Preliminary Roost Assessment, GI statement and Enhancement Plan of AVOW Building, Wrexham

Date	Author	Project Number	Approved by	Version	Comments
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Report Reference: EE.5239.25.LP

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Executive Summary

Site	Ty Avow, 21 Egerton St, Wrexham LL11 1ND NGR: SJ33375051
Surveyors	Keymar Wake (NRW Bat Licence Number S092545/1) and Lowri Parry
Proposed work	Replacing the single-story northwest extension with a new two-story glass one and minor repairs to the main building and other extensions fixing / replacing the rainwater goods, fascia boards and cleaning the stone parapets.
Areas/ structures affected	The single-story northwest extension and roof furniture around remaining building.
Type of survey	Daytime Bat Walkover and Preliminary Roost Assessment (16/07/2025), & Nesting Bird Assessment (16/07/2025)
Main results	• There was no access for bats into the loft spaces and very limited external features available for crevice dwelling bats. • The nesting bird assessment found no nesting birds using the site but potential nesting features including the flat roof (for gulls) potential nesting materials in the guttering of at the front of the main building. • The building was within Wrexham city centre with little connectivity to suitable surrounding habitat.
Survey conclusions	• Overall, the AVOW building had negligible bat potential. • The local area has a low suitability for bats. • The buildings have some nesting bird potential. • The potential impacts of the works are low.
Reasonable Avoidance Measures (RAMs)	RAMS will include: • Timing of works (with regards to nesting birds) • Lighting guidance • **A licence will not be required from NRW.**
Compensation and enhancements	• Enhancements will be in the form of bat and bird boxes.
Conclusions and Further Work	• The site is negligible for bats and no further surveys are required. There is potential for nesting birds on the site, the proposed works should not impact nesting birds.

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1.0 Introduction

1.1 *Project Introduction*

1.1.1 Enfys Ecology Ltd were commissioned by John Edwards to undertake a preliminary roost assessment (PRA), daytime bat walkover, and nesting bird assessment of AVOW Building to support a planning application. A Green Infrastructure Statement and Enhancement Plan are also included within this report.

1.1.2 The proposed works involve remodelling the interior and demolishing the single-story northwest extension and building a new two-story glass extension. The works to rest of the building include fixing / replacing the rainwater goods, fascia boards and cleaning the stone parapets. There were no final plans provided to Enfys Ecology Ltd at the time of writing.

1.1.3 The surveys were commissioned to determine whether the proposed works would affect bats and nesting birds. The survey work informing the report was carried out during the month of July 2025. The report and its findings are valid for 18 months from the aforementioned date in accordance with best practice.

1.1.4 All British bats (and roosting sites) are protected under the Wildlife and Countryside Act (1981), as amended. In addition, all UK bats are classified as European Protected Species by the Conservation of Habitats and Species Regulations (2017), as amended. Under these pieces of legislation it is an offence to kill, injure or disturb a bat, or to destroy any place used as a shelter by bats.

1.1.5 All birds and their nests are legally protected under the Wildlife and Countryside Act (1981), as amended. It is an offence to intentionally take, damage, or destroy the nest of any wild bird while it is being built, or in use, as well as killing or injuring wild birds or their eggs.

1.1.6 Should evidence of bats be found and it is deemed likely that the proposed works would disturb them a licence from Natural Resources Wales (NRW) would need to be obtained prior to any works commencing.

1.1.7 Planning Policy Wales (PPW12, paragraph 6.4.5) confirms that planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species (not including non-native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems.

1.1.8 Planning Policy Wales (PPW12, paragraph 6.2.12) states that a green infrastructure statement should be submitted with all planning applications. This should be proportionate to the scale and nature of the development proposed and will describe how green infrastructure has been incorporated into the proposal. This has been provided in Section 8.

2.0 Site Description

2.1 *Survey Area*

2.1.1 The site comprised a commercial red brick building with multiple extensions in Wrexham city centre. There was a hard-standing car park at the rear of the property accessed from Trinity Street on the Northwest side. The site was encapsulated by roads either side and surrounded by other commercial buildings and a bus station. There are four mature broadleaf trees in the immediate area but not within the site boundary. The survey area is shown in figure 2.1 below.

