserved Matters pursuant to the planning permission, up to date ecological surveys shall be carried out to provide up to date information regarding the potential of the area covered by the Reserved Matters application to support protected and notable species and inform the future design of measures that will be required to avoid, mitigate or compensate for impacts and to inform the Ecological Mitigation and Management Plan for that Reserved Matters application. These surveys shall be completed by suitably qualified ecologist(s), recognised by a relevant professional body such as CIEEM, and in accordance with current survey guidelines. The scope of these surveys shall be agreed in advance with the LPA, and may include advanced surveys for rare bat species. The surveys shall be completed in accordance with the agreed scope prior to the submission of the EMMP for that Reserved Matters area and the results and associated reports appended to the Ecological Mitigation and Management Plan for the Reserved Matters area.*

Condition 49

- 1.5 **Regulatory Condition:** Any application seeking approval of Reserved Matters pursuant to the planning permission shall be accompanied by a detailed Ecological Mitigation and Management Plan (EMMP), which shall be in accordance with the approved Phase-wide EMMP, shall

incorporate any additional or amended recommendations arising from the up to date Ecological Surveys relevant to that Reserved Matters Area and shall include details of protection of retained habitat and avoidance measures with regards to protected and notable species. The EMMP shall include details of pre-works, during works and post-works measures including any on-going management and maintenance necessary to ensure the effectiveness of the mitigation and enhancement measures. Any application seeking approval of Reserved Matters which includes a Proposed Primary Road, as shown on the Parameter Plan: Movement and Access reference 2153A-103P received by the LPA on 6th March 2017 shall be accompanied by detailed design proposals for those road(s), including all ecological mitigation, such as dark corridors, underpasses and bridges and drawings including cross sections and details of associated fencing and landscaping to guide wildlife. The development shall thereafter be carried out in accordance with the approved details.

- 1.6 Previous badger surveys have been carried out in 2010, 2011, 2014, 2016, 2018 by Bioscan (UK Ltd), 2023 and 2025 by Derek Finnie Associates in relation to the Site, including all three phases. Historic survey results have been reviewed and are summarised herein.

2.0 LEGISLATION

2.1 Badgers and their setts are protected under the Protection of Badgers Act 1992 which, in part, makes it an offence to:

- Kill, injure or take a badger
- Destroy or damage a badger sett or any part of it
- Obstruct access to, or any entrance of, a badger sett
- Disturb a badger whilst it is occupying a sett

2.2 Impacts to badgers and their setts should be avoided in the first instance by retaining setts and implementing an appropriate buffer distance to limit disturbance. Where this is not possible, a Natural England licensing system exists to permit certain works that would otherwise be illegal. This can include direct or indirect impacts which may result in any of the above offences. Where a licence has been granted, permitted impacts to a badger sett can only be carried out between the months of July and November (inclusive) and following an agreed method statement.

3.0 METHODS

3.1 A Site walkover was undertaken by Nathaniel Scott and William Campbell on 22 April 2026, to survey the site for badger signs. Using standard survey methods, the Site and immediately adjacent areas were searched for field signs of badger such as:

- Feeding signs such as snuffle entrances (snuffle holes) made during foraging
- Hairs caught on vegetation or fences
- Latrines, usually positioned on territorial boundaries
- Foraging tracks through vegetation or under fences
- Badger setts

3.2 All badger signs observed were mapped. When badger setts are found the number of entrances are recorded as well as the level of usage. Recording this information gives an indication of the type of sett by categorising it according to the criteria listed in Table 1 below (Harris *et al.* 1989, Cresswell *et al.* 1990, Wilson *et al.* 1997).

Table 1. Criteria used to determine sett type

Sett Type
Main Setts - These usually have a large number of entrances with large spoil heaps, and the sett generally looks well used. There will be well-used paths to and from the sett and between sett entrances. Although normally the breeding sett is in continuous use, it is possible to find a main sett that has become disused due to excessive digging or some other reason; it should be recorded as a disused main sett.
Annexe setts - They are often close to a main sett, usually less than 150 metres away, and are usually connected to the main sett by one or more obvious well-worn paths. They usually have several entrances, but may not be in use all the time even if the main sett is very active.
Subsidiary setts - These often only have a few; four (including all categories of use) was the average number in the first survey. They are usually at least 50 metres from a main sett, and do not have an obvious path connecting with another sett. They are not continuously active.
Outlying setts - These usually have only one or two entrances, often have little spoil outside the entrance, have no obvious path connecting with another sett, and are only used sporadically. When not in use by badgers, they are often taken over by foxes or even rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the actual entrance entrance), which is usually at least 250mm in diameter, and is rounded or a flattened oval shape. Fox and rabbit tunnels are smaller and often taller than broad.
Entrance Type
Well used entrances - These are clear of any debris or vegetation, are obviously in regular use, and may or may not have been excavated recently.
Partially used entrances - These are not in regular use and have debris such as leaves and twigs in the entrance, or have moss and/or other plants growing in or around the entrance. Partially used entrances could be in regular use after a minimal amount of clearance.
Disused entrances - These have not been in use for some time, are partially or completely blocked, and could not be used without a considerable amount of clearance. If the entrance has been disused for some time, all that may be visible is

a depression in the ground where the entrance used to be, and the remains of the spoil heap, which may be covered in moss or plants.
--

Limitations

- 3.3 During the survey, surveyors were unable to assess RAM3_F1 for badger field signs as permission was not granted; considering this field is an arable field, the likelihood of sett entrances is low due to heavy disturbance from agricultural activities.
- 3.4 No limitations related to weather conditions occurred with the survey conducted at an optimum time of year and in good conditions.

4.0 RESULTS

Historic Results

- 4.1 Badger surveys have been conducted at the Site (including all three phases of the proposed development) in 2010 and 2011, with follow-up surveys in 2014, 2016, and 2018 by Bioscan Ltd.
- 4.2 Update badger surveys were undertaken by Derek Finnie Associates in 2023 and 2025. This badger survey data was summarised in the Phase 2 Ecological Mitigation and Management Plan (EMMP) (Derek Finnie Associates, 2026), which stated that badger activity was found to be largely consistent with previous surveys undertaken.
- 4.3 Historic badger survey results can be found in Confidential Badger Set Location Plan; Chapter 12 Environmental Statement, Bioscan Ltd 2016 (Drawing No. Figure 12.15, January 2016); see Appendix B.

2026 Badger Survey Results

- 4.4 All badger setts previously identified within the Site were confirmed as still present and reassessed, where necessary. Sett numbers remain consistent with reporting and surveys which have occurred previously.
- 4.5 A badger plan showing the most up-to-date locations of sett entrances and badger activity based on the April 2026 survey is provided in Appendix A. Where detailed inspection could not be undertaken, tunnel locations were largely mapped indicatively with GPS coordinates taken as close to the tunnel as possible.

Sett 2a

- 4.6 A large active badger sett identified as Target Note 2a by Bioscan during the 2010, 2011, 2014, 2016, 2018 by Bioscan (UK Ltd), 2023 and 2025 by Derek Finnie, was identified within and adjacent to woodland W1 which lies within the eastern extent of Phase 2. Twelve entrances are situated within a strip of deciduous woodland, while three lie to the south within the neighbouring field. Observations made in association with this sett found the majority of the entrances to be active, well-used and clear of debris, with well-worn mammal runs between them. Some fresh bedding was observed outside three entrances, with claw marks and guard hairs also observed. Two entrances had distinctly large fresh spoil heaps in association. Three entrances were noted as being disused, with one partially collapsed, and two filled with debris including soil and leaf litter. It is considered that this is likely a main sett.

Sett 5

- 4.7 The presence of a second main sett identified as Sett B5 by Bioscan Ltd, was re-identified within an area of ancient woodland which lies to the

east of RMA 12 and RMA 13 areas, situated in the western extent of Phase 2. This sett consisted of 34 entrances (22-57 during survey 2026) split between four distinct disused and partially used setts located in different positions on the mound (see Appendix A for context).

- 4.8 Seven entrances (20-23) were located on the south bank now covered in bluebells at the time of the survey, with no evidence of entrance clearance and roots and twigs covering 5 of the 7 entrances. No evidence of recent or continual used with no disturbance in vegetation or evidence of digging seen. Would appear to be currently disused.
- 4.9 An additional series of nine entrances (24-32) located on the western bank facing east. Some evidence of recent use with fresh spoil heaps located on two of the entrances and a latrine c 0.2m wide and 1m long. Claw marks were identified at the edge of sett entrances with spoil heaps, and some debris (roots and leaf litter) was found in 3 of the entrances.
- 4.10 Seven more entrances (34-41) lie facing the Site boundary on the eastern bank facing eastward. Sett entrances were all heavily used, with fresh digging claw marks and no debris identified on any of the entrances. Badger guard hairs were identified within the area, and fresh bedding (bluebells) was seen on two of the entrances. This is likely the current active main sett.
- 4.11 The remaining nine entrances (42-50) were located on the northern bank facing both north and south on the bank. Debris (leaf litter, roots and twigs) were seen on all entrances. Similar to the first sett entrances found on the bank all were inactive at the time of the survey with no mammal paths or digging suggesting recent use.

Disused Setts

- 4.12 An outlier sett with a single tunnel entrance (14) not previously recorded in surveys by Bioscan and Derek Finnie was identified c. 67m to the west of Sett 2a. The hole is small in height but wide enough for a badger to use (see Photo 1). The hole appears disused, with leaf litter surrounding it and some within and roots overhanging the top of the hole.
- 4.13 An outlier / subsidiary sett comprising four entrances (16) was also observed within offsite woodland to the south of Sett 5, with debris surrounding and within the Sett entrances. No fresh spoil heaps or mammal pathways observed. One badger hair was identified on the exterior of the sett entrance. A further outlier sett, comprising a single entrance (15) is located south of Sett 16. This comprises a singular hole which is the correct d shape for a badger but is likely disused, debris covering the entrance and no field signs seen by surveyors.

- 4.14 An outlier sett (17), comprising a single tunnel, is present along a dry tributary of Channels Brook, to the east of the Gatt Pond within W3. This tunnel was clear, but no signs of recent activity were observed.
- 4.15 Further outlier and subsidiary setts are known to the present to the south-west of the Phase 2 Site along the banks of Channels Brook, as identified during Bioscan and DFA surveys. This area did not form part of the 2026 survey area for Phase 2, but is of relevance to the pattern of badger activity across the wider Mowbray site.

Mammal Holes

- 4.16 Mammal holes were observed to the south of Woodland W2 and not badger; the holes were circular in shape and narrowing quickly from the entrance, identified as rabbit warrens.
- 4.17 Overview of field signs identified. See Table 2 for full survey results.

Table 2. Badger Survey Results 2026

Sett No.	Tunnel No	Sett Type	Entrance Type	Notes
14	1	Outlier	Disused	Disused mammal hole situated on dry ditch bank within woodland W1. Partially blocked by roots. No evidence of badger found.
2a	2-13	Possible Main Sett	Largely well used	A series of 12 entrances situated within and in close proximity to W1. Nine of which were clear of debris with signs of recent use including claw marks and guard hairs. Large spoil heaps identified on at least half the entrances.
15	15	Outlier	Disused	A singular sett entrance found south of Sett 5.
16	16-19	Outlier	Disused	Some debris within the entrance, including leaf litter and badger hair along the entrance, but the entrance hasn't been recently used. Series of disused tunnels x 4, moss and debris covering them.
17	N/A	Outlier	Disused	Singular tunnel located on a tributary of the channel Brook. Entrance was clear, but no field signs located within the entrance or around its periphery.
5	20-53	Main Sett	Mixture of well-used and disused Sett entrances	South bank, entrances 22-28: entrances covered by bluebells at the time of survey; roots and twigs covering five of seven entrances; no entrance clearance, fresh spoil, mammal tracks or recent digging recorded; assessed as disused. Eastern bank, entrances 29-37: fresh spoil heaps at two entrances; claw marks at entrances with spoil; debris comprising roots and leaf litter within three entrances; latrine under holly measuring approximately 1m x 0.2m. Eastern bank facing Site boundary, entrances 38-47: clear, heavily used entrances with fresh digging and claw marks; no debris recorded; guard hairs present; fresh bluebell bedding recorded at two entrances; likely current active main sett group. Northern bank, entrances 48-57: entrances facing north and south; leaf litter, roots and twigs present at all entrances; no mammal paths, fresh spoil or recent digging recorded; assessed as inactive/disused at the time of survey.

5.0 SUMMARY

- 5.1 The 2026 badger survey confirmed that badgers remain active within and immediately adjacent to Phase 2 of the Site, with activity focused around retained woodland habitats and off-site woodland boundaries.
- 5.2 Two likely main setts were recorded. Sett 2a is located within and adjacent to woodland W1 in the eastern extent of Phase 2 south of the stream and supported multiple entrances, the majority of which showed evidence of regular or recent use, including clear entrances, fresh spoil, bedding, claw marks, guard hairs and mammal runs.
- 5.3 Sett 5, located within ancient woodland east of RMA 12 and RMA 13, comprised four distinct entrance groups. The southern and northern groups were largely inactive or disused at the time of survey, whereas the central/eastern groups showed clear evidence of recent badger use, including fresh spoil, claw marks, clear entrances, guard hairs, bedding and a latrine. The eastern bank group facing the Site boundary is considered likely to represent the currently active main area of the sett.
- 5.4 Several additional outlier or disused sett entrances were also recorded, including disused tunnels west of Sett 2a and south of Sett 5, along with four off-site disused entrances where only limited evidence of badger visitation was observed. Mammal holes recorded to the south of woodland W2 were considered to be rabbit warrens rather than badger sett entrances.
- 5.5 Overall, the findings indicate an established badger presence across the wider Phase 2 landscape, with active main sett use associated with woodland W1 on Site and the off-site ancient woodland.

