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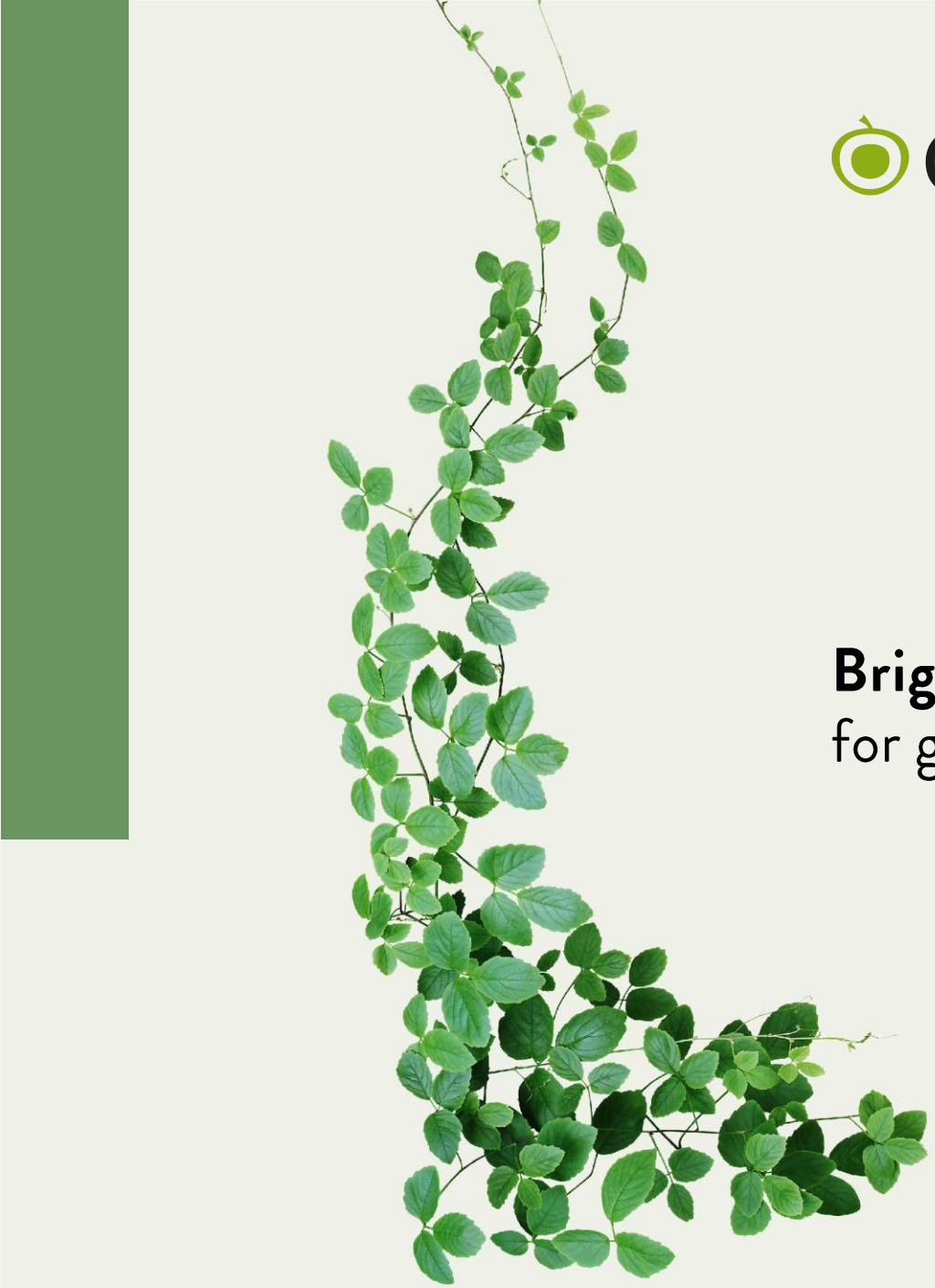

Client: Lovell

Project: Novartis Phase 1&2

Report: Bat Emergence Survey Report

QUALITY ASSURANCE

Issue/Revision:	Draft	Final
Date:	July 2025	August 2025
Comments:		
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File Reference:	552979jc15Jul25DV01_Emergence_Survey_Report.docx	552979jc15Jul25FV01_Emergence_Survey_Report.docx

CONTENTS

Tables

Figures

No table of figures entries found.