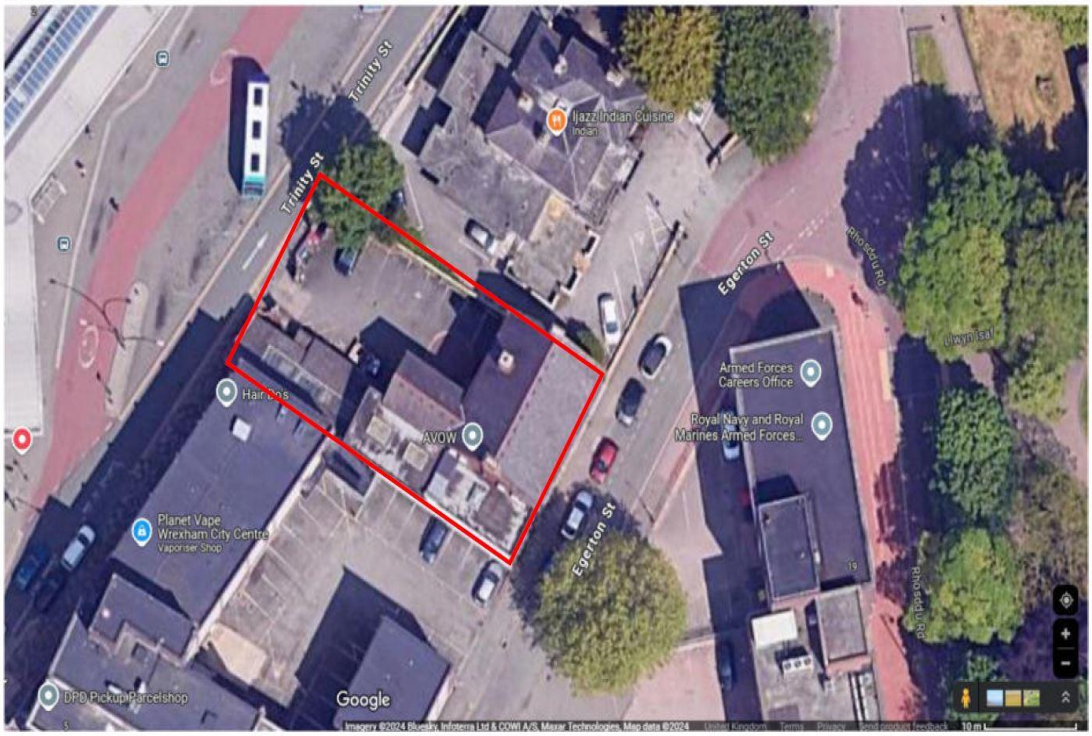


Figure 2.1: The site and the surveyed building (red box)
Base image © Google Maps 2025

2.1.2 The wider surrounding landscape was primarily industrial and urbanised. Commercial buildings extended for approximately 1.5km from the site in all directions. There were scattered small scale amenity green spaces interspersed within the city, the nearest park was 140m to the East of the site and the nearest water course is a small pond 375 meters to the west of the site. The wider area around the survey boundary is shown below in figure 2.2.



Figure 2.2: The site (red star) and the wider surrounding area

Base image © Google Maps 2025

3.0 Methodology

3.1 ***Desk Study***

3.1.1 The desk study comprised a consultation with Cofnod, the North Wales Environmental Information Service, to determine the presence of records of bats, roof-nesting birds, habitats, and statutory and non-statutory sites within 1km of the site. The records were used to inform the surveys, recommendations, and to provide context for evaluating the species and habitats found during the survey. Any relevant results from the desk study will be referred to in Section 4.1 and the full data search is available in Appendix A.

3.2 ***Daytime Bat Walkover***

3.2.1 A daytime bat walkover (DBW) was undertaken of AVOW Building by Keymar Wake, suitably qualified ecologist and Lowri Parry an assistant, respectively on the 16/7/2025. The DBW was carried out following the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins, 2023).

3.2.2 The DBW intended to observe and record any habitat features suitable for bats to roost, commute, and forage both on site and in the surrounding area. Photographic and biological evidence was taken where necessary.