6.0 REFERENCES

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Appendix A

Badger Survey Plan



- Site boundary
- 30m Mitigation Buffer
- Number of main sett entrances
- Badger Sett
 - Sett 2a - 12 entrances
 - Sett 5 - 34 entrances
- Outlier sett (disused)
- Snuffle Holes
- Latrine
- Mammal path



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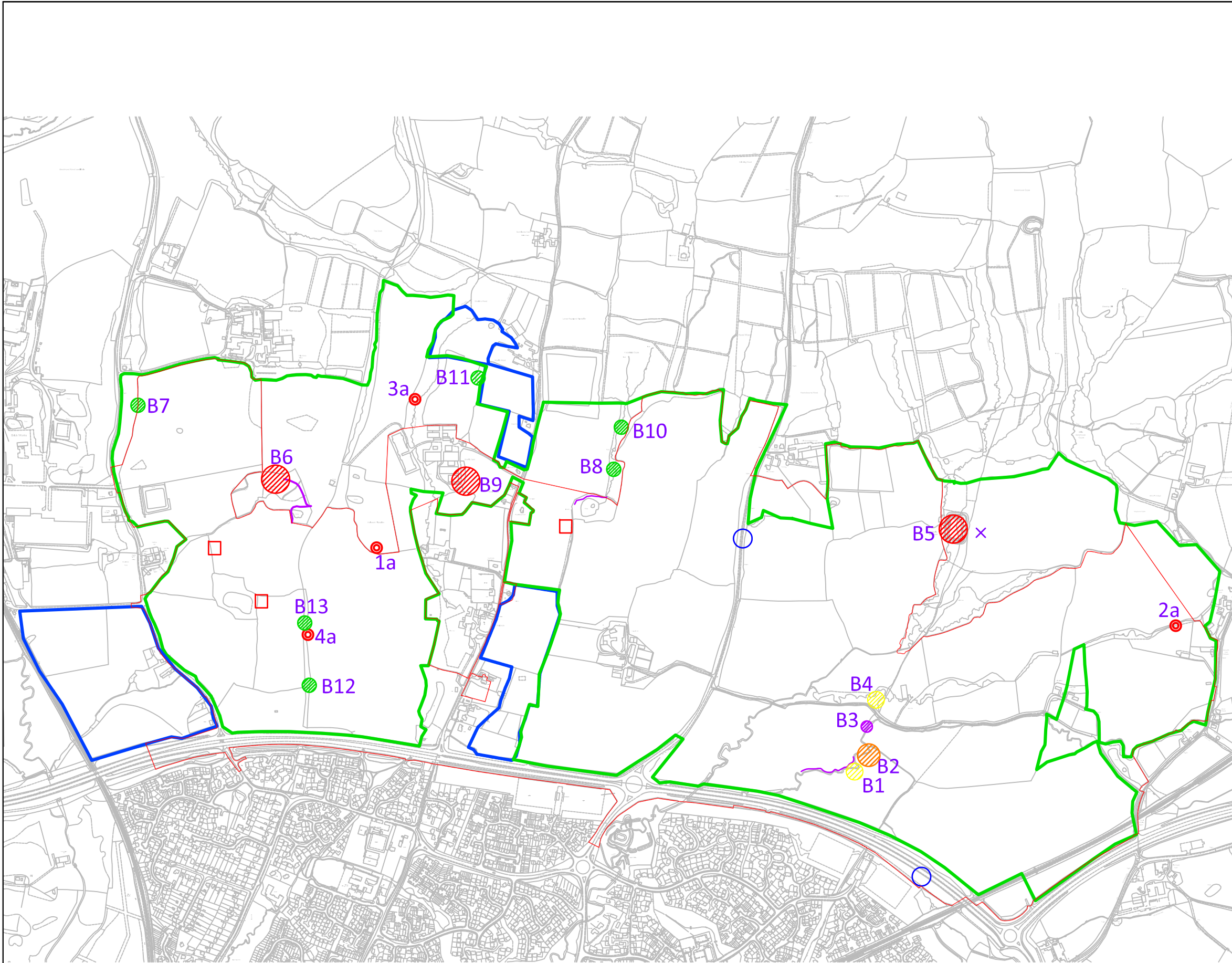
Project	Land North of Horsham, Mowbray - Phase 2	Date	June 2026	Drawing No.	CSA/7937/133
Drawing Title	Phase 2 - Badger Survey Plan	Scale	1:6,500	Rev	-
Client	Legal and General (Strategic Land Horsham) Ltd.	Drawn	WC	Checked	TS

Appendix B

Confidential Badger Sett Location Plan

Drawing No. Figure 12.15

Bioscan 2016



Key

- Application site boundary
- Study area (2014)
- Areas additional to the Study Area searched in 2010 and 2011
- Badger sett (main)
- Badger sett (annexe)
- Badger sett (subsidiary)
- Badger sett (outlier)
- Badger sett (possible)
- Badger sighting
- Badger Copse (Road Traffic Accident-during 2010 survey)
- Badger sett number
- Badger pathway
- Target Note with text reference (these refer to former setts or burrows not assessed to be setts- See Table 1 in report)
- Badger latrine



DO NOT SCALE

Title		
Confidential Badger Sett Location Plan		
Project	Client	
North Horsham	Liberty Property Trust	
Drawing No.	Revision	Project No.
Figure 1A	A	E1585
Drawn	Date	
BC	January 2016	

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Appendix C

Photographs



Photograph 1. Disused sett entrance with blackthorn scrub, within woodland W1.



Photograph 2. Sett entrance within the grassland neighbouring woodland to the south of the stream, part of Sett 2a.



Photograph 3. Sett entrance within the neighbouring grassland to the south of the stream, part of Sett 2a.



Photograph 4. Three sett entrance (in photo) found within Woodland 1 with a large fresh spoil heap.



Photograph 5. Mammal tunnel south of Woodland W3 located west of snuffle holes see Appendix A.



Photograph 6. Sett entrance in off-site ancient woodland; this is one of the disused sett entrances covered in bluebells (20-27) neighbouring the active part of Sett 5



Photograph 7. Disused tunnel neighbouring the active sett 5.



Photograph 8. Sett entrances facing the Site are part of the main sett 2a, which is active.



Photograph 9. Sett entrances facing the Site are part of the main sett 2a, which is active.



Photograph 10. Sett entrances facing the Site are part of the main sett 2a, which is active.

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Appendix G

Dormouse Survey Report

Dormouse Survey Report

August 2026

Phase 2 – Mowbray, North Horsham

Prepared by
CSA Environmental

On behalf of
Legal and General
(Strategic Land Horsham) Ltd.

Report No: CSA/7937/09

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/7937/09	-	10/08/2026	NS	CC	First Issue



CONTENTS		Page
1.0	Introduction	1
2.0	Legislation	3
3.0	Methods	4
4.0	Results	8
5.0	Summary	10
6.0	References	11
7.0	References	Error! Bookmark not defined.

Appendices

Appendix A: Dormouse Survey Plan

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. It sets out the findings of survey work undertaken for hazel dormouse *Muscardinus avellanarius* during 2026 at Land North of Horsham, Mowbray (hereafter referred to as 'the Site'), in regard to Reserved Matter Applications (RMAs) pertaining to Phase 2 of a mixed-use development.

Background

- 1.2 Strategic development at Mowbray is subject to an outline planning permission (DC/16/1667) and will provide up to 2,750 dwellings alongside retail and business areas, leisure and education facilities, Public Open Space, and associating landscaping and infrastructure. Development is being delivered in three phases, with each phase being subject to Reserved Matters applications for each sub-phase of development.
- 1.3 This report is provided to inform Horsham District Council of update survey work in relation to dormice at Phase 2 and to inform and support Ecological Mitigation and Management Plans (EMMPs) specific to Phase 2 as per conditions 14 and 49 of Outline Planning Permission DC/16/1677 (Non-Material Amendment ref: DC/19/0984):

Condition 14

- 1.4 **Pre-Commencement Condition:** *Prior to the submission of an Ecological Mitigation and Management Plan (EMMP) with an application seeking approval of Reserved Matters pursuant to the planning permission, up to date ecological surveys shall be carried out to provide up to date information regarding the potential of the area covered by the Reserved Matters application to support protected and notable species and inform the future design of measures that will be required to avoid, mitigate or compensate for impacts and to inform the Ecological Mitigation and Management Plan for that Reserved Matters application. These surveys shall be completed by suitably qualified ecologist(s), recognised by a relevant professional body such as CIEEM, and in accordance with current survey guidelines. The scope of these surveys shall be agreed in advance with the LPA, and may include advanced surveys for rare bat species. The surveys shall be completed in accordance with the agreed scope prior to the submission of the EMMP for that Reserved Matters area and the results and associated reports appended to the Ecological Mitigation and Management Plan for the Reserved Matters area.*

Condition 49

- 1.5 **Regulatory Condition 49:** Any application seeking approval of Reserved Matters pursuant to the planning permission shall be accompanied by a

detailed Ecological Mitigation and Management Plan (EMMP), which shall be in accordance with the approved Phase-wide EMMP, shall incorporate any additional or amended recommendations arising from the up to date Ecological Surveys relevant to that Reserved Matters Area and shall include details of protection of retained habitat and avoidance measures with regards to protected and notable species. The EMMP shall include details of pre-works, during works and post-works measures including any on-going management and maintenance necessary to ensure the effectiveness of the mitigation and enhancement measures. Any application seeking approval of Reserved Matters which includes a Proposed Primary Road, as shown on the Parameter Plan: Movement and Access reference 2153A-103P received by the LPA on 6th March 2017 shall be accompanied by detailed design proposals for those road(s), including all ecological mitigation, such as dark corridors, underpasses and bridges and drawings including cross sections and details of associated fencing and landscaping to guide wildlife. The development shall thereafter be carried out in accordance with the approved details.

- 1.6 Site wide surveys (including Phases 1, 2 and 3) for hazel dormice were carried out in 2010, 2011, 2014, 2016, 2018 and 2023 by Bioscan (UK) Ltd in relation to the Site including all three phases of development. Historic survey results have been reviewed and are summarised herein.

2.0 LEGISLATION

- 2.1 The dormouse is legally protected through inclusion under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and is afforded further protection as a European Protected Species (EPS) under Regulation 43 of the Conservation of Habitats and species Regulations 2017 (as amended).
- 2.2 Collectively and in summary, this legislation makes it an offence to:
- Intentionally or deliberately kill, injure or capture dormice
 - Intentionally, deliberately or recklessly disturb dormice in such a way as to be likely to significantly affect the ability of any significant group of dormice to survive, breed, or rear or nurture their young or the local distribution of or abundance of the species
 - Intentionally or recklessly damage, destroy or obstruct access to places used by dormice for shelter or protection (whether occupied or not) or intentionally or recklessly disturb a dormouse whilst it is occupying such a place
 - Damage or destroy a breeding site or resting place of a dormouse.
- 2.3 Where development is proposed that would result in an offence under the Regulations, an EPS statutory derogation licence (often termed 'EPS Mitigation Licence') will need to be secured from Natural England to permit an act that would otherwise be unlawful. Such a licence can only be granted following receipt of planning permission with all relevant conditions discharged, and where it has been demonstrated that specific statutory derogation tests have been met.

3.0 METHODS

Habitat Quality Assessment

- 3.1 A Habitat Quality Assessment (HQA) of all on-site woodland, hedgerows and scrub was undertaken in line with the protocol set out within the Hazel Dormouse Mitigation Handbook (Wells *et al.*, 2025), as described below. Under this guidance, a HQA is used to calculate survey effort for nest tube surveys as well as to estimate population densities within a site based upon the overall quality and quantity of on-site habitat.
- 3.2 The Hazel Dormouse Mitigation Handbook (Wells *et al.*, 2025) published in March 2025 provided updated guidance in regard to dormouse surveys, including nest tube survey effort. A Habitat Quality Assessment (HQA) of any on-site woodland, hedgerows and scrub was undertaken in line with the protocol set out within the Hazel Dormouse Mitigation Handbook, as described below on 16 April 2026. Under this guidance, a HQA is used to calculate survey effort as well as estimated population densities within a site based upon the overall quality of on-site habitat.
- 3.3 A HQA assesses the overall quality of a habitat for dormice through a combination of the richness of plant species of benefit to dormice within a stand of habitat and that habitat's structural complexity against pre-defined criteria. Stands of relatively homogenous and contiguous habitat can be grouped for assessment. Species richness is determined by the average count of plant species of benefit to dormice across transects of a defined parcel or length of habitat. The list of plant species which count towards the species richness count are provided in the Hazel Dormouse Mitigation Handbook (Wells *et al.*, 2025). In line with guidance, between four and five transects of 100m should be aimed for to gain a representative sample, however where smaller or shorter habitats are present, the length and number of these transects is adjusted proportionately.
- 3.4 Structural complexity for woodland and scrub is assessed based upon the extent of the canopy versus the understorey using the criteria set out in Table 1 below to generate a result of 'High', 'Medium' or 'Low' structural complexity.

Table 1. Structural complexity assessment criteria for woodland and scrub habitats (adapted from Wells *et al.*, 2025).

Suitability	Character or habitat present
High	Canopy and understorey layers present and well-connected, with or without scrub layer (e.g. bramble) beneath. OR

	Understorey and scrub generally present and well-connected with canopy sparse or absent.
Medium	Understorey layer generally present, with sparse or absent canopy and scrub layers. OR Understorey layer generally present, with sparse or absent canopy and scrub layers OR Scrub with developing understorey and/or canopy trees.
Low	Canopy present with sparse or absent understorey with or without scrub layer. OR Scrub present, with sparse or absent canopy and understorey above.

3.5 Hedgerow structural complexity is assessed based upon the presence of 'core' and 'additional' characteristics. Each stand/group of hedgerows must pass both core criteria for either 'high' or 'medium' categories as well as at least two additional characteristic features from the same categories to fall into that category. If not, it falls into the next lower category. These criteria are set out in Table 2 below.

Table 2. Structural complexity assessment criteria for hedgerow habitats (adapted from Wells *et al.*, 2025).

Suitability	Characteristic features	
High	Features typically present (core criteria)	No gaps or very few small gaps (up to 10% length) AND Width of hedge >3m
	Additional characteristic features (minimum 2 passes)	Dense growth to ground level along >50% hedge length Dense outgrowths along >25% hedge length Height >3m Mature standards <40m spacings Marginal permanent herbaceous cover >2m wide
Medium	Features typically present (core criteria)	10-25% of total length consists of gaps and/or some gaps large (>5m) AND Width of hedge 2-3m

	Additional characteristic features (minimum 2 passes)	Dense growth to ground level along 25-50% hedge length Dense outgrowths along 5-25% hedge length Height 2-3m Mature standards at 40-100m spacings Marginal permanent herbaceous cover 1-2m wide
Low	Features typically present (core criteria)	>25% of total length gaps and/or frequent large gaps (>5m) AND Width of hedge <2m
	Additional characteristic features	Dense growth to ground level along <25% hedge length Dense outgrowths along <5% hedge length Height <2m Mature standards >100m spacings or absent Marginal permanent herbaceous cover <1m wide

- 3.6 Suitable on-site habitats, comprising hedgerows, bramble scrub, and parcels of broadleaved woodland, were assessed for species diversity and structural complexity, assigned as "low", "medium" or "high" for the respective characteristic. The overall quality of each habitat parcel was then assigned using the matrix provided in Table 3 below.

Table 3. Habitat Quality Assessment matrix showing the relationship between species diversity, structural complexity and habitat quality (adapted from Hazel Dormouse Mitigation Handbook, 2025).

	Habitat Diversity		
Habitat Complexity	High	Medium	Low
High	Excellent	Good	Fair
Medium	Good	Good	Poor
Low	Fair	Poor	Poor

Population Estimates

- 3.7 Where presence is confirmed, the results of the HQA are used to provide an estimated population of dormice using a site based upon approximate density capacities for each habitat type and quality,

shown in Table 4 below. In order to calculate the estimated total dormouse population supported by a site, the area/length of suitable habitats must be multiplied by the relevant dormouse carrying capacity.

Table 4. Habitat Quality Assessment Index showing estimated density of breeding adult dormice depending on habitat quality and type (adapted from Hazel Dormouse Mitigation Handbook, 2025).

Habitat quality	Capacity for dormouse population density	
	Habitat type	
	Hedgerow (per 1km)	Woodland/Scrub (per 1ha)
Excellent	8	10
High	5	6
Medium	3	4
Poor	1	2

Limitations

- 3.8 Dormouse Habitat Quality Assessments (HQAs) were conducted at an optimum time of year and in good conditions. No specific limitations have been identified.

4.0 RESULTS

Habitat Quality Assessment

- 4.1 Habitat Quality Assessment results are detailed below and summarised in Tables 5-6.

