Erbistock Mill, Erbistock, Wrexham

Net Biodiversity Benefit Plan

24th July 2026

Authored by Richard Roe BSc MSc MCIEEM CEnv

CONTACT DETAILS

KINGDOM ECOLOGY LTD
7 Speke Road
Woolton
Liverpool
L25 8QA

Tel: 07799844249
Email: enquiries@kingdomecology.com

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1 Introduction

1.1 Background

Planning permission has been granted for the variation of Condition 2 of planning permission P/2023/0483 to amend the approved plans through the addition of balconies at Erbistock Mill, Erbistock, Wrexham, LL13 0DW (Planning Reference P/2025/0848, Wrexham County Borough Council). Permission was granted on 22nd December 2025.

Erbistock Mill is a converted water mill building of pre-20th century origin, located on the western bank of the River Dee (National Grid Reference SJ 3542 4220). The development proposals comprise alterations to the existing building, including the cladding of the upper elevations in timber boarding, the extension of the upper-floor living accommodation within an existing area of upper-floor terrace, and the addition of balconies. No works are proposed within the channel of the River Dee.

This Net Biodiversity Benefit Plan has been prepared to discharge Condition 4 of the above planning permission, which states:

> *No development shall commence until a detailed Net Biodiversity Benefit Plan has been submitted to and approved in writing by the Local Planning Authority. The approved details shall be fully implemented prior to the first use of the development hereby approved and shall be retained thereafter for the lifetime of the development.*

The reason given for the condition is to ensure that the development delivers a net benefit to biodiversity in accordance with paragraph 6.4.5 of Planning Policy Wales 11.

To address this planning condition, an appropriate green infrastructure and net biodiversity benefit scheme for the site has been devised (see below) by Richard Roe (BSc, MSc, MCIEEM, CEnv) of Kingdom Ecology Ltd. Richard has over 25 years' experience as a professional ecologist and is a licensed bat worker (Level 4 Class Licence).

In summary, the measures proposed comprise the retention of existing bat roosting features within the building; the creation of new bat roosting features within the stonework and the proposed timber cladding; the provision of tree-mounted bat boxes on retained mature trees; the provision of six swift nest boxes within the new cladding; the creation of two habitat piles; and the control of Himalayan balsam within the site boundary.

This document should be read alongside the accompanying Erbistock Mill Conservation Plan, prepared to discharge Condition 3, which sets out the measures to be followed during the construction phase. The same figures are appended to both documents.

1.2 Baseline Habitats and Species

The site comprises the existing mill building together with an area of hardstanding and gravelled driveway leading to a parking area immediately to the north of the building, and a trackway running to the west. A sandstone retaining wall runs along the western bank of the river and carries the parking area, trackway and building platform above it. Below the level of the retaining wall there is a narrow strip of vegetated riverbank, together with a vegetated sandbar which has developed within the river channel.

There are no habitats of significant biodiversity value present within the works area, which comprises the existing building and adjacent hardstanding. No trees will be removed and no vegetation clearance is required in order to deliver the development. No landscaping works are proposed.

The River Dee / Afon Dyfrdwy, which lies immediately adjacent to the site, is designated as a Special Area of Conservation (River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid SAC) and as a Site of Special Scientific Interest. The river and the extensive blocks of riparian woodland which adjoin it together offer high-value foraging and commuting habitat for bats, and the river corridor is used by otter (*Lutra lutra*), a qualifying feature of the SAC. The riparian woodland is not within the ownership or control of the applicant.

Bat survey work at the site has confirmed the presence of small numbers of roosting soprano pipistrelle (*Pipistrellus pygmaeus*) within crevice features in the building's external stonework. Six discrete roost features have been identified: three associated with the sandstone blockwork, window and balcony features of the south-west gable (Roosts 1 to 3), and three within the sandstone blockwork of the south-east-facing elevation overlooking the River Dee (Roosts 4 to 6). Each roost comprises a small, separate crevice used by individual or low numbers of bats, and the roosts are considered to represent a series of day roosts used by low numbers of non-breeding soprano pipistrelle, a common and widespread species. The roost locations are shown on Figures 2 and 3 in the Appendix.