3.3 ***Preliminary Roost Assessment***

3.3.1 The inspections of the AVOW building were carried out by Keymar Wake (licence holder of NRW Bat Licence S09254511) and an assistant on the 16/7/2025. The Preliminary Roost

Assessment (PRA) was carried out following the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins, 2023).

3.3.2 The buildings were assessed for any signs of bats; these included droppings, feeding remains, live/dead bats, and other indicative marks. Features of potential use to bats such as crevices, cracks, holes, and potential access points into the buildings were also assessed. High powered torches were used to inspect any identified features, and an endoscope was used to further investigate gaps and crevices, where appropriate. Both the interior and exterior of the building were examined. Photographic and biological evidence was taken where necessary.

3.4 ***Nesting Bird Assessment***

3.4.1 The internal and external inspections of the AVOW building were carried out Keymar Wake, suitably qualified ecologist and an assistant on the 16/7/2025 in tandem with the PRA.

3.4.2 The AVOW building was assessed for any signs of use by birds; these included droppings, in/active nests, live/dead birds, and other indicative marks. Features of potential use to birds such as crevices, holes, and potential access points into the building were also assessed and noted. High powered torches were used to inspect any identified features, and an endoscope was used to further investigate potential features, where appropriate.

3.4.3 Both the interior and exterior of the AVOW building were examined. Photographic evidence was taken where necessary.

3.5 ***Limitations***

3.5.1 Bats and birds are highly mobile animals, and it is possible that they may move into a building after the survey had occurred. Therefore, absence of bats and birds cannot be guaranteed. The survey was carried out during the month of July 2025, which is within the appropriate survey window for Preliminary roost assessment as per the 'Bat Surveys for Professional Ecologists - Good Practice Guidelines' (Collins, 2023), and within the breeding bird season (March – September inclusive).

3.5.2 The extension on the south side of the main building had a flat roof. The roof was to high to be accessed or surveyed, therefore the absence of nesting birds cannot be guaranteed. It is possible that birds, particularly gulls, could occupy the flat roof extension.

4.0 Survey Results

4.1 ***Desk Study - Sites***

4.1.1 There were no statutory designated within 1-kilometre (km) of the survey area.

4.1.2 There were no sites designated for bats within 5km.

4.1.3 There were no non-statutory designated sites within 1km of the survey area.

4.2 ***Desk Study – Species Records***

4.2.1 The data search from the local record centre (Cofnod) identified there were 17 bat records of 5 species within 1 km of the site. No roosts were recorded within 1km of the site, all records were active bats passing. The nearest bats to the site were identified as 'bat' approx. 187m to the east of the site. Other species within 1km included noctule, common pipistrelle, lesser horseshoe and brown long eared bat.

4.2.2 The data search from the local record centre identified there were 525 records of 76 bird species recorded within 1 km of the site. The nearest schedule 1 bird record was of a kingfisher, which was approx. 383m to the south of the site.

4.2.3 There were 32 records of swift within 1km of the site. The nearest record was 41m to the east of the site.

4.3 ***Daytime Bat Walkover (DBW)***

4.3.1 The site was situated in the city centre with very little connectivity to surrounding suitable habitat. There were four scattered large mature trees in the immediate area, but no vegetated flight lines. The other buildings in the surrounding area could provide roosting opportunities for the more urbanised species of bats (e.g. pipistrelles) but the city centre is generally well illuminated and noisy throughout the night so is not considered suitable bat habitat.

4.4 ***Preliminary Roost Assessment (PRA)***

4.4.1 The surveyed AVOW building, was a two-storey building with multiple extensions, constructed out of red brick with a mixture of pitched and flat roof. Detailed photographs of the AVOW building are provided in Table 4.3 below.

4.4.2 The potential roosting features (PRFs) and potential nesting features (PNFs) are shown in Table 4.4 below. There were very limited PRF's. The roof, main building and all extensions are well sealed. There was one gap on the porch, although this feature was not sufficiently deep for a roost, see Table 4.4 feature 1. The guttering on the front of main building had possible previous nesting material, see Table 4.4 feature 2. The extension on the south side of the main building had a flat roof, there was no access to this area and limited visibility from outside. This flat extension roof could provide suitable nesting habitat for gulls, see Table 4.4 feature 3.