Woodland/ Scrub Habitats

- 4.2 Woodland areas W1 and W3 were assessed to be of 'Excellent' habitat quality, in turn suggesting they have the strongest potential to support dormice. Woodland W2 was assessed to be of 'Good' habitat quality predominantly due to a relatively lower species diversity present within W2.
- 4.3 Scrub parcels S1 and S2 were assessed to be of 'Poor' habitat quality predominantly due to a lack of structural complexity and low species diversity.

Hedgerows

- 4.4 Hedgerow H4 was assessed to be of 'Excellent' habitat quality, in turn suggesting that this has the strongest potential to support dormice. Hedgerows H1-H3, H5, H10, H11, H22, H45-49 and H54 were all assessed to be of 'Good' habitat quality. Hedgerow H36 was assessed to be of 'Poor' habitat quality due to a lack of structural complexity and low species diversity.

Carrying Capacity

- 4.5 Based on the habitat quality and quantity, it is estimated that a population of up to c.27 individuals are likely to be supported by the on-site woodland and scrub habitats. This is largely attributed to the presence of both 'Excellent' and 'Good' quality habitat on-Site.
- 4.6 Based on the habitat quality and quantity, it is estimated that a population of up to c.13 dormice may be supported by the on-Site hedgerow habitats. This is largely attributed to the presence of extensive 'Good' quality habitats on-Site.

Table 5. Habitat Quality Assessment Summary: Areas of woodland/scrub habitat

Habitat Reference	Habitat Diversity	Habitat Complexity	Area (ha)	Habitat Quality
S1	Medium	Low	0.018	Poor
S2	Medium	Low	0.044	Poor
W1	High	High	0.96	Excellent
W2	Medium	High	1.07	Good
W3	High	High	1.13	Excellent

Table 6. Habitat Quality Assessment Summary: Lengths of hedgerow

Habitat Reference	Habitat Diversity	Habitat Complexity	Length (km)	Habitat Quality
H1	Medium	Medium	0.251	Good
H2	Medium	High	0.129	Good
H3	High	Medium	0.165	Good
H4	High	High	0.012	Excellent
H5	Medium	High	0.066	Good
H10	Medium	Medium	0.256	Good
H11	High	Medium	0.106	Good
H22	High	Medium	0.127	Good
H36	Low	Low	0.138	Poor
H45	Medium	Medium	0.264	Good
H46	High	Medium	0.264	Good
H47	High	Medium	0.218	Good
H48	Medium	Medium	0.158	Good
H49	Medium	Medium	0.187	Good
H54	Medium	Medium	0.087	Good

5.0 SUMMARY

- 5.1 The results of the Habitat Quality Assessment estimate that the on-Site habitats including areas of woodland, scrub and hedgerows, are capable of supporting an estimate population of up to 40 dormice in line with the principles set out within the new guidance.
- 5.2 Based on the findings of the Habitat Quality Assessment, and under the new guidance as detailed within the Hazel Dormouse Mitigation Handbook, the survey effort for nest tube surveys at the Site has been calculated. A total of 214 nest tubes will be deployed at the Site on 07 July 2026 (see Dormouse Survey Plan; Appendix B), with nest tube surveys being undertaken monthly from the end of July until end of September 2026 (3 months of survey).

6.0 REFERENCES

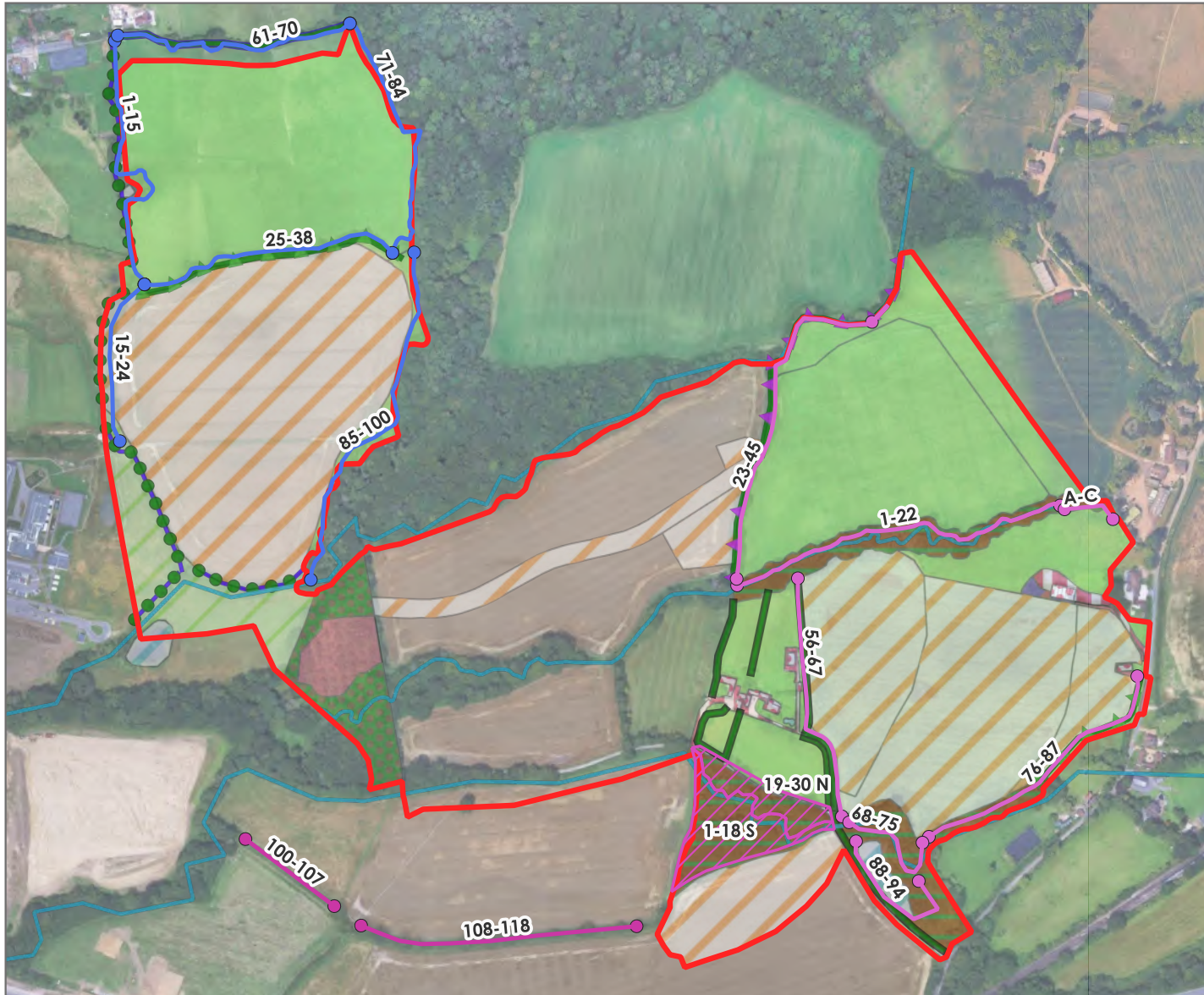
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Appendix A

Dormouse Survey Plan



- Site boundary
- Nest tube transects x214
- Tubes in the East of the Site
- Tubes for RMA 2
- Tubes in the West of the Site
- Nest tubes in woodland



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Project	Mowbray Phase 2, North Horsham	Date	July 2026	Drawing No.	CSA/7937/124
Drawing Title	Dormouse Survey Setup	Scale	Refer to scale	Rev	-
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Appendix H

Great Crested Newt Survey Report

GCN Survey Report

August 2026

**Land North of Horsham
Mowbray**

Prepared by
CSA Environmental

On behalf of
Legal and General
(Strategic Land Horsham)
Ltd.

Report No: CSA/7937/11

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/7937/11	-	10/08/2026	WC	TS/CC	



CONTENTS		Page
	Executive Summary	1
1.0	Introduction	2
	Background	2
2.0	Legislation	4
	Licensing	4
3.0	Methods	6
	Desk Study	6
	Habitat Suitability Index (HSI) Assessment	6
	Environmental DNA (eDNA) Sampling	6
4.0	Results	7
	Desk Study	7
	Habitat Suitability Index (HSI) Assessment	7
	Environmental DNA (eDNA) Sampling	7
5.0	Summary	9
6.0	References	10

Appendices

Appendix A: HSI and eDNA survey results

Appendix B: eDNA Results Plan

EXECUTIVE SUMMARY

This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. It presents the findings of update great crested newt *Triturus cristatus* survey work undertaken at Land North of Horsham, Mowbray, in relation to Reserved Matters Applications for Phase 2 of the consented mixed-use development.

The wider Mowbray development is subject to outline planning permission and will deliver up to 2,750 dwellings together with retail, business, leisure, education, public open space, landscaping and associated infrastructure. Condition 14 of the outline permission requires up-to-date ecological surveys to inform Ecological Mitigation and Management Plans for each Reserved Matters area.

A desk study was completed in March 2026 to identify ponds within 500m of the Site, supported by Habitat Suitability Index (HSI) assessments and environmental DNA sampling of accessible ponds. Surveys and sampling were undertaken between 11 May and 29 June 2026, with samples submitted for laboratory analysis to determine the presence or likely absence of great crested newt.

A total of 24 waterbodies were identified within 500 m of the Site, with generally good habitat connectivity north of the A264 and suitable terrestrial habitat present within and adjacent to the Site. The eDNA results confirmed great crested newt presence in five of the 12 ponds surveyed, with five ponds returning negative results and two indeterminate results. Ponds which tested positive for great crested newt eDNA were clustered and connected by suitable terrestrial habitat to the west of the Phase 2 Site, indicating the presence of a local great crested newt population in that locality.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. It sets out the findings of a great crested newt (GCN) survey at Phase 2 Land North of Horsham, Mowbray (hereafter referred to as 'the Site'), in regard to Reserved Matter Applications (RMAs) pertaining to Phase 2 of a mixed-use development. See Appendix A for Site-wide Phasing Plan.

Background

- 1.2 Strategic development at Mowbray is subject to an outline planning permission (DC/16/1667) and will provide up to 2,750 dwellings alongside retail and business areas, leisure and education facilities, Public Open Space, and associated landscaping and infrastructure. Development is being delivered in three phases, with each phase being subject to Reserved Matters Applications for each sub-phase of development.
- 1.3 This report is provided to inform Horsham District Council of update survey work in relation to GCN at Phase 2 and to inform and support Ecological Mitigation and Management Plans (EMMPs) specific to Phase 2 as per condition 14 and 49 of Outline Planning Permission DC/16/1677 (Non-Material Amendment ref: DC/19/0984):
- 1.4 ***Pre-Commencement Condition:*** *Prior to the submission of an Ecological Mitigation and Management Plan (EMMP) with an application seeking approval of Reserved Matters pursuant to the planning permission, up to date ecological surveys shall be carried out to provide up to date information regarding the potential of the area covered by the Reserved Matters application to support protected and notable species and inform the future design of measures that will be required to avoid, mitigate or compensate for impacts and to inform the Ecological Mitigation and Management Plan for that Reserved Matters application. These surveys shall be completed by suitably qualified ecologist(s), recognised by a relevant professional body such as CIEEM, and in accordance with current survey guidelines. The scope of these surveys shall be agreed in advance with the LPA, and may include advanced surveys for rare bat species. The surveys shall be completed in accordance with the agreed scope prior to the submission of the EMMP for that Reserved Matters area and the results and associated reports appended to the Ecological Mitigation and Management Plan for the Reserved Matters area.*

Condition 49

- 1.5 **Regulatory Condition 49:** Any application seeking approval of Reserved Matters pursuant to the planning permission shall be accompanied by a detailed Ecological Mitigation and Management Plan (EMMP), which

shall be in accordance with the approved Phase-wide EMMP, shall incorporate any additional or amended recommendations arising from the up to date Ecological Surveys relevant to that Reserved Matters Area and shall include details of protection of retained habitat and avoidance measures with regards to protected and notable species. The EMMP shall include details of pre-works, during works and post-works measures including any on-going management and maintenance necessary to ensure the effectiveness of the mitigation and enhancement measures. Any application seeking approval of Reserved Matters which includes a Proposed Primary Road, as shown on the Parameter Plan: Movement and Access reference 2153A-103P received by the LPA on 6th March 2017 shall be accompanied by detailed design proposals for those road(s), including all ecological mitigation, such as dark corridors, underpasses and bridges and drawings including cross sections and details of associated fencing and landscaping to guide wildlife. The development shall thereafter be carried out in accordance with the approved details.

2.0 LEGISLATION

- 2.1 Great crested newts *Triturus cristatus* are legally protected as European Protected Species (EPS) under Regulation 43 of the Conservation of Habitats and Species Regulations 2017. These Regulations make it an offence to:
- Deliberately capture, injure or kill a great crested newt
 - Deliberately disturb great crested newts, impairing their ability to survive, breed, reproduce or rear/nurture their young
 - Damage or destroy a breeding site or resting place used by a great crested newt
- 2.2 Great crested newts are also fully protected under the Wildlife & Countryside Act 1981 (as amended), making it an offence to:
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place of shelter or protection
 - Intentionally or recklessly obstruct access to any structure or place of shelter or protection
- 2.3 Disturbance of great crested newts is covered by both the 2017 Regulations and the 1981 Act. Disturbance that impairs survival or successful reproduction would be covered by the Regulations, while less significant acts of disturbance may only be covered by the Act.
- 2.4 It is important to note that great crested newts and their habitats (such as breeding ponds) are protected throughout the year, regardless of whether or not newts are present at the time.
- 2.5 Great crested newts are also listed as a species of principal importance for the conservation of biodiversity in England, under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006. The S41 species list is used to guide decision-makers, including planning authorities, in implementing their duty under Section 40 of the NERC Act to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Licensing

- 2.6 Where development is proposed that would result in an offence under the Habitats and Species Regulations, a statutory derogation licence may be granted by Natural England to permit an act that would otherwise be unlawful. To obtain an EPS licence for development, it must be demonstrated that the purpose of the act to be licensed is for:
- “preserving public health or public safety or other imperative reasons of overriding public interest including those of social or economic

nature and beneficial consequences of primary importance for the environment" (Regulation 55(2)(e))

2.7 In addition, Natural England will not grant an EPS licence unless they are satisfied that:

- "There is no satisfactory alternative" (Regulation 55(9)(a))
- "The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" (Regulation 55(9)(b))

2.8 NatureSpace's District Level Licensing Scheme is an alternative approach to mitigation licensing for planning applications which could affect great crested newt. The aim of district level licensing is to increase the number of great crested newts by providing new or improved habitats in targeted areas.

2.9 There are 5 risk zones included in the licensing scheme:

- Black zones are those in which great crested newt have national or regional importance. Developers are unable to apply for a district level license (DLL) if their site is in a black zone.
- Red zones contain highly suitable great crested newt habitat. Developers can apply for a DLL if their site is in a red zone.
- Amber zones contain suitable habitat, with great crested newt likely to be present. Developers can apply for a DLL if their site is in an amber zone.
- Green zones contain moderate suitability habitat where great crested newt may be present. Developers can apply for DLL if their site is in a green zone.
- White zones are those with low habitat suitability for great crested newt. Developers are able to apply for a DLL if their site is within a white zone

3.0 METHODS

Desk Study

- 3.1 In accordance with Natural England's Great Crested Newt Mitigation Guidelines (2001), a desktop search was undertaken in March 2026 to identify ponds within 500m of the Site which may have potential to support breeding great crested newt, using Ordnance Survey (OS) mapping, the MAGIC database and aerial photography. 500m is the generally accepted typical maximum dispersal range of this species, with great crested newt most likely to use terrestrial habitat within 250m of breeding ponds.