Plates

No table of figures entries found.

1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd (Greengage) was commissioned in February 2025 to undertake bat emergence surveys by Lovell of a site known Novartis Phase 1 & 2 in Horsham, West Sussex, to establish the presence/likely absence of summer roosting bats within the building on site, hereafter referred to as 'the former Novartis building'.

This document is a report of these surveys and has been produced to inform a planning application for the site which seeks the retention and change of use of the former Novartis building, and erection of multiple residential units with associated infrastructure.

The initial Preliminary Ecological Appraisal (PEA) was undertaken in November 2024 and a Preliminary Roost Assessment (PRA)[1] was undertaken by Greengage in February 2025 which involved a detailed systematic internal and external inspection of the former Novartis buildings suitability to support bats, following guidance from the Bat Conservation Trust (BCT)[2]. During the PRA, previously un-accessed areas of the former Novartis building was assessed, this includes the facades in the central courtyard area and the internal building. Potential Roosting Features (PRFs) were recorded across the former Novartis building, which include missing mortar under the concrete eaves and holes in brickwork. Due to several access/egress points from smashed windows into the former Novartis building and the number of features, the building was assessed overall with moderate suitability for summer roosting bats. No bats or signs of bats were recorded during the PRA survey.

As such, in accordance with the BCT guidelines[2] two dusk emergence surveys were carried out in May and June 2025.

The emergence surveys confirmed the likely absence of summer roosting bats in the former Novartis building and no mitigation actions in relation to summer roosting bats are required.

Low to moderate levels of bat foraging and commuting activity were observed during the emergence survey. Six bat species were recorded. The levels of activity were mostly associated with the vegetated habitats .

Bat activity surveys are underway at the site, scheduled for completion in October 2025, which will provide further detail of the use of the site by foraging and commuting bats. Detailed recommendations around the compensation and enhancement of the site for foraging and commuting bats will be provided in a separate standalone report.

The former Novartis building was also given high suitability to support hibernating bats, with hibernation surveys identifying the presence of a brown long-eared *Plecotus auritus* and possibly myotis *Myotis sp.* hibernation roost. This report should be read in conjunction with the bat hibernation survey report[3], which details the required further survey and mitigation requirements for the hibernation roost.

Whilst foraging and commuting resources for bats are not formally protected by law, their protection is a material consideration within the planning process. Furthermore, in accordance with planning policy and good practice, measures to enhance the site for summer roosting bats are recommended. These measures include:

- Bat-sensitive lighting regime following guidance from The Institute of Lighting Professionals (ILP) and BCT[4].
- Provision of integrated bat boxes into the fabric of the new buildings, suitable for summer roosting; and
- Wildlife friendly habitat creation to enhance the site as a foraging and commuting resource, including provision of biodiverse living roofs; wildflower meadow vertical planting through use of trellis and climbing plants, shrub and herbaceous planting native tree and hedgerow planting and provision of invertebrate habitat features such as loggeries, and insect hotels.

The development is predicted to have a negligible impact upon summer roosting bats. The enhancements measures will likely result in the development providing long term positive impacts for bats at a local scale.

The data collected during the bat emergence surveys is considered valid for 18 months in accordance Chartered Institute of Ecology and Environmental Management (CIEEM) guidance[5] and an updated survey will be required if the works have not started within this timeframe or should site conditions change significantly during this time.

2.0 INTRODUCTION

Greengage Environmental Ltd (Greengage) was commissioned in February 2025 to undertake bat emergence surveys by Lovell of a site known Novartis Phase 1 & 2 in Horsham, West Sussex, establish the presence/likely absence of summer roosting bats within the building on site, hereafter referred to as 'the former Novartis building'.

This document is a report of this survey and has been produced to inform a planning application for the site which seeks the retention and change of use of the former Novartis building, and erection of multiple residential units with associated infrastructure.

2.1 AIMS OF SURVEY

The survey aimed to:

- Determine the presence/absence of bat species; and
- Determine the intensity of bat activity both spatially and temporally to help estimate bat diversity and relative abundance and measure relative importance of the site for local populations.

By using a collation of existing data for the area to support the survey, it is possible to determine the presence/likely-absence of bats across the site and in the wider area. This information can then be used to inform the extent of any mitigation, compensation or enhancement that may be appropriate.