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4.5 ***Nesting Birds***

4.5.1 The AVOW building was suitable for nesting birds and this was shown by the vegetation and potential nesting material in the guttering and the flat roof of the extension. Table 4.4 provides further information on the features.

Table 4.3: Building Descriptions

External Description	External Photo	Internal Description	Internal Photo
Red brick building with original features. Pitched roof with the slate tiles and two red brick chimneys. Extension with flat roof on the left, south side of the building.		Loft of main building. Loft space was approx. 15 meters X 11.5m X 5m high. Gable walls were exposed red brick. Wooden roof frame with membrane between tiles and frame. Insulation on the floor.	 

External Description	External Photo	Internal Description	Internal Photo
Gable end of main building. Old ivy stems.		Light gaps coming from cut out areas in the membrane. The holes were purposely cut for vents and sealed with mesh. Red brick partition wall with access.	

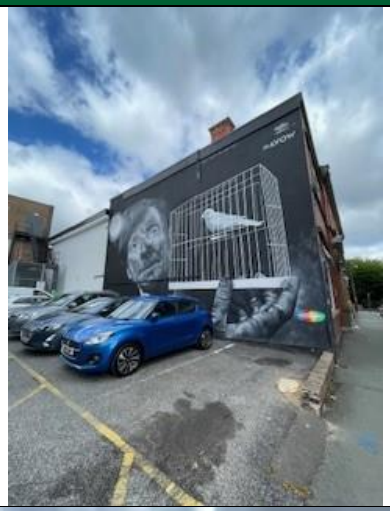
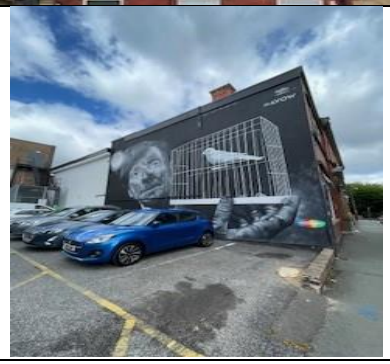
External Description	External Photo	Internal Description	Internal Photo
Southside extension with flat roof. Mural painted directly on to masonry. Plastic facia boards.			
The back of the main building with all extensions visible.		A hole into the loft space of the two-story pitched roof extension was visible from the main building loft space but it was inaccessible. Pitched roof extension was approx 5.5m X 8.5m X 2m high.	

Table 4.4: Descriptions of potential roosting and nesting features.

Feature Number	Description	Photograph
1	Small gap under slate tile on front corner of porch. The gap did not extend deep enough and therefore was not suitable for roosting bats. This was the only potential bat roosting feature of the building.	
2	Standing at the front of the property there was vegetation and potential nesting material present in the guttering at the left end and where the down pipe meets the guttering.	
3	Flat roof extension on the south side of the main building. This was a potential nesting feature for gulls.	

5.0 Discussion and Evaluation

5.1 ***DBW***

5.1.1 Overall the site was surrounded by artificial lighting, roads and a limited amount of vegetation and connectivity, therefore had low potential flight paths or foraging habitat as per the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins, 2023). This is defined as no obvious habitat features on site likely to be used as flight paths or by foraging bats; however, there are records of bats within the city centre so it cannot be discounted that bat species that are more tolerant of urban areas (e.g. pipistrelles) could be active around the site.

5.2 ***PRA***

5.2.1 Due to the building providing bats with only one PRF of limited suitability, the site is considered to have negligible potential to support roosting bats as per the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins, 2023). This is defined as a structure where there were 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.

5.3 ***Overall Site Assessment***

5.3.1 With the DBW and PRA findings considered, the site had a negligible potential to support bats as per the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins, 2023). The AVOW building will require no further surveys.

5.4 ***Proposed Works***

5.4.1 The works will entail a remodelling the interior and demolishing the single-story northwest extension and rebuilding a new two-story glass one. There is also predicted to be minor repairs to the existing roofs said to include fixing / replacing the rainwater goods, fascia boards and cleaning the stone parapets. There were no final plans provided to Enfys Ecology at the time of writing this report.

5.5 ***Effect of Works on Bats***

5.5.1 Recommended avoidance, mitigation, compensation and enhancement measures, to reduce the impact of the works on bats using the site and the immediate surrounding area will be detailed in section 6 and 7.