Habitat Suitability Index (HSI) Assessment

- 3.2 Where ponds were situated within a 500m radius and connected to the Phase 2 Site by traversable terrestrial habitats, access permission was requested to undertake a Habitat Suitability Index (HSI) assessment, using the standard approach set out by Oldham *et al.* (2000). These assessments were undertaken on 11 May 2026, 27 May 2026, 12 June 2026 and 29 June 2026 by Corie Lee (Natural England Class Licence WML-CL08 – Registration Number (2025-86765_SCI_CL08), Nat Scott and Amia Chalk.

Environmental DNA (eDNA) Sampling

- 3.3 Environmental DNA (eDNA) water sampling was used to determine the presence/likely absence of great crested newt from 12 ponds; see Table 1 in Appendix A for HSI and eDNA Survey Results. This method has been shown to be highly effective in detecting the presence of great crested newts (Biggs *et al.*, 2014).
- 3.4 Water samples were collected from 12 ponds on 11 May 2026, 27 May 2026, 12 June 2026 and 29 June 2026 by Corie Lee (Natural England Class Licence WML-CL08 – Registration Number (2025-86765_SCI_CL08), Nat Scott and Amia Chalk following the recommended procedure. Appropriate biosecurity measures were taken to avoid cross-contamination of great crested newt eDNA. Subsequently, the samples were sent to ADAS for analysis.

4.0 RESULTS

Desk Study

- 4.1 A desktop review of available waterbody records, supplemented by site visits, identified 24 waterbodies within 500 m of the Site. These ponds are shown on the GCN eDNA Results Plan (CSA/7937/135) provided in Appendix B. Habitat connectivity is generally good between all ponds located north of the A264. The A264 forms a significant barrier to wildlife movement and separates the Site, which lies to the north of the road, from habitats to the south of the road.
- 4.2 The positive ponds located in the west of the Site are within close proximity to each other and have the potential for newts to disperse between ponds. The ponds have the potential to support a metapopulation based on a cluster of positive eDNA results within 250m of each other. The ponds are clustered and exhibit stronger habitat connectivity, making them highly suitable for use by great crested newts where multiple populations use different ponds for breeding.
- 4.3 While the ponds within the eastern part of the Site remain connected by suitable habitat, they are located at greater distances from one another. For example, ponds P29 and P6 are separated from each other by approximately c. 200m. Terrestrial habitats both within and adjacent to the Site are of good quality and provide suitable refugia, foraging opportunities, and dispersal habitat for GCN outside of the breeding season.

Habitat Suitability Index (HSI) Assessment

- 4.4 Full results of the surveys are included in Appendix A.
- 4.5 Of the ponds surveyed within 500 m of the Phase 2 Site boundary, six were dry at the time of survey. These ponds appear to dry annually and were assessed as having, at most, average suitability for GCN. The dry ponds are located along hedgerow boundaries and within woodland habitats in the western part of the Site.
- 4.6 Three ponds within 500 m of the Site (P3, P20 and P27) could not be accessed for HSI or eDNA surveys. Attempts were made to contact the landowners in May; however, no response was received. Consequently, it was not possible to assess the suitability of these ponds for GCN or undertake eDNA sampling.
- 4.7 Three ponds (P1, P6 and P31) were assessed as being in excellent condition. These ponds are associated with high-quality terrestrial habitat and, like many ponds within 500 m of the Site, are characterised by good water quality and the absence of waterfowl and fish, factors that contribute positively to their suitability for GCN.

Environmental DNA (eDNA) Sampling

- 4.8 The eDNA survey results concluded that five of the 12 ponds surveyed within 500m of the Site boundary were positive for GCN, five were negative, and two returned indeterminate results.
- 4.9 Three of the five positive eDNA results (P2, P31 and P32) were located on the western Site boundary, with the two ponds (P37 and P52) located between 250m and 500m of the Site boundary.
- 4.10 The two indeterminate results (P34 and P39) were attributed to high levels of suspended sediment and evidence of DNA degradation within the samples. These ponds were located within ancient woodland to the north of the Site and were partially dry at the time of survey. Consequently, elevated sediment levels may have interfered with sample quality and affected the reliability of the eDNA analysis.

5.0 SUMMARY

- 5.1 The 2026 survey work identified 24 waterbodies within 500 m of the Phase 2 Site boundary. Of the 12 ponds subject to eDNA sampling, five returned positive results for GCN, five returned negative results and two returned indeterminate results. The positive ponds are clustered and connected by suitable terrestrial habitat, including hedgerows, woodland margins and other refugia within and adjacent to the Site, indicating the presence of a local GCN population.
- 5.2 HSI assessments recorded a range of pond conditions across the survey area. Six ponds were dry at the time of survey and appear likely to dry annually, reducing their suitability for breeding GCN. Three ponds, P1, P6 and P31, were assessed as having excellent suitability, while three ponds, P3, P20 and P27, could not be accessed for HSI assessment or eDNA sampling. The two indeterminate eDNA results were associated with ponds in ancient woodland to the north of the Site, where suspended sediment and DNA degradation may have affected sample reliability.

6.0 REFERENCES

Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F., 2014. *Analytical and methodological development for improved surveillance of the Great Crested Newt*. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Oxford: Freshwater Habitats Trust.

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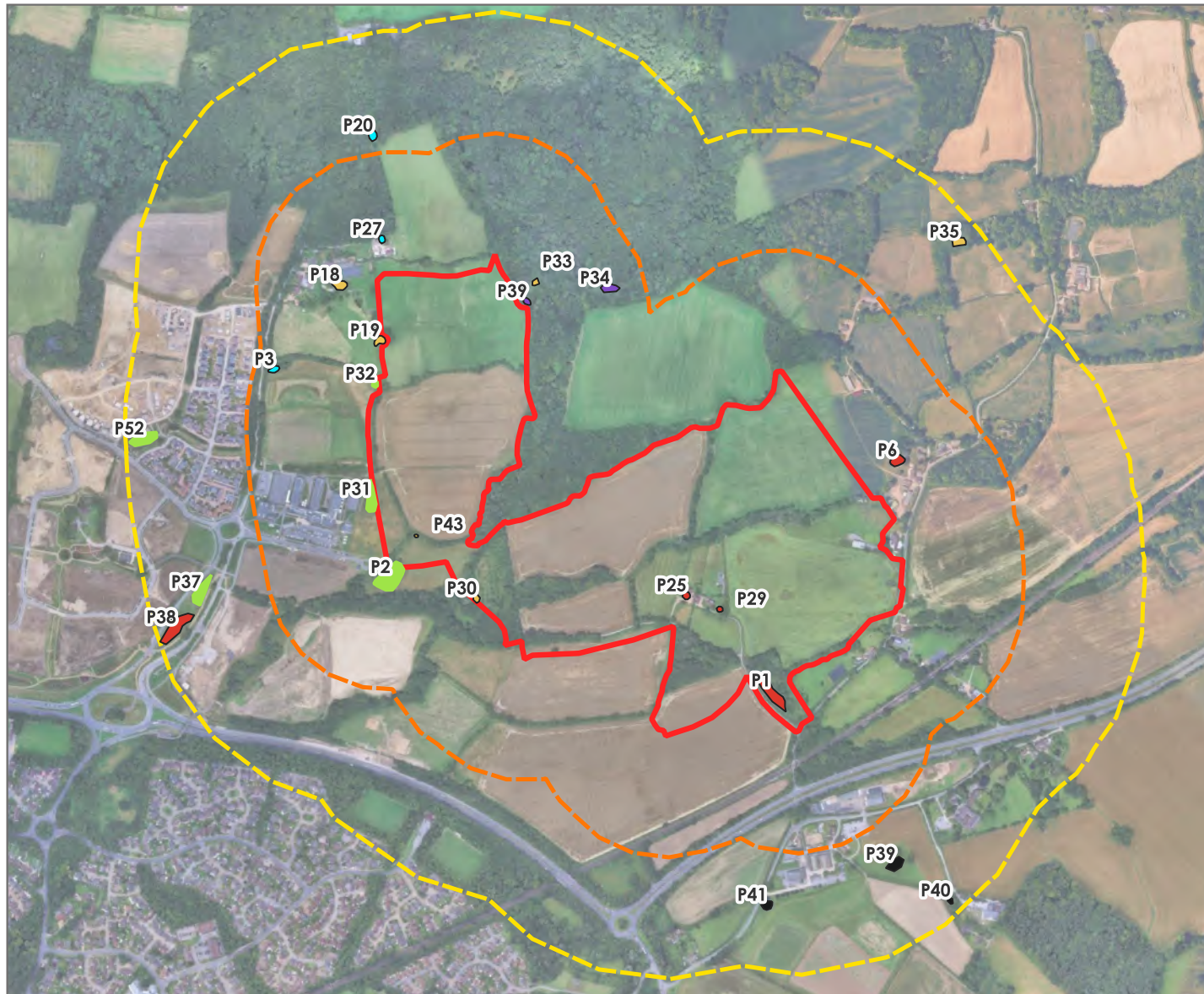
Appendix A

HSI and eDNA survey results

Habitat Suitability Factors:		Map location		Pond area in m²		Permanence / Desiccation		Water quality		Percentage perimeter shade to at least 1m from shore		Waterfowl impact (excluding moorhen)		Fish presence		Number of ponds within 1km not separated by barriers		Terrestrial habitat		Percentage of pond surface occupied by aquatic vegetation (March – May)		Product	HSI Score	HSI Suitability	eDNA Results
		Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value	Category	SI Value				
Pond Number	P1	Zone A	1	1600m2	0.865	Sometimes Dries	0.5	Good	1	0-60%	1	Absent	1	Absent	1	>12	1	Good	1	26-30%	0.6	0.2595	0.873803412	Excellent	Negative
	P2	Zone A	1	2000m2	0.8	Dries Annually	0.1	Poor	0.33	0-60%	1	Major	0.01	Absent	1	>12	1	Moderate	0.67	<1%	0.3	0.000053064	0.373662916	Poor	Positive
	P3		FALSE		FALSE		FALSE		FALSE		FALSE		0		0		0.1		0		0	FALSE	FALSE	#N/A	No access
	P6	Zone A	1	500-700m2	1	Never Dries	0.9	Moderate	0.67	0-60%	1	Minor	0.67	Possible	0.67	>12	1	Good	1	11-15%	0.45	0.121809015	0.810154676	Excellent	Negative
	P18	Zone A	1	450m2	0.9	Dries Annually	0.1	Poor	0.33	66-70%	0.8	Absent	1	Absent	1	>12	1	Good	1	96-100%	0.8	0.019008	0.672811866	Average	Dry not surveyed
	P19	Zone A	1	300m2	0.6	Dries Annually	0.1	Poor	0.33	96-100%	0.2	Minor	0.67	Absent	1	>12	1	Good	1	96-100%	0.8	0.00212256	0.54036349	Below Average	Dry not surveyed
	P20		FALSE		FALSE		FALSE		FALSE		FALSE		0		0		0.1		0		0	FALSE	FALSE	#N/A	No access
	P25	Zone A	1	200m2	0.4	Never Dries	0.9	Good	1	0-60%	1	Absent	1	Major	0.01	>12	1	Moderate	0.67	<1%	0.3	0.0007236	0.485232471	Poor	Negative
	P27		FALSE		FALSE		FALSE		FALSE		FALSE		0		0		0.1		0		0	FALSE	FALSE	#N/A	No access
	P29	Zone A	1	50-100m2	0.1	Dries Annually	0.1	Poor	0.33	0-60%	1	Major	0.01	Absent	1	>12	1	Moderate	0.67	<1%	0.3	0.1	0.303508599	Poor	Negative
	P30		FALSE	150m2	0.3		FALSE		FALSE		FALSE		0		0		0.1		0		0	0	0	Poor	Dry to surveyed
	P31	Zone A	1	500-700m2	1	Never Dries	0.9	Good	1	0-60%	1	Minor	0.67	Absent	1	>12	1	Good	1	1-5%	0.35	0.21105	0.855930566	Excellent	Positive
	P32	Zone A	1	100m2	0.2	Dries Annually	0.1	Good	1	0-60%	1	Minor	0.67	Minor	0.33	>12	1	Good	1	56-60%	0.9	0.0039798	0.575421553	Below Average	Positive
	P33	Zone A	1	150m2	0.3	Dries Annually	0.1	Poor	0.33	86-90%	0.4	Absent	1	Absent	1	>12	1	Good	1	96-100%	0.8	0.003168	0.562443002	Below Average	Dry not surveyed
	P34	Zone A	1	500-700m2	1	Dries Annually	0.1	Bad	0.01	96-100%	0.2	Minor	0.67	Absent	1	>12	1	Good	1	96-100%	0.8	0.0001072	0.400884697	Poor	Indeterminate
	P35	Zone A	1	400m2	0.8	Dries Annually	0.1	Poor	0.33	91-95%	0.3	Absent	1	Absent	1	>12	1	Good	1	<1%	0.3	0.002376	0.002376	Poor	Dry not surveyed
	P36	Zone A	1	150m2	0.3	Never Dries	0.9	Poor	0.33	0-60%	1	Minor	0.67	Possible	0.67	>12	1	Good	1	36-40%	0.7	0.027997893	0.699378915	Average	Positive
	P37	Zone A	1	800m2	0.985	Rarely Dries	1	Moderate	0.67	0-60%	1	Major	0.01	Minor	0.33	>12	1	Good	1	26-30%	0.6	0.001306701	0.514775208	Below Average	Positive
	P38	Zone A	1	1600m2	0.865	Rarely Dries	1	Moderate	0.67	0-60%	1	Minor	0.67	Minor	0.33	>12	1	Good	1	6-10%	0.4	0.051255402	0.742974596	Good	Negative
	P39	Zone A	1	150m2	0.3	Dries Annually	0.1	Good	1	96-100%	0.2	Absent	1	Absent	1	>12	1	Good	1	<1%	0.3	0.0018	0.53152935	Below Average	Indeterminate
	P40		FALSE		FALSE		FALSE		FALSE		FALSE		0		0		0.1		0		0	FALSE	FALSE	#N/A	Scoped out
	P41		FALSE		FALSE		FALSE		FALSE		FALSE		0		0		0.1		0		0	FALSE	FALSE	#N/A	Scoped out
	P42		FALSE		FALSE		FALSE		FALSE		FALSE		0		0		0.1		0		0	FALSE	FALSE	#N/A	Scoped out
	P43	Zone A	1	<50m2	0.05	Dries Annually	0.1	Poor	0.33	0-60%	1	Absent	1	Absent	1	>12	1	Good	1	<1%	0.3	0.000495	0.467154482	Poor	Dry not surveyed

Appendix B

GCN eDNA Results Plan



- Site boundary
- 250m buffer
- 500m buffer
- Positive eDNA result
- Negative eDNA result
- Indeterminate eDNA result
- Dry - not surveyed
- Scoped out
- No access

0 150 300 m



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Project	Land North of Horsham, Mowbray - Phase 2	Date	July 2026	Drawing No.	CSA/7937/135
Drawing Title	GCN eDNA results plan	Scale	1:10,000	Rev	-
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Appendix I

Reptile Survey Report

Reptile Survey Report

August 2026

**Land North of Horsham,
Mowbray – Phase 2**

Prepared by
CSA Environmental

On behalf of
Legal and General
(Strategic Land Horsham) Ltd.