2.2 SITE DESCRIPTION

The site extends to approximately 2.63 hectares (ha) and is centred on National Grid Reference TQ 17809 31816, OS Co-ordinates 517809, 131816.

The site comprised primarily of developed land; sealed surface, with one large existing building, (the former Novartis building), located adjacent the site's eastern boundary which contains a courtyard with a pond. Two large patches of sparsely vegetated urban land were located towards the centre of the site, both of which were which boarded by large patches of bramble scrub. Multiple areas of other neutral grassland were located throughout the site, positioned around the centre of the site, and in the northeast and southwest corners of the site. Two patches of willow scrub were located adjacent to the western site boundary, with an area of modified grassland located towards the northwest corner. At the entrance to the site along the western boundary, a small patch of other woodland; mixed was present to the south, with bramble scrub to the north bordered by another native hedgerow. Individual trees were located through the site, with the highest density located along the northern boundary of the site.

The site is located in the centre of Horsham and therefore situated in an urban setting, primarily surrounded by residential buildings and gardens. Parsonage Road and Wimblehurst Road run along the northern and western boundaries of the site respectively, with a railway line adjacent the southern boundary, with an additional railway line located in close proximity to the east of the site.

Fragmented priority woodland is present throughout Horsham with the closest situated in Horsham Park approximately 480 metres (m) south of the site boundary. Warnham Local Nature Reserve

(LNR) is located approximately 665m northwest of the site boundary, with a golf course located directly south of the LNR. Large areas of ancient woodland can be found within the wider area, with the closest located in approximately 850m north of the site boundary. Multiple parcels of different priority habitats are located within 2km of the site boundary. These include woodland pasture and parks, good quality semi-improved grassland (non-priority), ancient replacement woodland, and lowland meadows.

2.3 ECOLOGICAL BACKGROUND

Existing ecological survey data from the site, collected between 2015 and 2024, is summarised below.

Preliminary Ecological Appraisal 2015 - 2018

An initial Preliminary Ecological Appraisal (PEA) was undertaken by Hampshire County Council in 2015 and updated in 2018/2019[6]. This survey included the wider Novartis site, incorporating what is now known as Novartis Phase 1&2 (the site) and Novartis Phase 3 (an area of land to the east of the site). The site was found to comprise developed land; sealed surface (hard standing), three buildings (the former Novartis building and two gatehouses), a courtyard, introduced shrub, semi-improved grassland, scrub, bare ground and trees. The site was assessed to have suitability to support roosting bats, commuting and foraging bats, badger *Meles meles*, small mammals, reptiles, common amphibians, breeding birds and invertebrates with the presence of Invasive Non-Native Species (INNS) confirmed. Further surveys were recommended for several of these species including roosting bats.

Bat Surveys 2018

Two dusk (emergence) and one dawn (return) bat surveys were undertaken in 2018 by Hampshire County Council on two buildings formally known as the gatehouses (which have since been demolished) and the former Novartis building. No bats were observed emerging from or returning to roost at any of the buildings and bats were, therefore, confirmed likely absent. During these surveys, low to moderate levels of bat activity were recorded, which mainly pertained to common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*, with sightings and calls also recorded for brown long-eared bat *Plectous auritis*, noctule *Nyctalus noctula* and Myotis species.

Tree climbing surveys were also conducted with suitability identified for four trees on the site, with no bat presence recorded.

Preliminary Ecological Appraisal and Bat Surveys 2022

An updated PEA, reptile surveys and bat surveys were undertaken in 2022[7] by Ecology & Habitat Management Ltd. The site was found to support a building (the former Novartis building), hard standing/bare ground, semi-improved grassland, mixed scattered trees, scrub, tall ruderal and a courtyard.

One dusk emergence survey was conducted in August 2022 at the former Novartis building, no bats were observed emerging, confirming likely absence of roosting bats. During the bat activity surveys, moderate levels of activity were recorded from common pipistrelle, soprano pipistrelle Pipistrellus

pygmaeus, serotine *Eptesicus serotinus* and noctule with majority of the activity recorded in the southwest of the site around the treelines.

Preliminary Ecological Appraisal (PEA) 2024 and Preliminary Roost Assessment (PRA) 2025

PEA 2024

A PEA[8] was undertaken by Greengage on 5th November 2024.