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5.6 *Impacts on Designated and Notable Sites*

5.6.1 The proposed works will not have an impact on any designated or notable sites with 1 km of the site, or any sites designated for bats within 5 km as there were none within 1 and 5 km, respectively.

5.7 *Effect on Nesting Birds*

5.7.1 There were no signs of nesting birds during the survey. However, it is possible that birds could start using the site at any time. RAMs to reduce the risk to nesting birds are discussed in Section 6, and recommendations to enhance the site are provided in Section 7.

5.7.2 As birds are recorded around the site it is possible that birds could start using the site again at any time. There were no signs active nesting birds on site at the time of the survey, but the proposed works have the potential to impact nesting birds by causing disruption or direct nest disruption.

6.0 Mitigation and Reasonable Avoidance Measures (RAMs)

6.1 *Mitigation - Bats*

6.1.1 As the building is not used by bats to roost, no further surveys or specific mitigation measures are required; **a licence will not be required** and the works can be carried out at any time of year (subject to nesting bird restrictions).

6.1.2 Suitable Reasonable Avoidance Measures (RAMS) will be implemented to mitigate the potential to impact to bats. The following measures should be implemented **at all times** during the works:

- Working areas should be kept to the minimum required.
- Works should be avoided within 1 hour of dawn and dusk where possible to avoid disturbance to nocturnal animals.
- All works lighting should be directed into the site to avoid spillage out of the site.
- No lighting should be focused on any natural habitat feature present on site such as the mature trees around the site boundary.
- In the unlikely event that a bat is found during the works, **all works must stop immediately.** An ecologist must be called and a licence from NRW will be required before works can recommence.

6.2 *Mitigation - Lighting*

6.2.1 General lighting guidance has been provided below which can be used to inform any lighting installations on the site. The following notes are summarised from ILP (2023) 'Bats and Artificial Lighting at Night. Guidance Note GN08/23'. This guidance can be incorporated into any lighting design to ensure the new development will not have a negative impact on any bats using the site or in the wider area.

6.2.2 ILP (2023) conclude that for bats, artificial lighting at night (ALAN) is thought to increase the chances of predation by avian predators (such as owls and hawks) and in lit areas, bats are known to modify their behaviour, potentially in response to this threat. Illuminating a bat roost can cause disturbance and this may result in the bats deserting the roost, or even becoming entombed within it. Lighting would therefore be considered an obstruction under the legislation protecting bats and their roosts. In addition, artificial lighting can also affect the feeding behaviour of bats.

6.2.3 Ecological and lighting design advice should be sought right at the start of a project whenever lighting is being considered, in advance of any lighting design or fixing of scheme layout.

6.2.4 Key messages from the ILP (2023) 'Bats and Artificial Lighting at Night' guidance includes:

- The ecological mitigation hierarchy applies to lighting design: impacts to biodiversity should be avoided in the first instance through design and where this has been clearly demonstrated

not to be possible, appropriate mitigation needs to be put in place. Compensation is the least desirable option, so all other avenues should first be explored and ruled out. In parallel, opportunities to design lighting betterment for biodiversity should be sought wherever possible.

- It is important to integrate avoidance measures into developmental design, by retaining ecologically functional 'dark corridors' within schemes wherever feasible, and in preference to seeking lighting mitigation strategies. Consideration should be given to the lighting effect of a scheme on Key Habitat and Supporting Habitat areas for bats, as well as commuting routes.
- It is important to minimise Artificial Lighting At Night (ALAN) close to vegetation, particularly for slower-flying bat species.
- Dense vegetation should be included in urban landscapes to protect against ALAN for open-space foraging bats in city landscapes, and provide potential longer-term roosting opportunities.
- ALAN has been shown to be particularly harmful along river corridors, near woodland edges and hedgerows.
- Bats have considerable sensitivity to very low light levels and distances from light sources, and there is a need to maintain or reduce existing light levels in the environment.
- Careful choices would need to be made about the type of lighting chosen for a scheme, and this should be designed through a multi-disciplinary design approach. Whilst Part Night Lighting (PNL) schemes and the installation of LED lights may have energy-saving benefits, they can result in an increase in light intensity, impacting on bat behaviours, and the lighting design for each site should be developed using information from bat surveys, and pre-development light level data.