Report No: CSA/7937/13

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/7937/13	-	10/08/2026	WC/PW	CC	



CONTENTS		Page
	Executive Summary	1
1.0	Introduction	2
	Background	2
2.0	Legislation	4
3.0	Methods	5
4.0	Results	7
	Historical Results	7
	Current Records	7
5.0	Summary	8
6.0	References	9

Appendices

Appendix A: Reptile Survey Plan

EXECUTIVE SUMMARY

CSA Environmental undertook reptile surveys in 2026 on behalf of Legal and General (Strategic Land Horsham) Ltd at Land North of Horsham, Mowbray, to support Reserved Matters Applications associated with Phase 2 of the consented mixed-use development. The surveys were undertaken to satisfy ecological survey requirements outlined within Condition 14 of Outline Planning Permission DC/16/1667 (Non-Material Amendment ref: DC/19/0984) and to provide updated information for the preparation of Ecological Mitigation and Management Plans (EMMPs).

A total of 150 artificial refugia were deployed across suitable reptile habitat within the survey area and monitored during four survey visits between May and June 2026. The surveys focused on establishing the presence or likely absence of widespread reptile species and informing future mitigation requirements.

Historical surveys undertaken in 2014 and 2015 recorded small populations of slow worm *Anguis fragilis* and common lizard *Zootoca vivipara* within parts of Phase 2. Subsequent survey work in 2023 did not record any reptiles within the surveyed area.

The 2026 surveys recorded two male slow worms during the fourth survey visit, with no common lizard or grass snake *Natrix Helvetica* recorded. Population assessments using recognised industry methodologies indicate that the Site supports a low population of slow worm and has the potential to support low populations of common lizard and grass snake due to the availability of suitable habitat and historical records from the wider development area.

Although only four survey visits had been completed at the time of reporting due to periods of unsuitable (hot) weather, the survey effort and the findings obtained provide sufficient evidence to conclude that reptiles are present within the Site at low density.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Legal and General (Strategic Land Horsham) Ltd. It sets out the findings of a reptile presence / absence survey at Land North of Horsham, Mowbray (hereafter referred to as 'the Site'), in regard to Reserved Matter Applications (RMAs) pertaining to Phase 2 of a mixed-use development

Background

- 1.2 Strategic development at Mowbray is subject to an outline planning permission (DC/16/1667) and will provide up to 2,750 dwellings alongside retail and business areas, leisure and education facilities, Public Open Space, and associated landscaping and infrastructure. Development is being delivered in three phases, with each phase being subject to Reserved Matters Applications for each sub-phase of development.
- 1.3 This report is provided to inform Horsham District Council of update survey work in relation to reptiles at Phase 2 and to inform and support Ecological Mitigation and Management Plans (EMMPs) specific to Phase 2 as per conditions 14 and 49 of Outline Planning Permission DC/16/1677 (Non-Material Amendment ref: DC/19/0984):

Condition 14

- 1.4 **Pre-Commencement Condition:** *Prior to the submission of an Ecological Mitigation and Management Plan (EMMP) with an application seeking approval of Reserved Matters pursuant to the planning permission, up to date ecological surveys shall be carried out to provide up to date information regarding the potential of the area covered by the Reserved Matters application to support protected and notable species and inform the future design of measures that will be required to avoid, mitigate or compensate for impacts and to inform the Ecological Mitigation and Management Plan for that Reserved Matters application. These surveys shall be completed by suitably qualified ecologist(s), recognised by a relevant professional body such as CIEEM, and in accordance with current survey guidelines. The scope of these surveys shall be agreed in advance with the LPA, and may include advanced surveys for rare bat species. The surveys shall be completed in accordance with the agreed scope prior to the submission of the EMMP for that Reserved Matters area and the results and associated reports appended to the Ecological Mitigation and Management Plan for the Reserved Matters area.*

Condition 49

- 1.5 **Regulatory Condition:** Any application seeking approval of Reserved Matters pursuant to the planning permission shall be accompanied by a detailed Ecological Mitigation and Management Plan (EMMP), which

shall be in accordance with the approved Phase-wide EMMP, shall incorporate any additional or amended recommendations arising from the up to date Ecological Surveys relevant to that Reserved Matters Area and shall include details of protection of retained habitat and avoidance measures with regards to protected and notable species. The EMMP shall include details of pre-works, during works and post-works measures including any on-going management and maintenance necessary to ensure the effectiveness of the mitigation and enhancement measures. Any application seeking approval of Reserved Matters which includes a Proposed Primary Road, as shown on the Parameter Plan: Movement and Access reference 2153A-103P received by the LPA on 6th March 2017 shall be accompanied by detailed design proposals for those road(s), including all ecological mitigation, such as dark corridors, underpasses and bridges and drawings including cross sections and details of associated fencing and landscaping to guide wildlife. The development shall thereafter be carried out in accordance with the approved details.

- 1.6 Previous reptile surveys have been carried out in 2014 and 2015 by Bioscan (UK) Ltd in relation to the Site including all three phases. Historic survey results have been reviewed and are summarised herein.

2.0 LEGISLATION

- 2.1 All native British reptile species are listed within Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded protection against killing and injury under parts of sub-section 9(1) of the Act. In addition, all native British reptile species are adopted as Species of Principal Importance for the Conservation of Biodiversity in England in respect of Section 41 of the Natural Environment and Rural Communities Act 2006.

3.0 METHODS

- 3.1 A total of 150 reptile refugia, comprising rectangles of roofing felt measuring 1.0 x 0.5m, were installed in areas of suitable habitat present at the Site on 27 April 2026 by Hannah Baker and Alice Motola ACIEEM. The location of these refugia is shown on the Reptile Survey Plan (CSA/7937/100) provided in Appendix A.
- 3.2 Following an initial 2-week 'bedding-in' period for refugia, surveys were carried out on four occasions during favourable weather conditions (e.g. intermittent or hazy sunshine, not too windy, sunny spells following wet or cloudy weather) between May and September 2026 (final survey still TBC). The surveys were led by Hannah Baker and Alice Motola ACIEEM. Each survey visit comprised a slow walk of the Site to visually and physically check refugia for the presence of reptiles. On each occasion a visual search was also carried out within areas of suitable habitat whilst walking between refugia locations.
- 3.3 The primary aim of the reptile survey was to establish the presence or likely absence of widespread reptile species within the survey area, rather than to estimate abundance or population size. To this end, seven survey checks, an effort generally considered 'reasonable effort' in establishing the presence or likely absence of reptiles at a Site, were carried out.
- 3.4 Given the inherent problems in detecting reptiles, greater survey effort and/or identification or marking of individuals would be required to establish the actual or relative abundance of reptile populations. However, as reptiles are confirmed to be present and mitigation action is required, an approximation of population size is useful in guiding reptile mitigation strategies and has therefore been reported below.
- 3.5 There are several published methods for broadly 'categorising' reptile population sizes in the UK, with the most commonly employed by ecological consultants being HGBI (1998), Froglife (1999) and/or Natural England (2011 [now rescinded]). These three approaches vary in their application, assumptions and limitations, and therefore outputs have been reported for all three methods for comparison below.

Limitations

- 3.6 The three metrics referenced below, HGBI (1998), Froglife (1999) and/or Natural England (2011; now rescinded), rely on varying proxies to calculate/estimate reptile populations. The HGBI categories are based on adult population densities, as opposed to peak counts. Moreover, the categorisation by HGBI is intended to inform capture effort for translocation exercises and, therefore, is not directly applicable to providing a population size class estimate, though it is widely applied within the industry for this purpose.

- 3.7 The Froglife method is based on peak adult counts where surveys have used refugia densities of 10 per hectare. Surveys carried out on behalf of CSA used densities of c. 61 per ha of suitable reptile habitat to maximise site coverage and opportunities to confirm the presence or likely absence of reptiles. Therefore, to enable comparison with the Froglife categories, peak counts have been divided by a factor of 6.1 so that they are proportionate to the Froglife survey effort of 10 refugia per ha.
- 3.8 Finally, the Natural England methods provide population class size estimates based upon a refugia density of 100 per ha and, in addition, goes on to consider habitat suitability. As with the Froglife method, survey results have been scaled to be proportionate to a survey effort of 100 refugia per ha. The consideration of peak counts and habitat suitability may be the most ecologically sound, or holistic, of the three indices. However, in light of the guidance having been rescinded, this metric cannot be exclusively relied upon.
- 3.9 Aside from the below, there were no specific limitations to the reptile surveys that have taken place, which were conducted at an optimum time of year and in good conditions.
- 3.10 Only four surveys have been able to take place as of the time of reporting due to the extreme hot weather in June and July. The remaining surveys are expected to follow at an appropriate time under appropriate conditions.

4.0 RESULTS

Historical Results

- 4.1 Three reptile surveys have occurred within Phase 2, during 2014, 2015 and 2023. Surveys completed in 2014 and 2015 identified small populations of slow worm and common lizard. These were found to the north of Bush Lane, and this area is covered by the works associated with the Bailey Road Extension where a translocation exercise has been underway, with works now underway as of the time of writing this report. No reptiles were found in the follow-up survey during 2023 conducted by Derek Finnie Associates on Site.

Current Records

- 4.2 As of mid-June 2026 (when four of the proposed seven surveys had been completed), only two reptiles have been recorded during surveys. Both were male slow-worm, encountered on transect D on the fourth survey. No other reptiles have been noted during any of the surveys. Full survey results are provided in Table 1 below.
- 4.3 It should be noted that although the Site is c. 53ha, suitable reptile habitat, comprising grassland, scrub and field margins, accounts for c. 2.46ha within the Site. Within this area, 150 artificial refugia were used to provide a survey refugia density of 61 refugia per ha.

Table 1. Reptile population size category estimates

Method	Species		
	Slow worm	Common lizard	Grass snake
Peak count between May and June (2026)	2	0	0
HGBI (1998)	Low	Low	Low
Froglife (1999)	Low	Low	Low
Natural England (2011)*	Small	Small	Small

*Rescinded

- 4.4 It is acknowledged that the above metrics have their limitations. However, in consideration of this information, balanced against an ecological understanding of the Site, previous survey results, and current survey findings, it is estimated that the Site currently likely supports at most a 'low' population of slow worm and common lizard, with the potential for low number of grass snake to also be present.

5.0 SUMMARY

- 5.1 The 2026 reptile surveys undertaken at Land North of Horsham, Mowbray Phase 2 recorded only two male slow worms, with no common lizard or grass snake identified during four survey visits between May and June 2026. Historical surveys in 2014 and 2015 recorded small populations of slow worm and common lizard within the wider Phase 2 area, although a subsequent survey in 2023 did not record any reptiles.
- 5.2 Taking account of current survey results, historical records, habitat availability and recognised population assessment methodologies, the Site is considered to support a low population of slow worm and may continue to support low numbers of common lizard and potentially grass snake within suitable habitats.

6.0 REFERENCES

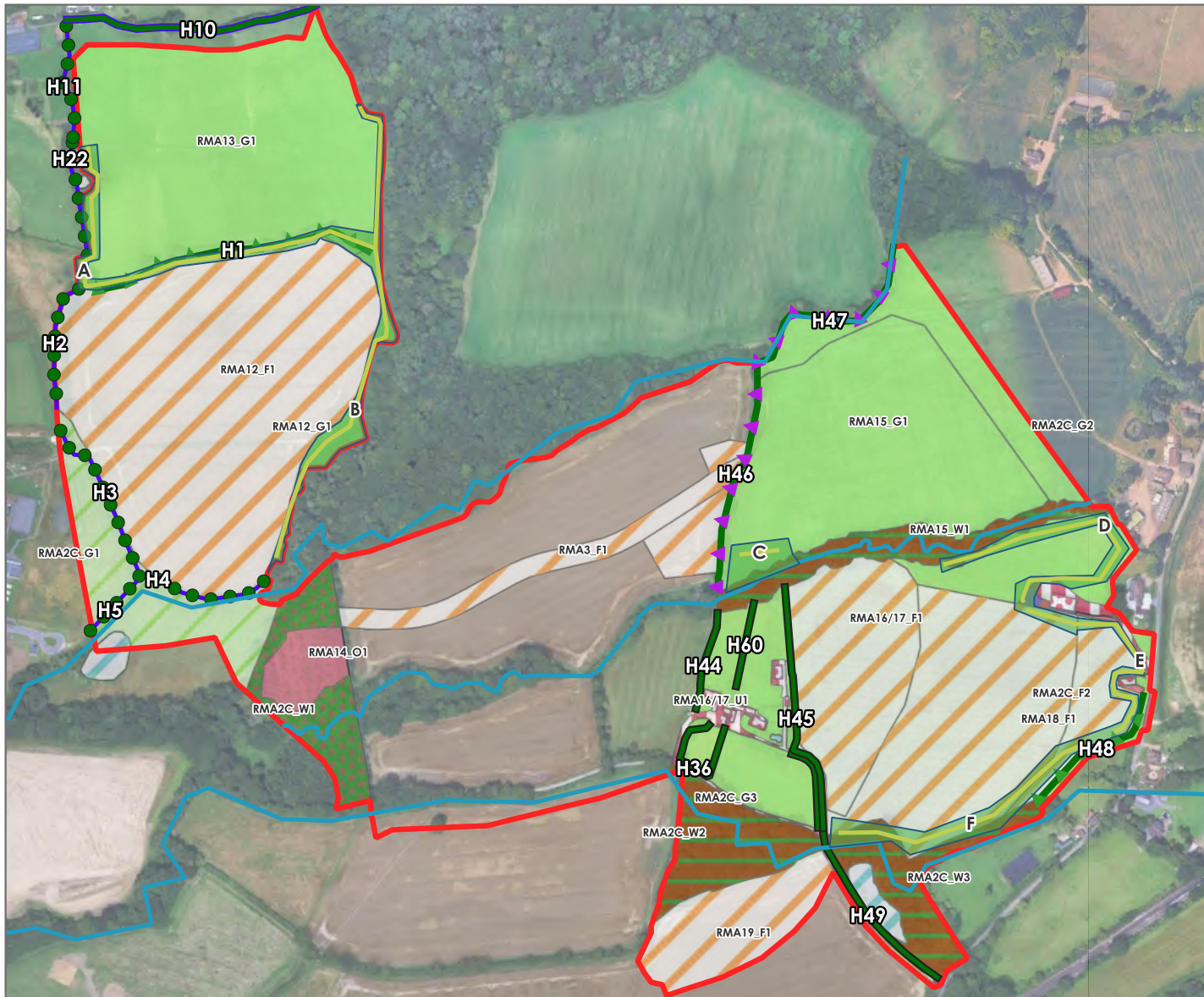
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Appendix A

Reptile Survey Plan



- Site boundary
- Suitable reptile habitat
- Reptile transects

Reptile Transect	Number of Mats
A	25
B	35
C	5
D	30
E	25
F	30



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Project	Land North of Horsham, Mowbray - Phase 2	Date	August 2026	Drawing No.	CSA/7937/100
Drawing Title	Reptile Survey Plan	Scale	Refer to scale	Rev	-
Client	Legal and General (Strategic Land Horsham) Ltd.	Drawn	WC	Checked	TS



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Appendix J

Invertebrate Survey Report

Land at Mowbray, Horsham, West Sussex (TQ198337).