During the PEA the site was found to comprise developed land; sealed surface, a building (the former Novartis building), a pond (non-priority), sparsely vegetated urban land, bramble scrub, other neutral grassland, willow scrub, modified grassland, other woodland; mixed, native hedgerow and individual trees. The habitats had moderate suitability for use by commuting, foraging and summer roosting bats. External Potential Roosting Features (PRFs) were noted on the former Novartis building, which comprised gaps in mortar under the concrete eaves and a gap between the metal parapet and wall. The building was assessed initially with low suitability for roosting bats.

PRA 2025

As a result of the PEA, further survey in the form of a PRA[1] incorporating the internal areas and courtyard of the former Novartis building was recommended. This full internal and external assessment of the former Novartis building took place on 5th February 2025.

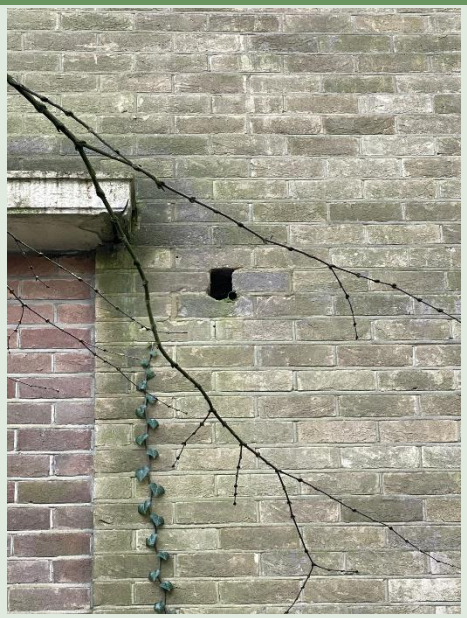
On the externals of the building ingress/egress points included smashed windows and a hole in brickwork. PRFs included holes in brickwork, missing/cracked mortar, holes in concrete eaves and a gap between the metal parapet and concrete wall. The PRFs were all likely to be surface features and lacking any large cavity spaces, therefore, individually they were assessed with low suitability for roosting bats. No signs of bats or bats themselves were noted during the external inspection.

Nevertheless, given the number of features found, the building was upgraded from low to moderate suitability to support summer roosting bats.

Table 2.1 below details the results of the external PRA.

Table 2.1 Results of the External PRA

PRF No.	PRF Description	Photograph	Suitability
Internal Courtyard			

PRF No.	PRF Description	Photograph	Suitability
F001	Hole in brickwork at approximately 4.5m from ground level within the internal courtyard, with a northern aspect. Approximately 10cm tall and 7cm wide. Likely a surface feature with no large cavity space that is exposed an open and therefore thermally unstable.		Low
F002	Missing mortar under the concrete eave on the eastern aspect within the internal courtyard at roof level. Likely a surface feature with no large cavity space that is exposed an		Low

PRF No.	PRF Description	Photograph	Suitability
	open and therefore thermally unstable.		
F003	Missing mortar under the concrete eave with a southern aspect within the internal courtyard at roof level. Likely a surface feature with no large cavity space that is exposed an open and therefore thermally unstable.		Low
External Façade			
F004	Gap in mortar under concrete eave on the southwest corner with a northwest aspect. Feature is likely to be superficial and lack a large cavity space. Is likely to be		Low

PRF No.	PRF Description	Photograph	Suitability
	thermally unstable.		
F005	Crack in brickwork directly below the concrete eave on the southern aspect at roof level. Unlikely to provide a large cavity space and is likely to be exposed and thermally unstable.		Low
F006	Crack in mortar under concrete eave above the 5th window on the south-western aspect at roof level. It is unlikely to provide a large cavity space and is likely to be thermally unstable.		Low
F007	Gap between metal parapet and concrete wall on eastern aspect at roof level, likely to		Low

PRF No.	PRF Description	Photograph	Suitability
	be thermally unstable.		
F008	Hole in concrete eave on the northeastern aspect. Unlikely to provide a large cavity space and is likely to be thermally unstable.		Low

further information on the above can be found in the PRA report[1].

Given the moderate suitability to support summer roosting bats, further survey in accordance with Bat Conservation Trust (BCT) Guidance[2], was recommended, taking the form of two emergence surveys.

Desk Based Assessment

As part of the PEA undertaken by Greengage in November 2024, biological records were analysed to identify any records of bat species in the local area. Records were obtained from Sussex Biodiversity Record Centre (SxBRC).