6.2.5 After avoiding, wherever possible, the potential impacts of Artificial Lighting At Night (ALAN) through scheme designs, if further mitigation measures are required in the form of lighting controls, ILP (2023) recommend that a lighting professional helps to select those light sources, lamps, LEDs and their fittings which are most appropriate for the project. To assist with the decision-making process, ILP (2023) suggest that the following are considered when choosing luminaires:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone et al, 2012).
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill.

- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges.
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - see ILP (2021) GN01.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1- or 2-minute timer is likely to be appropriate.
- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

6.3 ***Nesting Birds***

6.3.1 No evidence of nesting birds was found during the assessment/surveys; however, the site was suitable for nesting birds.

6.3.2 Where possible, work to these areas should be avoided during the bird nesting season (March to September inclusive). If this is not possible, a nesting bird check must be carried out at no sooner than 48 hours before works commence.

6.3.3 If birds are found nesting in the AVOW building or vegetation during any point in the works, all works to that area must stop and only continue once the chicks have fledged.

7.0 Enhancement Plan

7.1 *Bats*

7.1.1 The existing site has negligible potential for bats but there are records of bats in the local area. To enhance the site for bats, the at least two bat boxes will be installed on the building as part of the proposed works.

7.1.2 Bat boxes should be constructed out of woodstone or woodcrete as they last longer and require less maintenance than wooden boxes. Examples of suitable bat boxes are shown below in Figure 7.1.



Figure 7.1: Examples of suitable bat boxes for summer roosting (Left – Beaumaris Box; Centre – Vivara Multi-Chambered Bat Box; Right – 2F Schwegler Bat Box)

7.1.3 The bat boxes will be mounted at least 3m high on a southerly elevation. The boxes should be away from any windows, doors, streetlights or any other artificial illumination. The proposed criteria for the locations will ensure the boxes are shielded from any potential sources of light spillage, safe from predators, such as cats, and are orientated to provide suitable roosting conditions for bats.

7.2 *Nesting birds*

7.2.1 The proposed works have the potential to interfere with birds that may use the site opportunistically. The cofnod records show that swifts are in the area; therefore, to enhance the site for swifts, the AVOW building will incorporate swift bird boxes into the design. As swifts prefer to nest in colonies a minimum of two multi-cavity swift nest boxes should be erected. The boxes should be placed at least 5m high on the northern or eastern elevations and away from direct sunlight. They should also have a clear flight path in front of them. As they will be external boxes, they will need to be attached securely so as not to be moved by any strong winds.

7.2.2 There are different types of nest boxes available, but the HabiSabi double swift box is recommended as it is multicavity and can be opened to insert a nest cup before it is erected onto the wall. To increase the chances of swifts using the boxes they should contain an internal egg cup, so the eggs do not move around within the box. Ready-to-insert egg cups are available online; it is recommended that an egg cup is used in each of the two cavities of each of the nest boxes. Examples of suitable swift nest box are shown below in Figure 7.3.



Figure 7.2: Examples of suitable swift nest box

8.0 Green Infrastructure Statement

8.1 *Introduction*

8.1.1 Green infrastructure (GI) is defined in Planning Policy for Wales (PPW) Edition 12[1] as "*the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse*

[1] See: https://www.gov.wales/planning-policy-wales

and connect places". Development proposals should take GI into consideration in order to avoid negative impacts on habitats and species, and seek ways to maintain and enhance biodiversity. Impacts on habitats and species should be treated in a step-wise manner (PPW 12, paragraph 6.4.15), by seeking to:

- **Avoid** damage to biodiversity in its widest sense by maintaining the largest possible area of existing habitat supporting biodiversity and functioning ecosystems, particularly Section 7 habitats and species where present, through careful development design and consideration of long-term maintenance and management and ensuring that retained habitats continue to be well connected to adjacent habitats to provide connectivity for key species.

- **Mitigate** or **restore** by identifying measures to address the specific negative effects by repairing damaged habitats and disturbed species. The measures should seek to restore in excess of like for like, accounting for disturbance and time lags for the recovery of habitat and species, and in every case, mitigation or restoration measures should seek to build ecosystem resilience within the site and where possible the wider area.