Otter spraint was recorded beneath the raised decking at the site during earlier survey work (November 2023), at a time when a weir ran diagonally across the river channel immediately adjacent to the building. The weir was removed by the Environment Agency in 2025, and otter are now able to move freely along the river channel without any need to leave the water and pass along the bank. No evidence of otter was recorded during site visits undertaken in May and June 2026, and no suitable otter holt sites have been identified within or immediately adjacent to the works area.

Japanese knotweed (*Reynoutria japonica*) and Himalayan balsam (*Impatiens glandulifera*) are present on the vegetated bank and sandbar below the sandstone retaining wall, at the water's edge. In addition, a fourth, recently established stand of Japanese knotweed is present within the works area, immediately to the north of the existing decking, at the point where scaffolding is required; this stand will be cut back and contained beneath a root-barrier membrane prior to the erection of scaffolding, as set out within the accompanying Conservation Plan. With that exception, neither species is present within, or rooted beneath, the main works area above the retaining wall. Both species are listed on Schedule 9, Part II of the Wildlife and Countryside Act 1981 (as amended).

Nesting birds have not been recorded within the building.

1.3 Green Infrastructure and Net Biodiversity Benefit

1.3.1 Introduction

Chapter 6 of Planning Policy Wales (PPW) includes key requirements in relation to green infrastructure and net benefit for biodiversity.

PPW requires planning authorities firstly to ensure that development avoids and then minimises impact on biodiversity and ecosystems, and secondly that it provides opportunities for enhancement within areas identified as important for the ability of species to adapt and/or to move to more suitable habitats.

The quality of the built environment should be enhanced by integrating green infrastructure into development through appropriate site selection and use of creative design. With careful planning and design, informed by an appropriate level of assessment, green infrastructure can embed the benefits of biodiversity and ecosystem services into new development and places, help to overcome the potential for conflicting objectives, and contribute to health and well-being outcomes.

A green infrastructure statement should be submitted with planning applications, proportionate to the scale and nature of the development proposed, describing how green infrastructure has been incorporated into the proposal. This document fulfils that purpose for the proposed development at Erbistock Mill and sets out the measures by which the development will deliver a net benefit for biodiversity.

Section 6 of the Environment (Wales) Act 2016 places a legal obligation on public bodies in Wales to 'maintain and enhance biodiversity' whilst carrying out their functions, and Section 7 requires Welsh Ministers to publish and maintain lists of species and habitats of principal importance for the purpose of maintaining and enhancing that biodiversity. Both soprano pipistrelle and otter are listed under Section 7 of that Act.

1.3.2 Net Benefit and the Step-Wise Approach

PPW states 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, locally or nationally, and must work alongside nature; it must provide a net benefit for biodiversity and improve, or enable the improvement of, the resilience of ecosystems.

Planning authorities must follow a step-wise approach to maintain and enhance biodiversity, build resilient ecological networks and deliver net benefits for biodiversity, by ensuring that any adverse environmental effects are firstly avoided, then minimised, mitigated, and as a last resort compensated for. Enhancement must be secured by delivering a biodiversity benefit primarily on site or immediately adjacent to the site, over and above that required to mitigate or compensate for any negative impact.

The proposals at Erbistock Mill have been designed in accordance with this step-wise approach. Importantly, the measures which compensate for the loss of the three roost features on the south-west gable and terrace are distinguished below from those measures which are provided over and above that compensation and which therefore constitute the net benefit for biodiversity.

1.3.3 Step-Wise Approach to the Development – Avoid, Minimise, Mitigate and Compensate

Avoid. The development has been designed to avoid impacts upon biodiversity so far as is practicable. No works are proposed within the channel of the River Dee, and no works are proposed to the bed or banks of the river below the sandstone retaining wall. The riverside walkway which formed part of earlier proposals for the site is no longer proposed. No trees will be removed and no vegetation clearance is required. The three roost features within the lower south-east elevation (Roosts 4 to 6) lie below the extent of the proposed cladding and will be retained in situ and left undisturbed. No new external lighting is proposed anywhere at the site.