Invertebrate Scoping Survey 13th June 2026

Written by: Scotty Dodd MSc MCIEEM MRES

11 Knowles Meadow, Hill Brow, Liss, Hampshire. GU33 7QW

July 2026

Quality Control

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the *Code of Professional Conduct issued by the Chartered Institute of Ecology and Environmental Management (CIEEM)*. We confirm that the opinions expressed are our true and professional bona fide opinions.

		Date
Survey Ecologist	Scotty Dodd MSc MCIEEM MRES	Survey date: 13/06/2026
Report Author	Scotty Dodd MSc MCIEEM MRES	Submission date:03/07/2026

The contents of this report were correct at the time of the site visit. The report is provided for the sole use of the named client and is confidential.

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Contents

Quality Control	1
Summary	3
1. Introduction	4
2. Methods	4
3. Results	5
4. Discussion and Recommendations	7
Species Recorded	7
Pantheon Output	9
Conclusions & Recommendations.....	9
5. References & Bibliography.....	10
6. Appendix 1: Species List	0

Summary

A single scoping visit was made to an agricultural and pasture land parcel at Mowbray, Horsham, West Sussex (TQ198337) by Invertebrate Ecologist Scotty Dodd MSc MCIEEM MRES on behalf of CSA Environmental. The remit for the visit was to assess the potential for important invertebrate assemblages and notable and S41 invertebrates.

Survey date/s: 13th June 2026

Species total: 161 invertebrate species identified.

European Protected Species or Wildlife & Countryside Act species:

None

UKBAP / SPI (NERC S41) species:

None

Notable species – 5 species

Order	Family	Species	Common Name	Current Conservation Status	SAT
Araneae	Lycosidae	<i>Pardosa tenuipes</i>	a spider	LC; NS	
Araneae	Salticidae	<i>Ballus chalybeius</i>	a spider	LC; NS	
Araneae	Salticidae	<i>Marpissa muscosa</i>	a spider	LC; NS	
Coleoptera	Melandryidae	<i>Abdera biflexuosa</i>	a beetle	LC; NS	A212
Coleoptera	Curculionidae	<i>Polydrusus formosus</i>	a weevil	[Na]	

Pantheon analysis:

No Specific Assemblage Types were found to be in Favourable condition by SSSI standards.

Conclusions & Recommendations:

The site is predominately large scale sown grass leys with some smaller compartments supporting a more diverse sward, there are also several small wooded areas, networks of hedgerows and Channells Brook along the southern boundary. The site supports a reasonable diversity of predominately widespread and common invertebrate species associated with hedgerows and trees and the less homogenous flora found at the field margins, small meadows, hedgerow bases and woodland edge. No habitats or resources were noted that had the potential to support important invertebrate assemblages. Ideally a proportion of the existing woodland, hedgerows and trees will be retained.

Further invertebrate surveys are not recommended.

1. Introduction

- 1.1 A single scoping visit was made to an agricultural and pasture land parcel at Mowbray, Horsham, West Sussex (TQ198337) by Invertebrate Ecologist Scotty Dodd MSc MCIEEM MRES on behalf of CSA Environmental. The remit for the visit was to assess the potential for important invertebrate assemblages and notable and S41 invertebrates.
- 1.2 A single scoping visit was made to the site on the 13th June 2026.
- 1.3 This report provides the scoping survey's findings along with any required recommendations for further survey, mitigation options and further ecological enhancements. A list of invertebrate species observed during the visit is appended.

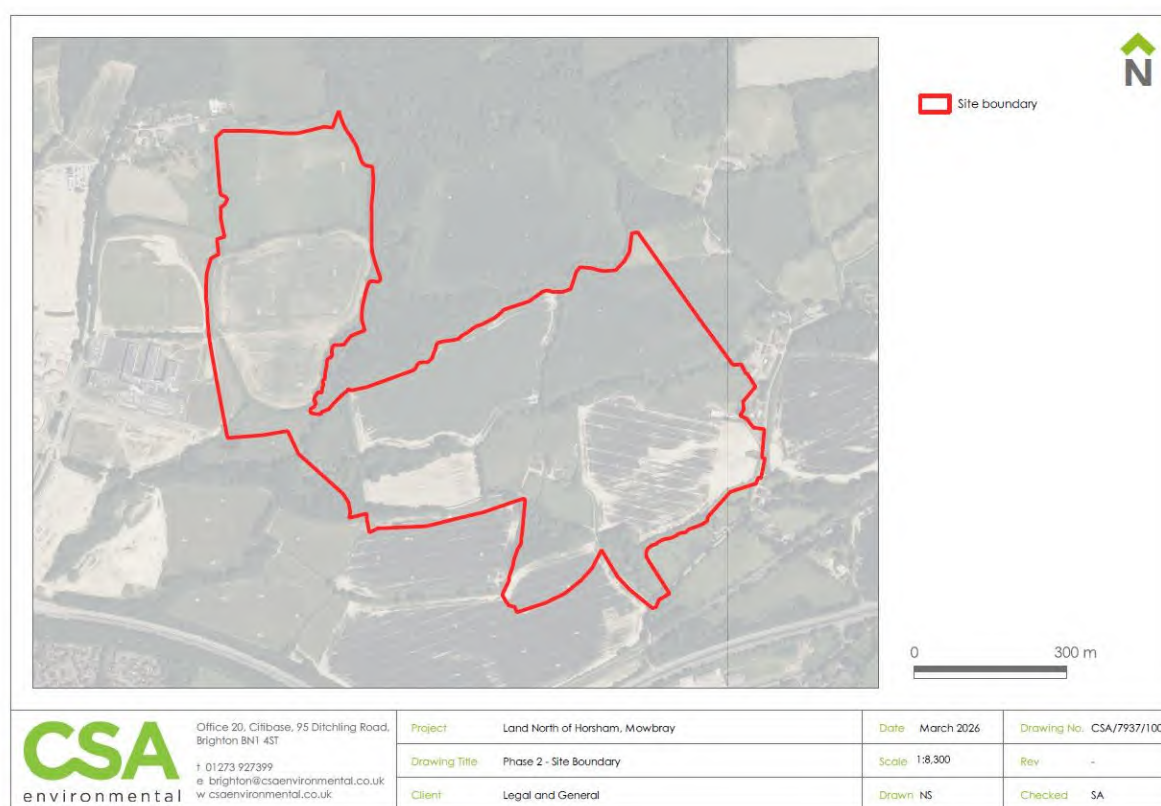


Figure 1: Site red line boundary. © CSA Environmental.

2. Methods

- 2.1 The site was visited on the 13th June 2026 by Invertebrate Ecologist Scotty Dodd MSc MCIEEM MRES.
- 2.2 Weather conditions were optimal being mostly bright and sunny with temperatures in the mid-twenties. Approximately four hours were spent surveying the site.

-
- 2.3 A general walkover survey of the site was undertaken to visually identify features and habitats with the potential to support scarce or protected invertebrates. Features of interest were sampled for invertebrates using heavy duty calico sweep net, beating tray, suction sampler, butterfly net for spot-netting at resources of interest and hand searching targeted food-plants / features. Visual observations of mobile insects were also noted.
- 2.4 CSA Environmental advised that previously invertebrate surveys of the site had been undertaken but the report was not available. This report (no date supplied) suggested that the site was of Parish Importance for invertebrates and cites several SPI species, e.g. White Admiral *Limenitis Camilla*, Brown Hairstreak *Thecla betulae*, Dingy Skipper *Erynnis tages* and Stag Beetle *Lucanus cervus*. It is not clear from the information available if these species were recorded at the site or are just known to occur within the data-search area.
- 2.5 The species list is analysed using Pantheon. Pantheon is a database tool developed by Natural England and the Centre for Ecology & Hydrology to analyse invertebrate sample data and assess assemblage data for favourable versus unfavourable condition by SSSI standards. Hence, if an assemblage or suite of assemblages are found to be favourable this would indicate that the site is likely to be of significant importance for invertebrates. Further information on Pantheon is available here: <http://www.brc.ac.uk/pantheon/about/pantheon>

3. Results

- 3.1 No invertebrate species protected under Schedule 5 (Section 9) of the Wildlife & Countryside Act (as amended) 1981 were recorded during the scoping survey visit and there is very limited potential for any such species to be present at the site.
- 3.2 There are currently 943 SPI (covering all taxonomic groups) included on the S41 list. The S41 list is intended to provide guidance to decision-makers, e.g. those representing public bodies and local/regional authorities, in implementing their duty under Section 40 of the NERC Act to ‘...have regard to the conservation of biodiversity in England when carrying out their normal functions’. No UK Biodiversity Action Plan (UK BAP) priority species and Species of Principle Importance (SPI) covered under The Natural Environment and Rural Communities Act 2006 Section 41 (NERC S41) were recorded during a single visit in June. Several SPI species may have previously been recorded at the site or are known to occur in the general area.
- 3.3 The scoping visit recorded five species with a conservation designation. These species are considered to be Nationally Scarce (NS). NS species without parenthesis have been recently reviewed using IUCN criteria. Those species within parenthesis (i.e. Na & Nb species) are yet to be reviewed using the new criteria and the NS status may be downgraded; this is qualified in the discussion section for each species:

Table 1: Summary of species with a conservation designation recorded during the survey.

Order	Family	Species	Common Name	Current Conservation Status	SAT
Araneae	Lycosidae	<i>Pardosa tenuipes</i>	a spider	LC; NS	
Araneae	Salticidae	<i>Ballus chalybeius</i>	a spider	LC; NS	
Araneae	Salticidae	<i>Marpissa muscosa</i>	a spider	LC; NS	
Coleoptera	Melandryidae	<i>Abdera biflexuosa</i>	a beetle	LC; NS	A212
Coleoptera	Curculionidae	<i>Polydrusus formosus</i>	a weevil	[Na]	

3.4 A total of 161 invertebrate species were recorded during the survey. This is a reasonably high number of species for a single visit in June to a site with limited resources for invertebrates.

3.5 A full list of invertebrates recorded is appended.

3.6 Pantheon analysis: A small number (n=21) of largely common and widespread species of invertebrates were found to be directly associated with the Specific Assemblage Types (SATs) generated. The results returned for all detected SATs is Unfavourable condition, by SSSI standards. Pantheon analysis table below:

Table 2: Pantheon analysis showing Specific Assemblage Types (SATs) detected, number of species (No.Sp.) recorded that are assigned to the SAT and percentage representation of all species assigned to the SAT (% Rep.).

Broad biotope	Habitat	SAT	No. of species	% representation	SQI	SAT Code	Reported condition
tree-associated	decaying wood	bark & sapwood decay	9	2	133	A212	Unfavourable (9 species, 19 required)
open habitats		rich flower resource	4	2	100	F002	Unfavourable (4 species, 15 required)
tree-associated	decaying wood	heartwood decay	2	1	100	A211	Unfavourable (2 species, 6 required)
open habitats	short sward & bare ground	open short sward	2	1	100	F112	Unfavourable (2 species, 13 required)
tree-associated	decaying wood	fungal fruiting bodies	1	1		A213	Unfavourable (1 species, 7 required)

Broad biotope	Habitat	SAT	No. of species	% representation	SQL	SAT Code	Reported condition
open habitats		scrub-heath & moorland	1	<1	100	F003	Unfavourable (1 species, 9 required)
wetland	running water	slow-flowing rivers	1	4	100	W125	Unfavourable (1 species, 4 required)
open habitats		scrub edge	1	<1	100	F001	Unfavourable (1 species, 11 required)

Species list overview			
Sample size: 160	Number analysed: 136	Not analysed: 24	% return: 85
Taxonomic output			
Species group	Number analysed	% of total analysed	% of whole sample
insect - beetle (Coleoptera)	44	32%	27%
insect - true bug (Hemiptera)	37	27%	23%
spider (Araneae)	22	16%	13%
insect - true fly (Diptera)	14	10%	8%
insect - hymenopteran	8	5%	5%
insect - moth	3	2%	1%
insect - butterfly	3	2%	1%
insect - orthopteran	1	0%	0%
insect - scorpion fly (Mecoptera)	1	0%	0%
crustacean	1	0%	0%
insect - dragonfly (Odonata)	1	0%	0%
harvestman (Opiliones)	1	0%	0%

Figure 2: Pantheon taxonomic output.

4. Discussion and Recommendations

Species Recorded

- 4.1 A total of 161 invertebrate species were recorded during the survey. This is a reasonably high number of species for a single visit in June to a site with limited resources for invertebrates. As the seasons progress further invertebrate species are highly likely to be present at the site. However, the habitats and resources present do not suggest that any assemblages of note are likely to be detected.
- 4.2 Five species recorded have a conservation designation. All four Nationally Scarce species are considered to be locally common in the region. The Notable B weevil *Polydrusus formosus* is a very common species in the

south-east and is likely to be downgraded in the forthcoming review of the group.

4.3 The following species with a conservation designation were recorded:

Table 3: Species with conservation designations recorded during the survey with notes on contextual rarity within the region.

Order	Family	Species	Common Name	Current Conservation Status	SAT	Comment
Araneae	Lycosidae	<i>Pardosa tenuipes</i>	a spider	LC; NS		Mainly southern England and Wales. Occurs in a variety of sparsely vegetated habitats but typically occurs in moist and marshy places. Generally very local.
Araneae	Salticidae	<i>Ballus chalybeius</i>	a spider	LC; NS		Widespread in south-eastern England, but otherwise has a scattered distribution across southern England and Wales, being recorded as far north as Leicestershire and North Wales, with old records for Durham. An arboreal species associated with woodland and scrub habitats.
Araneae	Salticidae	<i>Marpissa muscosa</i>	a spider	LC; NS		In the UK the species is widespread in south-eastern England, with a few scattered records further west and north. The spider occurs mostly under loose bark on trees, on paling fences, posts, hop poles, etc, but in south-east Dorset it is common under flat stones on the tops of dry-stone walls
Coleoptera	Melandryidae	<i>Abdera biflexuosa</i>	a beetle	LC; NS	A212	Locally common across Southern and Central England, becoming more local and scarce in the West Country, Wales and further north. Not recorded in Scotland. Saproxyllic in the moribund branch wood of native Quercus species.
Coleoptera	Curculionidae	<i>Polydrusus formosus</i>	a weevil	[Na]		Widespread across southern and central England, where it appears to be increasing dramatically, with occasional coastal records from Wales. An arboreal, polyphagous species whose hosts includes a wide range of broadleaf trees. Likely to be downgraded.

4.4 CSA Environmental advised that previously invertebrate surveys of the site had been undertaken but the report was not available. This report (no date supplied) suggested that the site was of Parish Importance for invertebrates and cites several SPI species, e.g. White Admiral *Limenitis Camilla*, Brown Hairstreak *Thecla betulae*, Dingy Skipper *Erynnis tages* and Stag Beetle *Lucanus cervus*. It is not clear from the information available if these species

were recorded at the site or are just known to occur within the data-search area. There is some potential for all of these species to occur at the site.