- As a last resort off-site **compensation** for unavoidable damage must be provided. This must be of significant magnitude to fully compensate for any loss.

- All development must **deliver a net benefit** for biodiversity and ecosystem resilience from the baseline state (proportionate to the scale and nature of the development proposed).

8.2 *General - Local Policy*

8.2.1 On 20*th* December 2023 Wrexham County Borough Council adopted the Wrexham Local Development Plan (LDP) 2013 - 2028[2]. The adopted LDP will form the development plan for Wrexham County Borough and will be the basis for decisions on land use planning in this area. The Wrexham LDP replaces the adopted Wrexham Unitary Development Plan. The LDP is a long-term land use and development strategy, focused on achieving sustainable development and will: guide development for housing, employment, retail and other uses; set out policies that will be used to decide planning applications; and, safeguard areas of land requiring protection or enhancement.

8.3 *Biodiversity – Local Policy*

8.3.1 Wrexham Local Development Plan (LDP) 2013 – 2028 includes a vision and a set of strategic objectives which include the following: Objective SO9: Protect, manage and enhance the natural and historic environment and landscapes. High level, strategic policies seek to deliver the LDP vision, objectives and strategy. Policy SP5: Planning Obligations confirms that ecological mitigation can be delivered through planning obligations and Policy SP12:

[2] Available: https://wrexham-consult.objective.co.uk/portal/adopted_wrexham_local_development_plan

Design Principles & Masterplanning Framework requires projects to demonstrate how they have taken account of the local characteristics of surrounding areas and how innovative design solutions will enhance the quality of the build and natural environment.

8.4 Wrexham Council have approved a series of local planning guidance (LPG)[3] notes which amplify the Development Plan policy. These include the following notes which are of relevance to biodiversity:

- LPG Note No 7 – Landscape and Development. This note provides general guidance and clarifies landscape information requirements.
- LPG Note No 17 - Trees and Development. This note provides information regarding the protection of trees and highlights the benefits of trees as an integral part of development design.
- LPG Note No 26 - Landscape and Industrial Developments. This guidance aims to help applicants have a better understanding of the landscape and environmental issues which the Council will take into account of when determining applications for industrial development.
- LPG Note No 29 – Wrexham Industrial Estate Employment Development and Nature Conservation. This note advises developers/landowners on the key ecological issues that they need to address before carrying out any development on the Wrexham Industrial Estate (whether or not it requires planning permission) and the procedures they should follow to gain planning permission and the necessary licences.
- LPG Note No 35 – Great Crested Newt Mitigation Requirements Johnstown Newt Site SAC and the Wider Countryside. This guidance note is intended to provide advice and guidance to developers, land owners, members and other local authority council officers when assessing development proposals involving, or in close proximity to GCN populations, together with other material planning considerations.
- LPG Note No 32 – Biodiversity and Development. This guidance note intends to raise the quality and profile of nature conservation, protected species and biodiversity issues when submitting and considering planning applications. The document provides an introduction to biodiversity in the County, details the requirements for site appraisals, ecological surveys and assessments, considers when an Appropriate Assessment will be required, and identifies the ecological mitigation hierarchy (avoid, mitigate, compensate, enhance). The LPG Note sets out the expectations in relation to monitoring management and compliance and provides examples of how to incorporate biodiversity into a development.

8.5 ***Summary of Green Infrastructure Proposals***

8.5.1 As set out in PPW 12, paragraph 6.4.21, the impacts on habitats and species from a proposed development should be treated in a step-wise manner. Table 8.1 summarises how the proposed works at AVOW building, Wrexham has adopted these step-wise principles and details the Green Infrastructure contribution of the proposed scheme. The Green

[3] Available: https://www.wrexham.gov.uk/service/development-plans-and-other-planning-policy/local-planning-guidance-notes

Infrastructure contribution proposed is considered to be proportionate to the proposed development.