A total of 167 records for the following bat species were identified within 2km of the site:

- Common pipistrelle;
- Soprano pipistrelle;
- Serotine;
- Natterer's bat *Myotis nattereri*;
- Leisler's *Nyctalus leislerii*;
- Noctule;
- Nathusius' Pipistrelle *Pipistrellus nathusii;*
- Brown long eared;
- Daubenton's *Myotis daubentonii*;
- Unidentified pipistrelle bat species Pipistrellus spp;
- Unidentified bat species Chiroptera spp; and

- Whiskered *Myotis mystacinus*.

Using MAGIC[9], five records of EPS mitigation licences relating to roosting bats were found within 2km of the site. The closest of these pertained to the destruction of a common pipistrelle resting place from 2014-2019 (2014-3464-EPS-MIT), located approximately 800m southeast of the site. Two pertained to the destruction of a common pipistrelle and brown long-eared bat resting place from 2013-2015 (EPSM2013-6687) and 2015-2020 (2015-8735-EPS-MIT) respectively, with the closest located approximately 1km north of the site. One record pertained to the destruction of a brown long-eared bat resting place from 2012-2014 (EPSM2012-4231) located approximately 1.6km east of the site. The final licence pertained to the damage of a common pipistrelle resting place from 2016 (2016-26580_EPS-MIT) located approximately 1.72km south of the site. None of these are considered linked to the site through suitable habitat corridors.

3.0 METHODOLOGY

3.1 EMERGENCE SURVEY

The PRA[1] identified nine locations across the site that would enable all aspects of the former Novartis building to be surveyed (SL01-SL09).

A two emergence surveys were undertaken on 13th May and 15th June 2025. Each survey was undertaken in clear, still and warm conditions with sunset temperatures between 22°C and 17°C, in accordance with BCT guidelines. Auxiliary survey data with weather conditions for each survey is provided in Appendix C.

Emergence surveys commenced 15 minutes prior to sunset and continued for 90 minutes after sunset.

Each surveyor was equipped with an Echo Meter Touch bat detector to detect, visualise and record the calls of any bats present in the area. Additionally, infrared Canon XA11 cameras, each alongside two Light Emitting Diodes (LED) Infra-Red (IR) lights, were used as Night Visual Aids (NVA) for surveyors Stills from the darkest point of the survey from each surveyor location have been provided in Appendix D. Following the survey, the video footage and bat calls were analysed in-office using specialist computer software to confirm species present and assess ambiguous sightings/calls.

Of the nine survey locations SL07 and SL09 were unmanned (camera only no surveyor) during the first survey and SL09 was unmanned during the second Surveyor locations are mapped in Appendix B.

3.2 SURVEYORS

BCT guidance outlines the different levels of competency to undertake professional bat work which aligns with CIEEM definitions[10] .

The survey was designed by Jess Cole, Senior Consultant, has a BSc degree in Ecology (Hons) and is an Associate member of CIEEM. Jess holds a Natural England Great Crested Newt Licence and has over eight years' experience in ecological survey and assessment. Jess meets the BCT Level 2 (Capable) competency which is the appropriate level for simple sites such as this one. Jess also wrote this report.

The survey was led by Ben Newbery, Consultant, who has an undergraduate degree in Zoology (BSc Int) and an MSc in Biodiversity and Conservation, with over two years' experience in ecological survey and assessment. Ben's experience spans PEAs, Biodiversity Net Gain (BNG) and bat-surveying, with botanical identification being a particular interest.

Sound and NVA data was reviewed by Isobel Novak, Graduate Consultant, who has a degree in Biology (BSc Hons), an MSc in Conservation, and is a Qualifying member of CIEEM with over 3 years' experience in ecological surveying and assessment. She also holds a Great Crested Newt Level 1 Class Licence (2025-12737-CL08-GCN). Her experience includes bat activity and emergence/re-entry, great crested newt eDNA, translocation and population, and Ecological Clerk of Works. Isobel also undertakes data analysis and assists in developing strategies and protocols for efficient data management.

The report was reviewed by Abbie Case, Senior Ecologist, who has a BSc (Hons) in Ecology and Conservation, an MSc in Conservation Biology and is an Associate member of CIEEM. Abbie has over seven years in ecological survey and assessment and holds a Natural England Great Crested Newt Licence.

The report was verified by Alexandra Wadia, Principal Consultant, who has a BSc (Hons) in Biology, and a MSc in Ecology & Environmental Management, and is a Full member of CIEEM. Alexandra holds a Natural England Great Crested Newt Licence and has over nine years' experience in ecological survey, assessment and reporting.