Minimise. Where impacts cannot be entirely avoided, they will be minimised. Works affecting bat roost features will be undertaken under a European Protected Species Licence, under the supervision of a licensed bat worker and will avoid the hibernation period between 1st November and 1st March. Exclusion zones will be established around the three stands of Japanese knotweed below the retaining wall, and access to the scaffold will be taken from the south so that operatives and materials do not pass through them.

A fourth stand of Japanese knotweed, which has recently become established within the works area at the point where scaffolding is required, will be cut back and contained beneath a root-barrier membrane prior to the erection of scaffolding, so that it is not disturbed or spread by the works. Pollution prevention, waste management and biosecurity measures will be implemented throughout the construction phase to protect the River Dee corridor. These measures are set out in full within the accompanying Conservation Plan.

Mitigate and compensate. The proposed works would obstruct bat access to, and flight lines from, the roost features on the south-west gable and terrace, resulting in the loss of Roosts 1 to 3. These works will be undertaken under a European Protected Species Licence issued by Natural Resources Wales. The loss of the three roost features will be compensated through the creation of new roosting features within the fabric of the building, and through the provision of tree-mounted bat boxes on retained mature trees which will also serve as a receptor during the licensed works.

1.3.4 Site Enhancements (Net Biodiversity Benefits)

The measures set out below have been designed to deliver a biodiversity benefit on site, over and above that required to compensate for the loss of the three roost features.

The site is a constrained one. It comprises an existing building set on a narrow platform between a trackway and a retaining wall, with limited land available for habitat creation and no landscaping proposed. The opportunities for enhancement therefore lie principally in the fabric of the building itself, in the retained trees and narrow band of vegetation along the trackway, and in the control of an invasive non-native species which currently occupies the riparian margin.

Taken together, the measures set out at Sections 1.3.5 to 1.3.9 result in a net increase in the roosting and nesting resource available at the site, the introduction of nesting provision where none presently exists, and the creation of new deadwood habitat. The proposed development therefore provides a net benefit for biodiversity when compared with the existing situation.

1.3.5 Bat Roosting Provision

The bat roosting provision comprises the retention of existing features, the creation of new crevice features within the stonework, the design of the proposed timber cladding to function as bat roosting habitat, and the provision of tree-mounted bat boxes. All features are shown on Figures 1-3 in the Appendix.

Retained features. Roosts 4 to 6, within the lower south-east elevation, will be retained in situ. These features will not be re-pointed, blocked, enclosed or otherwise obstructed, and will not be illuminated.

Created crevice features in stonework. New crevices will be created within sections of wall that are re-mortared, by inserting timber battens (approximately 2 cm by 5 cm in cross-section) into the wet mortar and removing them before it sets, creating crevices and bat access into the existing stone walls. A total of eight such features will be created: six within the external walls of the south-east elevation and two within the south-west gable. The features will be created at a variety of heights up to the base of the proposed cladding.

Cladding as bat roosting habitat. The proposed timber cladding to the upper elevations will itself provide high-quality bat roosting habitat, functioning as a large wooden bat box. The cladding will be fixed to battens of at least 25 mm to provide a continuous crevice between the wall and the cladding, and will be left open at its base so that bats can crawl behind it. Additional access points will be created higher on the cladding by periodically inserting battens between the overlapping boards, with three such features on each of the four clad elevations – twelve access features in total – at a height of at least 5 m. Where the cladding is to be treated, only timber treatment products approved for use in or near bat roosts will be used.

Tree-mounted bat boxes. Three Schwegler 2F® bat boxes (or similar approved alternative) will be installed on retained mature trees adjacent to the trackway adjacent to the mill, within the applicant's ownership. The boxes will be installed prior to the commencement of works affecting roost features, under the supervision of the licensed bat worker, and will serve both as a receptor during the licensed works and as a permanent enhancement thereafter. The boxes will be installed at a minimum height of 4 m, positioned to avoid a north-facing aspect, and positioned so that the box entrances and the bat flight lines below the entrances are not obstructed by vegetation.