Pantheon Output

- 4.5 The Pantheon output indicates that the site is of low quality for invertebrates with low representations of habitat specialists. This corresponds with the surveyors' observations at the site, which was predominately large scale sewn grass leys with some smaller compartments supporting a more diverse sward, there are also several small wooded areas, networks of hedgerows and the shaded Channells Brook along the southern boundary. Despite the presence of wood edge and hedgerows the SAT scrub edge F001 was extremely poorly represented. Overall, the best represented SATs are those tree associated SATs relating to dead and decaying wood with bark & sapwood decay A212 (n=9spp.), heart wood decay A211 (n=2spp.) and, to a lesser extent, fungal fruiting bodies A213 (n=1spp.)
- 4.6 No SATs were found to be in Favourable condition. None of the SATs were found to be close to threshold for assessment and were generally poorly represented due to a lack of specialist species associated with the target resources.

Conclusions & Recommendations

- 4.7 The site is predominately large scale sewn grass leys with some smaller compartments supporting a more diverse sward. The site supports a reasonable diversity of predominately widespread and common invertebrate species associated with hedgerows and trees and the less homogenous flora found at the field margins, small meadows, hedgerow bases and woodland edge. No habitats or resources were noted that had the potential to support important invertebrate assemblages.
- 4.8 Ideally a proportion of the existing woodland, hedgerows and trees will be retained. Hedgerows, scrub and trees were sampled around the field margins and along the lane / brook and yielded a reasonable number of arboreal invertebrates. Ideally existing boundary trees and shrubs will be retained as they provide linear wildlife corridors and specific host resources for a variety of phytophagous and saproxylic invertebrates.
- 4.9 Any existing dead and decaying wood features should be retained where safe to do so. These might include extant log piles, fallen trees, standing dead wood and dying limbs on living trees. During any tree clearance a proportion of any arisings should be retained on site in a variety of situations – ideally with the bark on, so hand-felled rather than using a forestry harvester in some instances. These might include, log piles, brash piles, dead hedges, long lengths of trunk or entire felled trees. Situations might include these features being in sunlight, in shade, on damp ground, on dry ground, elevated above ground etc
- 4.10 Further invertebrate surveys are not recommended.

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<http://www.brc.ac.uk/pantheon/> - Accessed 02/07/2026

6. Appendix 1: Species List

****See separate Excel spreadsheet****

Order	Family	Species	Common Name	SQS	Current Conservation Status	Larval feeding guild	Adult feeding guild	Broad biotope	Habitat	Specific assemblage type (SAT)	Associations	Resources
Araneae	Anyphaenidae	<i>Anyphaena sabina</i>	a spider			predator	predator	tree-associated	arboreal			
Araneae	Araneidae	<i>Araniella cucurbitina sensu stricto</i>	a spider	1		predator	predator					
Araneae	Araneidae	<i>Mangora acalypha</i>	a spider	1	LC	predator	predator	open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> dry
Araneae	Clubionidae	<i>Clubiona brevipes</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage
Araneae	Clubionidae	<i>Clubiona comta</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage
Araneae	Clubionidae	<i>Clubiona pallidula</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage
Araneae	Dictynidae	<i>Brigittea latens</i>	a spider	1	LC	predator	predator	open habitats	tall sward & scrub	F003		base status >> acidic, habitats >> litter & ground layer, soil humidity >> dry
Araneae	Linyphiidae	<i>Agynera rurestris</i>	a spider	1	LC	predator	predator	open habitats	short sward & bare ground			habitats >> litter & ground layer, soil humidity >> dry
Araneae	Linyphiidae	<i>Entetecara acuminata</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage
Araneae	Linyphiidae	<i>Hylyphantes graminicola</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> understorey, conifer or broadleaved >> broadleaved only
Araneae	Linyphiidae	<i>Tenuiphantes tenuis</i>	a spider	1	LC	predator	predator	open habitats	tall sward & scrub			habitats >> exposed chalk, soil humidity >> dry, soil type >> calcareous substrates
Araneae	Lycosidae	<i>Pardosa tenuipes</i>	a spider	4	LC; NS	predator	predator	coastal; wetland	brackish pools & ditches; marshland			brackish dune slacks, drawdown zone: mud/shallow litter
Araneae	Philodromidae	<i>Philodromus cespitum</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, foliage
Araneae	Philodromidae	<i>Philodromus rufus sens. str.</i>	a spider			predator	predator					
Araneae	Salticidae	<i>Ballus chalybeius</i>	a spider	4	LC; NS	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage
Araneae	Salticidae	<i>Marpissa muscosa</i>	a spider	4	LC; NS	predator	predator	tree-associated	arboreal; decaying wood			dead trunks & branches >> trunks & branches, trunk & branches >> bark predator
Araneae	Tetragnathidae	<i>Tetragnatha montana</i>	a spider	1	LC	predator	predator	wetland	acid & sedge peats			wetland vegetation
Araneae	Theridiidae	<i>Asagena phalerata</i>	a spider	1	LC	predator	predator	open habitats	tall sward & scrub		Formicidae	habitats >> litter & ground layer, soil humidity >> dry, soil type >> sand
Araneae	Theridiidae	<i>Enoplognatha ovata sensu stricto</i>	a spider	1		predator	predator					
Araneae	Theridiidae	<i>Paidiscura pallens</i>	a spider	1	LC	predator	predator	tree-associated	arboreal		, Quercus	canopy >> scrub at wood edge/glade, foliage
Araneae	Theridiidae	<i>Theridion varians</i>	a spider	1	LC	predator	predator	tree-associated	arboreal			canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage
Araneae	Thomisidae	<i>Diaea dorsata</i>	a spider	1	LC	predator	predator	tree-associated	arboreal		, Buxus, Quercus, Taxus	canopy, foliage
Araneae	Thomisidae	<i>Misumena vatia</i>	a spider	1	LC	predator	predator	open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> variable humidity
Araneae	Thomisidae	<i>Xysticus cristatus</i>	a spider	1	LC	predator	predator	open habitats				
Coleoptera	Apionidae	<i>Ceratapion carduorum</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Apionidae	<i>Ischnopterapion loti</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub		Lotus	habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Apionidae	<i>Protapion fulvipes</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub		Trifolium	habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Buprestidae	<i>Agrilus laticornis</i>	a beetle	1	LC	xylophagous	does not feed	tree-associated	decaying wood	A212	Saproxylic, Quercus	bark & cambium >> cambial layer, conifer or broadleaved >> broadleaved only, dead trunks & branches >> aerial branches
Coleoptera	Cantharidae	<i>Cantharis flavilabris (=nigra auctt.) black scutellum</i>	a beetle	1		predator	nectivore	open habitats	tall sward & scrub			habitats >> litter & ground layer, habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Cantharidae	<i>Cantharis lateralis</i>	a beetle	1	LC	predator	nectivore	open habitats	tall sward & scrub			habitats >> litter & ground layer, habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Cantharidae	<i>Cantharis rufa</i>	a beetle	1	LC	predator	nectivore	open habitats	tall sward & scrub			habitats >> litter & ground layer, habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Cantharidae	<i>Malthinus balteatus</i>	a beetle	1	LC			tree-associated	decaying wood	A212	Saproxylic	conifer or broadleaved >> broadleaved only, dead trunks & branches >> trunks & branches, sapwood & bark decay >> bark & cambium
Coleoptera	Cantharidae	<i>Malthinus seriepunctatus</i>	a beetle	1	LC			tree-associated	decaying wood	A212	Saproxylic	conifer or broadleaved >> broadleaved only, dead trunks & branches >> trunks & branches, sapwood & bark decay >> bark & cambium

Coleoptera	Cerambycidae	<i>Pseudovadonia livida</i>	a beetle	1	LC	herbivore		open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Cerambycidae	<i>Rutpela maculata</i>	a beetle	1	LC	xylophagous		tree-associated	decaying wood	A212	Saproxylic	conifer or broadleaved, dead trunks & branches >> stumps, flowers (adult), roots & underground wood >> sub decay
Coleoptera	Chrysomelidae	<i>Cassida rubiginosa</i>	a beetle	1	LC	herbivore	herbivore	open habitats	tall sward & scrub		Cirsium	habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Chrysomelidae	<i>Crepidodera aurata</i>	a beetle	1	LC		herbivore	tree-associated	arboreal		Salix	canopy, conifer or broadleaved >> broadleaved only, foliage >> leaves and/or stems, terrestrial aspect >> larvae ground active/pupate in soil
Coleoptera	Chrysomelidae	<i>Crepidodera aurea</i>	a beetle	1	LC		herbivore	tree-associated	arboreal		Populus	canopy, conifer or broadleaved >> broadleaved only, foliage >> leaves and/or stems, terrestrial aspect >> larvae ground active/pupate in soil
Coleoptera	Chrysomelidae	<i>Gastrophysa viridula</i>	a beetle	1	LC	herbivore	herbivore	open habitats	tall sward & scrub		Rumex	habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Chrysomelidae	<i>Phaedon tumidulus</i>	a beetle	1	LC	herbivore	herbivore	open habitats	tall sward & scrub		Apiaceae	habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Chrysomelidae	<i>Psylliodes affinis</i>	a beetle	1	LC	herbivore	herbivore	open habitats	tall sward & scrub		Solanum	habitats >> soil & roots, habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Chrysomelidae	<i>Psylliodes dulcamarae</i>	a beetle	1	LC	herbivore	herbivore	open habitats	tall sward & scrub		Solanum	habitats >> sward/field layer
Coleoptera	Coccinellidae	<i>Adalia decempunctata</i>	10-spot Ladybird	1		predator	predator	tree-associated	arboreal		Aphididae	canopy, foliage
Coleoptera	Coccinellidae	<i>Coccinella septempunctata</i>	7-spot Ladybird	1		predator	predator				Aphididae	
Coleoptera	Coccinellidae	<i>Harmonia axyridis</i>	Harlequin Ladybird			predator	predator				Aphididae	
Coleoptera	Coccinellidae	<i>Propylea quatuordecimpunctata</i>	14-spot Ladybird	1		predator	predator				Aphididae	
Coleoptera	Coccinellidae	<i>Psyllobora vigintiduopunctata</i>	22-spot Ladybird	1		saprophag	saprophag	open habitats	tall sward & scrub			habitats >> litter & ground layer, soil humidity >> variable humidity
Coleoptera	Coccinellidae	<i>Tytthaspis sedecimpunctata</i>	16-spot Ladybird	1		saprophag	saprophag	open habitats	tall sward & scrub			habitats >> litter & ground layer, soil humidity >> variable humidity
Coleoptera	Curculionidae	<i>Anthonomus pedicularius</i>	a weevil	1		herbivore	herbivore	tree-associated	arboreal		Crataegus	canopy >> understorey, conifer or broadleaved >> broadleaved only, foliage >> leaves and/or stems, terrestrial aspect >> pupate in foliage on ground
Coleoptera	Curculionidae	<i>Coeliodes rana</i>	a weevil	1		herbivore	herbivore	tree-associated	arboreal		Quercus	canopy, conifer or broadleaved >> broadleaved only, foliage >> leaves and/or stems, terrestrial aspect >> pupate in foliage on ground
Coleoptera	Curculionidae	<i>Nedus quadrimaculatus</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> soil & roots, habitats >> sward/field layer, soil humidity >> damp
Coleoptera	Curculionidae	<i>Orchestes hortorum</i>	a weevil	1		herbivore	herbivore	tree-associated	arboreal		Quercus	canopy, leaves and/or stems >> leaves (miners), terrestrial aspect >> pupate in foliage on ground
Coleoptera	Curculionidae	<i>Phyllobius pomaceus</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> soil & roots, habitats >> sward/field layer, soil humidity >> damp
Coleoptera	Curculionidae	<i>Phyllobius pyri</i>	a weevil	1		herbivore	herbivore	tree-associated	arboreal		Polyphagous	canopy, conifer or broadleaved >> broadleaved only, foliage >> leaves and/or stems, terrestrial aspect >> larvae ground active/pupate in soil
Coleoptera	Curculionidae	<i>Phyllobius roboretanus</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub		Polyphagous	habitats >> soil & roots, habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Curculionidae	<i>Polydrusus formosus</i>	a weevil	4	[Na]	herbivore	herbivore	tree-associated	arboreal		Polyphagous	canopy, conifer or broadleaved >> broadleaved only, foliage >> leaves and/or stems, terrestrial aspect >> larvae root feeders
Coleoptera	Curculionidae	<i>Tychius picirostris</i>	a weevil	1		herbivore	herbivore	open habitats	tall sward & scrub		Trifolium	habitats >> soil & roots, habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Kateretidae	<i>Brachypterus glaber</i>	a beetle	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Latridiidae	<i>Corticara gibbosa</i>	a beetle									
Coleoptera	Melandryidae	<i>Abdera biflexuosa</i>	a beetle	4	LC; NS	fungivore	fungivore	tree-associated	decaying wood	A212	Saproxylic, Quercus	conifer or broadleaved >> broadleaved only, dead trunks & branches >> aerial branches
Coleoptera	Melyridae	<i>Cordylepherus viridis</i>	a beetle	1	LC	herbivore	nectivore	open habitats	short sward & bare ground	F112		habitats >> sward/field layer, soil humidity >> dry
Coleoptera	Melyridae	<i>Malachius bipustulatus</i>	a beetle	1	LC	predator	nectivore	tree-associated	decaying wood	A212	Saproxylic	conifer or broadleaved >> broadleaved only, dead trunks & branches >> trunks & branches, flowers (adult), sapwood & bark decay >> bark & cambium
Coleoptera	Mycetophagidae	<i>Eulagius filicornis</i>	a beetle		DD (European)	fungivore	fungivore	tree-associated	decaying wood	A213	Saproxylic, Quercus	conifer or broadleaved >> broadleaved only, dead trunks & branches >> freshly dead, fungal fruiting bodies
Coleoptera	Nitidulidae	<i>Cychramus luteus</i>	a beetle	1				open habitats	tall sward & scrub		Fungi	habitats >> fungi fruiting bodies, soil humidity >> variable humidity
Coleoptera	Nitidulidae	<i>Meligethes aeneus</i>	a beetle				nectivore	open habitats				
Coleoptera	Oedemeridae	<i>Oedemera lurida</i>	a beetle	1	LC	predator	nectivore	open habitats	tall sward & scrub			habitats >> sward/field layer
Coleoptera	Oedemeridae	<i>Oedemera nobilis</i>	a beetle	1	LC	herbivore	nectivore	open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> variable humidity
Coleoptera	Ptinidae	<i>Grynobius planus</i>	a beetle	1	LC	xylophagous	does not feed	tree-associated	decaying wood	A211	Saproxylic	conifer or broadleaved >> broadleaved only, dead trunks & branches >> trunks & branches
Coleoptera	Scraptiidae	<i>Anaspis fasciata</i>	a beetle	1	LC	predator	nectivore	tree-associated	decaying wood	A212	Saproxylic	conifer or broadleaved >> broadleaved only, dead trunks & branches >> trunks & branches, flowers (adult)