Table 8.1: Summary of Green Infrastructure Proposals for AVOW Building, Wrexham

Step-Wise Stages	Summary of Project Proposals
Avoidance	• The proposed works are essential to enhance the environmental sustainability, functionality, and user wellbeing of the community building. The existing extension is in poor condition, particularly the roof, which compromises both structural integrity and energy efficiency. Its removal and replacement with a modern glass conservatory will significantly improve thermal performance through passive solar gain and increased natural lighting. This not only reduces reliance on artificial heating and lighting — supporting energy efficiency — but also enhances occupant wellbeing by providing a brighter, more uplifting and naturally lit space. • In addition, the replacement of aging soffits and drainpipes across the building is necessary to ensure effective rainwater management, preventing water damage and improving climate resilience. These works form a vital part of a green infrastructure approach, contributing to a healthier, more sustainable, and community-focused environment. • No bats or evidence of bats or birds were seen during the surveys and the building will be retained after the works. There is no existing vegetation within the site, being a commercial building within Wrexham city centre and surrounded by hard standing. • There will be no loss of species or habitats as a result of the works.
Mitigation	*Destructive Works* • Mitigation measures with regards to bats and birds have been detailed in Section 6 of this report. This includes steps to take if a bat is found during the works and also the requirement to undertake nesting bird checks prior to works, if carried out during the nesting bird season. *Lighting* • Guidance with regards to lighting and bats has been given in Section 6.2. This will limit disturbance to bats by potential increased lighting.
Compensation	• Compensation is not required as there will be no loss of species or habitat as part of the proposed works.
Enhancement	• The site will be enhanced for bats, birds and other species. • At least two bat boxes are to be erected on the building • Two multicavity swift boxes will be installed on the building

8.6 **Statement**

8.6.1 The scheme has been designed taking a step-wise approach to impacts on habitats and species, and ecological enhancement will be provided through the erection of bat and bird boxes, that will be maintained in the long term by the site owners.

9.3.2 Planning Policy Wales identifies the importance of "*paying due regard to the potential for continued long term maintenance and management of retained areas to benefit biodiversity*" (PPW12, paragraph 6.4.15). The site owners will ensure the future maintenance and management of the site and enhancement measures.

9.0 Legislation

9.1 ***International Law***

9.1.1 The UK is a contracting party to the 1979 Convention of the Conservation of European Wildlife and Natural Habitats (commonly referred to as the Bern Convention). The Bern convention has been described as the "European Treaty for the conservation of nature". Its provisions with regards to bats are transposed into law as follows:

- In England and Wales via the Conservation of Habitats and Species Regulations 2017 (as amended) (the England and Wales Habitat Regulations) and the Wildlife and Countryside Act 1981 (as amended) (the W&CA)

9.2 ***Legislation in England and Wales***

9.2.1 All species of bat, their breeding sites and their resting places in England and Wales are protected through a 'dual' system of protection, under the England and Wales Habitats Regulations and W&CA. Because two regimes give legal protection to bats, the implications of both regimes must be fully understood.

9.2.2 Regulation (Reg.) 43 of the England and Wales Habitats Regulations makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats (which includes any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate or to affect significantly the local distribution or abundance of the species to which they belong);
- damage or destroy a breeding site or resting place of a bat; or
- possess, control, transport, sell or exchange, or offer for sale or exchange, any live or dead bat or part of a bat or anything derived from a bat or any part of a bat

9.2.3 Under Section 9 of the W&CA (s.9(4)(b), 9(4)(c) and 9(5) only), it is an offence (in relation to bats) to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place of shelter or protection;
- intentionally or recklessly obstruct access to any structure or place used by a bat for shelter or protection; or
- sell, offer or expose for sale, or have in their possession or transports for the purpose of sale, any live or dead bat or any part of, or anything derived from a bat (or be responsible for adverts suggesting the intention to do this).

9.3 ***Birds***

9.3.1 In addition, under the Wildlife and Countryside Act, 1981 (as amended) and the Countryside and Rights of Way, 2000, all wild birds, their nests and eggs are protected during the breeding season (typically March to August inclusive). This makes it an offence to:

- Intentionally kill, injury or take any wild bird.
- Take, damage or destroy the nest of a wild bird included in Schedule ZA1.
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built.
- Take or destroy an egg of any wild bird.

10.0 References

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

ILP. (2021). 'Guidance Note 1 for the reduction of obtrusive light. Available: https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/

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