The resulting position is summarised in Table 1 below.

Table 1 – Bat Roosting Features: Baseline and Post-Development Position

Feature	***Number***	***Status***
Roost features identified at the site (baseline)	6	Roosts 1 to 6
Roost features lost	3	Roosts 1 to 3, south-west gable and upper-floor terrace
Roost features retained in situ	3	Roosts 4 to 6, lower south-east elevation
Created crevice features in stonework	8	Six on the south-east elevation; two on the south-west gable
Created access features in cladding	12	Three on each of the four clad elevations, at a height of at least 5 m
Continuous crevice behind cladding	All clad elevations	Cladding fixed to battens of at least 25 mm and left open at the base

Feature	*Number*	*Status*
Tree-mounted bat boxes	3	Retained mature trees adjacent to the trackway
Total roosting features available post-development	26	Comprising 3 retained, 8 created crevices, 12 cladding access features and 3 boxes, together with the continuous crevice behind the cladding

The three confirmed roost features which will be lost are therefore well compensated. Twenty-six discrete roosting features will be available following completion, together with an extensive continuous crevice behind the cladding on all four elevations. This represents a net increase in the roosting resource available to bats at the site.

1.3.6 Swift Nest Boxes

Six swift nest boxes will be provided within the north-west elevation of the building. The boxes will be a Vivara Pro Build-in Swift Box or similar approved equivalent, fixed to the external brickwork with the new timber cladding fitted around each box so that the entrance remains flush, unobstructed and visually unobtrusive.

The boxes will be located at high level on the elevation, immediately below the shelter of the eaves, at a minimum height of 5 m above ground level. The north-west aspect provides suitable conditions, avoiding the strong southerly aspect which can cause boxes to overheat. Each box will have a clear, unobstructed flight path to the entrance, and the boxes will not be illuminated.

Swift boxes of this type are also readily used by house sparrow and other small bird species, and are therefore considered a 'universal bird brick'.

The provision of six nest boxes therefore represents a clear enhancement. The box locations are shown on Figure 3b in the Appendix.

1.3.7 Habitat Piles

Two habitat piles will be created within shaded positions along the trackway to the north of the building, within the applicant's ownership. Locations are shown on Figure 1 in the Appendix.

Dead and decaying wood is of importance to wildlife, including invertebrates and fungi. These habitats can also provide a food source and shelter for birds and other small mammals.

Woody cuttings and larger pieces of wood will be used to create the piles. Quantities of brash, twigs and branches will be stacked together, and the brash is more valuable if tied tightly together in tight bundles before stacking, as this will retain a higher level of moisture. Each habitat pile will measure approximately 1 m x 1 m x 0.6 m and will comprise logs, branches and woody material of varying sizes in order to create diverse microhabitats.

The piles will be provided in shaded locations to allow them to remain relatively moist and to avoid desiccation. Once created, the piles will be left undisturbed to allow colonisation by invertebrates and use by other wildlife, and additional material may be added over time as it becomes available.

1.3.8 Himalayan Balsam Control

Himalayan balsam is present on the vegetated bank and sandbar adjacent to the site boundary, below the sandstone retaining wall. Himalayan balsam is an invasive alien species which grows in dense stands and out-competes native flora. It spreads rapidly by seed dispersal; on contact or slight disturbance of the seed pods the parent plant can catapult seed up to approximately 7 m, and seed is also readily carried by wind and water. Riparian corridors such as the River Dee are a particularly effective dispersal route.

A programme of Himalayan balsam control will be undertaken within the site boundary. The programme will comprise:

- Hand-pulling of Himalayan balsam within the site boundary, undertaken annually between May and July for three consecutive years from the commencement of development.
- Plants will be pulled or cut at ground level and below the first node to achieve the best results, and control will be completed in advance of seeding, which generally occurs between August and October.
- Care will be taken to avoid contact with mature seed pods during the works.
- All arisings will be removed and disposed of appropriately. Arisings will not be composted on site, will not be deposited on the riverbank or within the river channel, and will not be exported from site as untreated green waste.
- A brief written record of each year's control works will be prepared and submitted to Wrexham County Borough Council for each of the three years.