This report was written by Jess reviewed by Abbie and verified by Alexandra who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

3.3 LIMITATIONS AND COMMENTARY ON METHODOLOGY

The data collected during the bat emergence surveys is considered valid for 18 months in accordance Chartered Institute of Ecology and Environmental Management (CIEEM) guidance[5] and an updated survey will be required if the works have not started within this timeframe or should site conditions change significantly during this time.

Sound data from two unmanned locations failed to record, this was at SL07 on 13/05/2025 and SL09 on 16/06/2025. This is not considered to be a significant constraint owing to the proximity of these locations to other nearby surveyor locations (SL07, SL08 and SL09), which would have recorded the same bat calls. Furthermore, no bat emergences were recorded at either of these locations. This is therefore not considered to be a significant constraint to survey.

It should be noted that the number of registrations does not reflect the number of bats, as the same bat is likely to have been recorded on more than one occasion especially when displaying foraging behaviours.

Overall, there were no significant limitations to the bat surveys. The surveys were undertaken at a suitable time of year and in suitable weather conditions.

4.0 RESULTS

4.1 EMERGENCE SURVEYS

There was no evidence of roosting observed during either of the emergence surveys.

During the surveys, low-medium levels of commuting activity were recorded, with the first survey in May recording a greater diversity of species. Species recorded during the first survey included common pipistrelle, soprano pipistrelle, noctule, serotine and Leisler's, whilst in June only common pipistrelle, soprano pipistrelle and brown long-eared were recorded.

Social calls from pipistrelle species were also recorded during the survey in May.

The most frequently recorded species during the first survey was soprano pipistrelle with a total of 76 registrations, followed by Leisler's with 38 registrations. The least frequently recorded species was Noctule with three registrations. One *Nyctalus* registration could not be confirmed to species level.

During the second survey the most frequently recorded species was common pipistrelle with 170 registrations, soprano pipistrelle was recorded 24 times and brown long-eared on one occasion.

It should be noted that the number of registrations does not reflect the number of bats, as the same bat is likely to have been recorded on more than one occasion, especially when displaying foraging behaviours.

The first bat recorded during the first survey was a soprano pipistrelle recorded at 21:14, 35 minutes after sunset. The average emergence time of common pipistrelle is 20 minutes after sunset, which does not suggest the bat emerged from nearby the site.

During the second survey the first bat, a common pipistrelle, was recorded at 21:24, 13 minutes after sunset. The average emergence time of common pipistrelle is 20 minutes after sunset, this result is therefore indicative of a roost nearby to the site.

It should be noted that full bat activity surveys are underway at the site scheduled for completion in October 2025 will provide further detail of the use of the site by foraging and commuting bats.

5.0 RECOMMENDATIONS AND CONCLUSIONS

5.1 SUMMARY OF EMERGENCE SURVEYS

The survey results confirmed the likely-absence of summer roosting bats within the former Novartis building on site. There is therefore no requirement for mitigation with regards to summer roosting bats.

Low-moderate levels of bat foraging and commuting activity were observed during the emergence survey. Six species were recorded including common pipistrelle, soprano pipistrelle, brown long-eared, noctule, serotine and Leisler's. The levels of activity were mostly associated with the vegetated habitats on site (e.g the trees) and therefore these habitats on site are considered to be of value for local bat populations. Bat activity surveys are underway at the site scheduled for completion in October 2025 which will provide further detail of the use of the site by foraging and commuting bats. Detailed recommendations around the compensation and enhancement of the site for foraging and commuting bats will be provided in a separate standalone report.

The former Novartis building was also given high suitability to support hibernating bats, with hibernation surveys conducted between February - March 2025, which identified the presence of a brown long-eared and possibly myotis hibernation roost within the basement of the building. This report should therefore also be read in conjunction with the bat hibernation survey report[3], which details the required further survey and mitigation requirements for the hibernation roost.

5.2 ENHANCEMENT

In accordance with planning policy and good practice, measures to enhance the site for summer roosting bats are recommended.

Lighting

Bats are a highly photosensitive species. Alterations to lighting levels on site as a result of the development proposals may stand to negatively impact their established flight paths and foraging grounds on site.