Coleoptera	Staphylinidae	<i>Tachyporus hypnorum</i>	a beetle	1		predator	predator	open habitats	tall sward & scrub			habitats >> litter & ground layer, soil humidity >> variable humidity
Coleoptera	Throscidae	<i>Trixagus dermestoides</i>	a beetle	1		herbivore	does not feed	open habitats	tall sward & scrub			habitats >> soil & roots, soil humidity >> variable humidity
Dermaptera	Forficulidae	<i>Forficula auricularia</i>	Common Earwig									
Diptera	Agromyzidae	<i>Phytomyza ilicis</i>	a leaf mining fly			herbivore		tree-associated	arboreal		Ilex	
Diptera	Anthomyiidae	<i>Pegomya solennis</i>	a leaf mining fly			herbivore		tree-associated	shaded woodland floor		Rumex	conifer or broadleaved >> broadleaved only, woodland habitat
Diptera	Cecidomyiidae	<i>Dasineura urticae</i>	a gall midge			herbivore					Urtica dioica	
Diptera	Empididae	<i>Empis femorata</i>	a fly	1		predator	predator	open habitats	tall sward & scrub			habitats >> sward/field layer
Diptera	Empididae	<i>Empis tessellata</i>	a fly	1		predator	predator	open habitats	tall sward & scrub			habitats >> sward/field layer
Diptera	Opomyzidae	<i>Opomyza germinationis</i>	a fly	1		herbivore	saprophagous	open habitats	tall sward & scrub		Poaceae	habitats >> soil & roots, habitats >> sward/field layer, soil humidity >> dry
Diptera	Sciomyzidae	<i>Coremacera marginata</i>	a fly	1		parasitoid	saprophagous	open habitats	tall sward & scrub		Cochlicopa, Discus	habitats >> unknown, soil humidity >> dry
Diptera	Stratiomyidae	<i>Pachygaster atra</i>	a fly	1	LC	saprophagous	saprophagous	tree-associated	shaded woodland floor			conifer or broadleaved >> broadleaved only, humidity >> damp, shadiness >> heavy shade, woodland habitat >> woodland litter
Diptera	Syrphidae	<i>Chrysotoxum bicinctum</i>	a hoverfly	1	LC	predator	nectivore	open habitats	tall sward & scrub		Aphididae	habitats >> soil & roots, soil humidity >> dry
Diptera	Syrphidae	<i>Episyrphus balteatus</i>	a hoverfly	1	LC	predator	nectivore	open habitats	tall sward & scrub		Aphididae	habitats >> sward/field layer, soil humidity >> dry
Diptera	Syrphidae	<i>Melanostoma mellinum</i>	a hoverfly	1	LC	predator	nectivore	open habitats	tall sward & scrub			habitats >> litter & ground layer, soil humidity >> damp
Diptera	Syrphidae	<i>Merodon equestris</i>	a hoverfly	1	LC	herbivore	nectivore	open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> damp
Diptera	Syrphidae	<i>Myathropa florea</i>	a hoverfly	1	LC	saprophagous	nectivore	tree-associated	decaying wood	A211	Saproxylic	conifer or broadleaved >> broadleaved only, flowers (adult), roots & underground wood >> sub decay, wet hollows >> inundated rot holes, woodmould >> moist wood moi
Diptera	Syrphidae	<i>Sphaerophoria scripta</i>	a hoverfly	1	LC	predator	nectivore	open habitats	tall sward & scrub		Aphididae	habitats >> sward/field layer, soil humidity >> dry
Diptera	Syrphidae	<i>Syrphus ribesii</i>	a hoverfly	1	LC	predator	nectivore				Aphididae	
Diptera	Syrphidae	<i>Volucella pellucens</i>	a hoverfly	1	LC	predator	nectivore	tree-associated	shaded woodland floor		Vespula	conifer or broadleaved >> broadleaved only, nests >> wasp nests
Diptera	Tachinidae	<i>Gymnocheta viridis</i>	a fly			parasitoid	nectivore	tree-associated			Lepidoptera	
Hemiptera	Anthocoridae	<i>Anthocoris confusus</i>	a true bug	1		predator	predator	tree-associated	arboreal		Acari, Aphididae,	canopy
Hemiptera	Anthocoridae	<i>Anthocoris nemoralis</i>	a true bug	1		predator	predator	tree-associated	arboreal		Acari, Aphididae,	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Anthocoridae	<i>Anthocoris nemorum</i>	a true bug	1		predator	predator				Acari, Aphididae,	
Hemiptera	Anthocoridae	<i>Xylocoris (Xylocoris) cursitans</i>	a true bug	1		predator		tree-associated	decaying wood	A212	Saproxylic	bark & cambium >> beneath tight bark, conifer or broadleaved >> broadleaved only
Hemiptera	Aphrophoridae	<i>Philaenus spumarius</i>	a leafhopper	1		herbivore	herbivore				Polyphagous	
Hemiptera	Cicadellidae	<i>Errastunus ocellaris</i>	a leafhopper	1		herbivore	herbivore	open habitats	tall sward & scrub		Poaceae	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Cicadellidae	<i>Eupteryx aurata</i>	a leafhopper	1		herbivore	herbivore				Polyphagous	
Hemiptera	Cicadellidae	<i>Oncopsis alni</i>	a leafhopper	1		herbivore	herbivore	tree-associated	arboreal		Alnus	canopy, carr/wet woodland, conifer or broadleaved >> broadleaved only
Hemiptera	Cicadellidae	<i>Viridicerus ustulatus</i>	a leafhopper			herbivore	herbivore	tree-associated	arboreal		Populus	
Hemiptera	Cixiidae	<i>Tachyciklus pilosus</i>	a leafhopper	1		herbivore	herbivore				Polyphagous	
Hemiptera	Coreidae	<i>Coreus marginatus</i>	Dock Bug	1	LC	herbivore	herbivore	open habitats	tall sward & scrub		Rumex	habitats >> sward/field layer, soil humidity >> variable humidity
Hemiptera	Lygaeidae	<i>Ischnodemus sabuleti</i>	a true bug	1		herbivore	herbivore	wetland	marshland		Poaceae	wetland vegetation
Hemiptera	Lygaeidae	<i>Kleidocerys resedae</i>	a true bug	1		herbivore	herbivore	tree-associated	arboreal		Betula	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Lygaeidae	<i>Nysius ericae</i>	a true bug	1		herbivore	herbivore	open habitats	short sward & bare ground		Polyphagous	habitats >> unknown, soil humidity >> dry
Hemiptera	Lygaeidae	<i>Scolopostethus thomsoni</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Microphysidae	<i>Loricula elegantula</i>	a true bug	1				tree-associated	arboreal			
Hemiptera	Miridae	<i>Amblytylus nasutus</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub			habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Atractotomus mali</i>	a true bug	1				tree-associated	arboreal		Aphididae, Crataegus, Malus	canopy, conifer or broadleaved >> broadleaved only

Hemiptera	Miridae	<i>Campyloneura virgula</i>	a true bug	1		predator	predator	tree-associated	arboreal		Corylus, Crataegus, Quercus etc	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Miridae	<i>Capsus ater</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Poaceae	habitats >> sward/field layer
Hemiptera	Miridae	<i>Closterotomus norwegicus</i>	a true bug			herbivore		open habitats	tall sward & scrub		Polyphagous	
Hemiptera	Miridae	<i>Deraeocoris (Deraeocoris) flavilinea</i>	a true bug					tree-associated	arboreal		Acer	
Hemiptera	Miridae	<i>Deraeocoris (Deraeocoris) ruber</i>	a true bug	1				open habitats	tall sward & scrub		Polyphagous	habitats >> sward/field layer, soil humidity >> variable humidity
Hemiptera	Miridae	<i>Grypocoris (Lophyromiris) stysi</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Apiaceae, Heracleum sphondylium, Urtica	habitats >> sward/field layer, soil humidity >> damp
Hemiptera	Miridae	<i>Heterotoma planicornis</i>	a true bug									
Hemiptera	Miridae	<i>Leptopterna dolabrata</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Poaceae	habitats >> sward/field layer, soil humidity >> damp
Hemiptera	Miridae	<i>Liocoris tripustulatus</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Lygocoris (Lygocoris) pabulinus</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Notostira elongata</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Poaceae	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Orthocephalus saltator</i>	a true bug	1		herbivore	herbivore	open habitats	short sward & bare ground	F112	Poaceae	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Orthonotus ruffrons</i>	a true bug	1		herbivore	herbivore	tree-associated	shaded woodland floor		Urtica dioica	conifer or broadleaved >> broadleaved only, humidity >> damp, shadiness >> heavy shade, woodland habitat >> undergrowth
Hemiptera	Miridae	<i>Orthotylus (Orthotylus) marginalis</i>	a true bug	1		predator	predator	tree-associated	arboreal		Salix	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Miridae	<i>Phylus (Phylus) coryli</i>	a true bug	1				tree-associated	arboreal		Corylus	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Miridae	<i>Phylus (Phylus) melanocephalus</i>	a true bug					tree-associated	arboreal		Quercus	
Hemiptera	Miridae	<i>Plagiognathus (Plagiognathus) arbustorum</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Urtica dioica	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Plagiognathus (Plagiognathus) chrysanthemi</i>	a true bug	1		herbivore	herbivore	open habitats	short sward & bare ground		Asteraceae	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Stenotus binotatus</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Poaceae	habitats >> sward/field layer, soil humidity >> dry
Hemiptera	Miridae	<i>Sthenarus rotemundi</i>	a true bug	1		herbivore	herbivore	tree-associated	arboreal		Populus	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Nabidae	<i>Himacerus (Aptus) mirmicoides</i>	a true bug	1		predator	predator	open habitats	tall sward & scrub		Acari, Aphididae,	habitats >> litter & ground layer, soil humidity >> dry
Hemiptera	Nabidae	<i>Himacerus (Himacerus) apterus</i>	a true bug	1		predator	predator	tree-associated	arboreal		Acari, Aphididae,	canopy
Hemiptera	Pentatomidae	<i>Pentatoma rufipes</i>	Red-legged Shieldbug	1	LC			tree-associated	arboreal		Quercus	canopy, conifer or broadleaved >> broadleaved only
Hemiptera	Psyllidae	<i>Psylla alni sensu stricto</i>	Alder Psyllid			herbivore	herbivore	tree-associated	arboreal		Alnus	
Hemiptera	Tingidae	<i>Tingis (Tingis) ampliata</i>	a true bug	1		herbivore	herbivore	open habitats	tall sward & scrub		Cirsium arvense	habitats >> sward/field layer, soil humidity >> damp
Hymenoptera	Apidae	<i>Apis mellifera</i>	Honey Bee	1		nectivore	nectivore	open habitats		F002		
Hymenoptera	Apidae	<i>Bombus lucorum sensu lato</i>	White-tailed Bumblebee agg.			nectivore	nectivore					
Hymenoptera	Apidae	<i>Bombus pascuorum</i>	Carder Bumblebee	1		nectivore	nectivore	open habitats	tall sward & scrub	F002		habitats >> sward/field layer, soil humidity >> dry
Hymenoptera	Apidae	<i>Bombus pratorum</i>	Early Bumblebee	1		nectivore	nectivore	open habitats; tree-associated	shaded woodland floor; tall sward & scrub	F002		conifer or broadleaved >> broadleaved only
Hymenoptera	Apidae	<i>Bombus terrestris</i>	Buff-tailed Bumblebee	1		nectivore	nectivore	open habitats	tall sward & scrub	F002		habitats >> sward/field layer, soil humidity >> variable humidity
Hymenoptera	Formicidae	<i>Formica fusca</i>	an ant	1								
Hymenoptera	Formicidae	<i>Lasius niger</i>	an ant	1				open habitats	short sward & bare ground			habitats >> litter & ground layer, soil humidity >> variable humidity

Hymenoptera	Formicidae	<i>Myrmica ruginodis</i>	an ant	1		predator	predator	tree-associated	shaded woodland floor			shadiness >> heavy shade, woodland habitat >> woodland litter
Hymenoptera	Formicidae	<i>Temnothorax nylanderii</i>	an ant	1				tree-associated	decaying wood	A212	Saproxylc	bark & cambium >> beneath tight bark
Hymenoptera	Ichneumonidae	<i>Amblyteles armatorius</i>	a parasitic wasp			parasitoid					Lepidoptera	
Isopoda	Porcellionidae	<i>Porcellio scaber</i>	Rough Woodlouse	1	LC	saprophag	saprophagous					
Lepidoptera	Argyresthiidae	<i>Argyresthia brockeella</i>	a micro moth	1		herbivore	nectivore	tree-associated	arboreal		Alnus, Betula	
Lepidoptera	Lycaenidae	<i>Celastrina argiolus</i>	Holly Blue	1	LC	herbivore	nectivore	tree-associated	arboreal		Hedera helix, Ilex aquifolium	canopy >> scrub at wood edge/glade, conifer or broadleaved >> broadleaved only, foliage, honeydew & sap runs (adult) >> honeydew (adult)
Lepidoptera	Nepticulidae	<i>Stigmella aurella</i>	a micro moth			herbivore	nectivore	open habitats	tall sward & scrub		Rubus	habitats >> sward/field layer
Lepidoptera	Nymphalidae	<i>Maniola jurtina</i>	Meadow Brown	1	LC	herbivore	nectivore	open habitats	tall sward & scrub		Poaceae	habitats >> sward/field layer
Lepidoptera	Nymphalidae	<i>Polygonia c-album</i>	Comma	1	LC	herbivore	nectivore	open habitats	tall sward & scrub		Humulus lupulus, Salix, Ulmus, Urtica dioica	habitats >> sward/field layer
Lepidoptera	Psychidae	<i>Psyche casta</i>	a micro moth			herbivore	does not feed	open habitats	tall sward & scrub		Lichens, Poaceae	habitats >> litter & ground layer
Mecoptera	Panorpidae	<i>Panorpa germanica</i>	a scorpion fly	1		saprophag	saprophag	open habitats	tall sward & scrub			habitats >> sward/field layer
Odonata	Platycnemididae	<i>Platycnemis pennipes</i>	White-legged Damselfly	1	LC	predator	predator	wetland	running water	W125		flow >> slow flow, wetland vegetation
Opiliones	Phalangidae	<i>Rilaena triangularis</i>	a harvestman	1		predator	predator	tree-associated	shaded woodland floor			conifer or broadleaved >> broadleaved only, shadiness >> light shade, woodland habitat >> undergrowth
Orthoptera	Phaneropteridae	<i>Leptophyes punctatissima</i>	Speckled Bush-cricket	1	LC	herbivore	herbivore	open habitats	tall sward & scrub	F001		habitats >> sward/field layer
Psocodea	Ectopsocidae	<i>Ectopsocus petersi</i>	a bark fly			herbivore		tree-associated	arboreal			
Psocodea	Stenopsocidae	<i>Stenopsocus immaculatus sensu stricto</i>	a bark fly			herbivore		tree-associated	arboreal			
Trombidiformes	Eriophyidae	<i>Aceria macrochela</i>	a gall mite			herbivore		tree-associated	arboreal		Acer campestre	
Trombidiformes	Eriophyidae	<i>Cecidophyes rouhollahi</i>	a gall mite			herbivore					Galium	
Trombidiformes	Eriophyidae	<i>Eriophyes leiosoma</i>	a gall mite			herbivore		tree-associated	arboreal		Tilia	
Trombidiformes	Eriophyidae	<i>Eriophyes inangulis</i>	a gall mite			herbivore		tree-associated	arboreal		Alnus	
Trombidiformes	Eriophyidae	<i>Phyllocoptes coryli</i>	a gall mite			herbivore		tree-associated	arboreal		Corylus	



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