Therefore, the below bullet points provide high level recommendations for the design of wildlife friendly lighting on site. These are based on guidance from BCT and the Institute of Lighting Professionals (ILP)[4]:

- Do not increase lighting levels above the current level on site and reduce where possible;
- Use of low-UV warm-white LED bulbs (< 2,700k) with directional, downward facing and shielded lights which point away from green features such as trees, hedgerows and areas of soft landscaping;
- External lights should be subject to curfew controls where possible with lights on movement sensors to reduce light pollution when not needed;
- Green infrastructure should remain unlit, particularly between April and October, inclusive; and
- Use of buffer planting to block light spillage into valuable areas e.g. grasslands and hedgerows.

It is recommended that any new lighting design is modelled (to create a lighting contour plan) to estimate spill levels. This should then be reviewed and approved by a Suitably Qualified Ecologist (SQE).

Wildlife Friendly Landscaping

It is important that any suitable foraging habitat on site is retained or replaced, and, where possible, enhanced, to prevent net loss in bat foraging habitat. Vegetation clearance, particularly of trees, shrubs and scrub, should also be kept to a minimum to protect the commuting routes provided by these green corridors.

Floral diversity should be encouraged in the new landscaping, to encourage a richer assemblage of invertebrate prey. This can be achieved through:

- Use of biodiverse living roofs;
- Creation of areas of wildflower meadow where possible instead of blanket use of lawn (species poor grass seed mixtures);
- Creation of vertical planting through use of trellis and climbing plants;
- Provision of shrub and herbaceous planting utilising native species and species from the Royal Horticultural Society (RHS) Plants for Pollinators list[11];
- Native tree and hedgerow planting;
- Use of Sustainable Urban Drainage Systems (SuDS) and swales; and
- Provision of invertebrate habitat features such as loggeries, and insect hotels.

Bat Boxes

The wider site offers many opportunities to provide bat boxes to enhance roosting opportunities, namely the many mature trees on site and within the brick courses of the new buildings.

Plate 5.3 below gives examples of suitable tree mounted and integrated boxes for summer and winter roosting. These should be positioned approximately 5m from ground level facing between south and west. It is recommended that at least 12 bat boxes are provided on site.

Plate 5.3 *Suitable bat boxes- 2F Schwegler Bat Box (General Purpose)[12] for summer roosting (top left), 1FW Schwegler Bat Hibernation Box[13] (top right) for hibernation, Habibat 003[14] form summer roosting (bottom left) and Vivara Pro UK Build-in WoodStone® Bat Box[15] (bottom right).*

6.0 SUMMARY AND CONCLUSION

Greengage was commissioned in February 2025 to undertake a bat emergence surveys by Lovell of a site known Novartis Phase 1 & 2 in Horsham, West Sussex, to establish the presence/likely absence of summer roosting bats within the former Novartis building.

A PRA[1] was undertaken by Greengage in February 2025 which established moderate summer roosting suitability within the former Novartis building. As such, in accordance with the BCT guidelines[2] two dusk emergence surveys were carried out in May and June 2025.

The emergence surveys confirmed the likely absence of summer roosting bats in the former Novartis building and no formal mitigation actions in relation to summer roosting bats are required.

Low-moderate levels of bat foraging and commuting activity were observed during the emergence survey. Six species were recorded. The levels of activity were mostly associated with the vegetated habitats on site and therefore these habitats on site could be considered valuable for local bat populations. Bat activity surveys are underway at the site scheduled for completion in October 2025 which will provide further detail of the use of the site by foraging and commuting bats. Detailed recommendations around the compensation and enhancement of the site for foraging and commuting bats will be provided in a separate standalone report.

The former Novartis building was also given high suitability to support hibernating bats, with hibernation surveys conducted between February - March 2025, which identified the presence of a brown long-eared and possibly Myotis sp. hibernation roost within the basement of the building. This report should therefore also be read in conjunction with the bat hibernation survey report[16], which details the required further survey and mitigation requirements for the hibernation roost.

Whilst there is no requirement for formal mitigation measures for summer roosting bats, in accordance with planning policy and good practice, measures to enhance the site for summer roosting bats are recommended within section 5 of this report.

With roosting bats confirmed as likely-absent, the development is predicted to have a negligible impact upon summer roosting bats. Furthermore, the enhancement measures to be implemented will likely result in the development providing long term positive impacts for bats at a local scale.

APPENDIX A LEGISLATION AND POLICY

A.1 LEGISLATION

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

The Wildlife & Countryside Act 1981 (WCA)[17] was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annexe IV of the Habitats Directive[18], 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019[19], which transposes the Habitats Directive into UK law. Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England. Additionally, although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

A.2 PLANNING POLICY

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2024[20] sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the

natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: *'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'.* Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

Horsham District Planning Framework[21]

Policy 24. Strategic Policy: Environmental Protection

The high quality of the district's environment will be protected through the planning process and the provision of local guidance documents. Taking into account any relevant Planning Guidance Documents, developments will be expected to minimise exposure to and the emission of pollutants including noise, odour, air and light pollution and ensure that they:

1. Address land contamination by promoting the appropriate re-use of sites and requiring the delivery of appropriate remediation;
2. Are appropriate to their location, taking account of ground conditions and land instability;
3. Maintain or improve the environmental quality of any watercourses, groundwater and drinking water supplies, and prevents contaminated run-off to surface water sewers;
4. Minimise the air pollution and greenhouse gas emissions in order to protect human health and the environment;
5. Contribute to the implementation of local Air Quality Action Plans and do not conflict with its objectives;
6. Maintain or reduce the number of people exposed to poor air quality including odour. Consideration should be given to development that will result in new public exposure, particularly where vulnerable people (e.g. the elderly, care homes or schools) would be exposed to the areas of poor air quality; and
7. Ensure that the cumulative impact of all relevant committed developments is appropriately assessed.

Policy 25. Strategic Policy: The Natural Environment and Landscape Character

The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which:

1. Protects, conserves and enhances the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintains settlement separation.
2. Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.

3. Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible.
4. Conserve and where possible enhance the setting of the South Downs National Park.

Policy 31. Green Infrastructure and Biodiversity

1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.
2. Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.
3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required.
4. a. Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:
    i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)
    ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
    iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.

    b. Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:
    i. The reason for the development clearly outweighs the need to protect the value of the site; and,
    ii. That appropriate mitigation and compensation measures are provided.
5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

APPENDIX B SURVEYOR LOCATIONS

NOVARTIS PHASE 1&2

Legend

Red Line Boundary

PRFs

- Crack in brickwork
- Crack in mortar under concrete eave
- Gap in mortar under concrete eave
- Hole in brickwork
- Hole in concrete eave

PRF line

- Gap between metal parapet and wall

Suitability

- High (Hibernation)
- Moderate (Summer)

Surveyor Location

Title: Figure A.1 PRA Survey Results

Drawn by: JC
Date: 15/07/2025

Reviewed by: SB
Date: 15/07/2025

Project number: 552979

Greengage

APPENDIX C AUXILIARY SURVEY DATA

Table C.1 Auxiliary survey data

Date	Surveyor locations covered	Sunset Time	Survey Duration	Conditions
13/05/2025	SL01-SL09	20:39	20:24 - 22:09	Start: 17°C End: 12°C Clear 0/8 Wind (Beaufort Scale): 1 Dry, no rain
16/06/2025	SL01-SL09	21:20	21:05 - 22:50	Start: 12°C End: 16°C Clear 0/8 Wind (Beaufort Scale): 2 Dry, no rain

APPENDIX D STILLS FROM NVA AT THE DARKEST POINT OF SURVEY

Table D.1 Stills from NVAs during the darkest point of survey

Date	Survey Location reference	Time	Still
13/05/2025	SL01	22:04-22:09	
13/05/2025	SL02	22:04-22:09	
13/05/2025	SL03	22:04-22:09	
13/05/2025	SL04	22:04-22:09	

Date	Survey Location reference	Time	Still
13/05/2025	SL05	22:04-22:09	
13/05/2025	SL06	22:04-22:09	
13/05/2025	SL07	22:04-22:09	
13/05/2025	SL08	22:04-22:09	

Date	Survey Location reference	Time	Still
13/05/2025	SL09	22:04-22:09	
16/06/2025	SL01	22:45-22:50	
16/06/2025	SL02	22:45-22:50	
16/06/2025	SL03	22:45-22:50	

Date	Survey Location reference	Time	Still
16/06/2025	SL04	22:45-22:50	
16/06/2025	SL05	22:45-22:50	
16/06/2025	SL06	22:45-22:50	
16/06/2025	SL07	22:45-22:50	

Date	Survey Location reference	Time	Still
16/06/2025	SL08	22:45-22:50	
16/06/2025	SL09	22:45-22:50	

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