The three stands of Japanese knotweed below the retaining wall lie outside the works area and will be left entirely undisturbed within demarcated exclusion zones for the duration of the construction works. The fourth stand, within the works area, will be cut back and contained beneath a root-barrier membrane to allow the scaffolding to be erected without disturbing it, and will subsequently be eradicated by herbicide treatment under a Japanese Knotweed Management Plan. These measures are set out in full within the accompanying Conservation Plan.

1.3.9 Implementation

All of the measures set out within this document will be fully implemented prior to the first use of the development, with the exception of the second and third years of the Himalayan balsam control programme, which by their nature fall in the two years following completion.

The integral bat roosting features and the swift nest boxes must be built into the fabric of the building during the construction phase and cannot

be retrofitted. Their provision must therefore be taken into account in the construction programme.

The tree-mounted bat boxes will be installed prior to the commencement of works affecting bat roost features, so that they are available as a receptor during the licensed works.

Installation of all features will be undertaken under the supervision of the appointed Ecological Clerk of Works, Richard Roe (BSc, MSc, MCIEEM, CEnv) of Kingdom Ecology Ltd, who will confirm on completion that each feature has been correctly installed and is fit for purpose. This forms part of the Ecological Compliance Audit set out within the accompanying Conservation Plan.

1.3.10 Long-Term Retention and Management

All of the features set out within this document will be retained for the lifetime of the development.

The created crevice features, the cladding access features and the swift nest boxes are built into the fabric of the building and are permanent. They cannot be removed without physical alteration of the building. Responsibility for the retention of all features will rest with the owner of the property.

No active management is required. The following requirements will apply for the lifetime of the development:

- The retained roost features, created crevice features, cladding access features, swift boxes and bat boxes will not be removed, blocked, enclosed, repositioned or otherwise obstructed.
- Entrances to all boxes and features will be kept clear of vegetation and other obstructions so that flight paths remain unobstructed.
- None of the features will be illuminated, and no external lighting will be installed on the riverside elevation or elsewhere at the site other than in accordance with the lighting commitments set out within the accompanying Conservation Plan.
- Where the timber cladding is re-treated during the lifetime of the building, only timber treatment products approved for use in or near bat roosts will be used.
- The habitat piles will be left undisturbed, and material may be added over time as it becomes available.
- Should any of the tree-mounted boxes be lost or damaged, they will be replaced on a like-for-like basis.

Bats and their roosts remain protected under wildlife legislation irrespective of this document, and any future works which would affect the retained or created roosting features would require further consultation with an appropriately qualified ecologist and may require a licence from Natural Resources Wales.

1.3.11 Summary of Net Biodiversity Benefit

Table 2 below summarises the measures proposed and identifies whether each is provided as compensation for a loss, or as an enhancement over and above that compensation.

Table 2 – Summary of Measures and Net Biodiversity Benefit

Measure	***Function***	***Benefit delivered***
Retention of Roosts 4 to 6 in situ	Avoidance	Three existing roost features retained and protected in perpetuity
Eight created crevice features in stonework	Compensation and enhancement	Replaces the three roost features lost and provides five further features
Twelve created access features in cladding, with a continuous crevice behind the cladding on all four elevations	Enhancement	New roosting resource across a range of aspects and heights
Three tree-mounted Schwegler 2F® bat boxes	Receptor and enhancement	Alternative roosting habitat during the licensed works, retained permanently thereafter
Six swift nest boxes on the north-west elevation	Enhancement	New nesting provision for a Section 7 priority species where none presently exists; also suitable for house sparrow and other small birds
Two habitat piles along the trackway	Enhancement	New deadwood habitat for invertebrates, fungi, birds and small mammals
Himalayan balsam control for three consecutive years	Enhancement	Improved condition of habitats adjacent to the riparian margin adjoining the River Dee SAC and reduced seed source for downstream spread
No new external lighting at the site	Avoidance	Dark corridor retained along the River Dee for bats, otter and other nocturnal wildlife

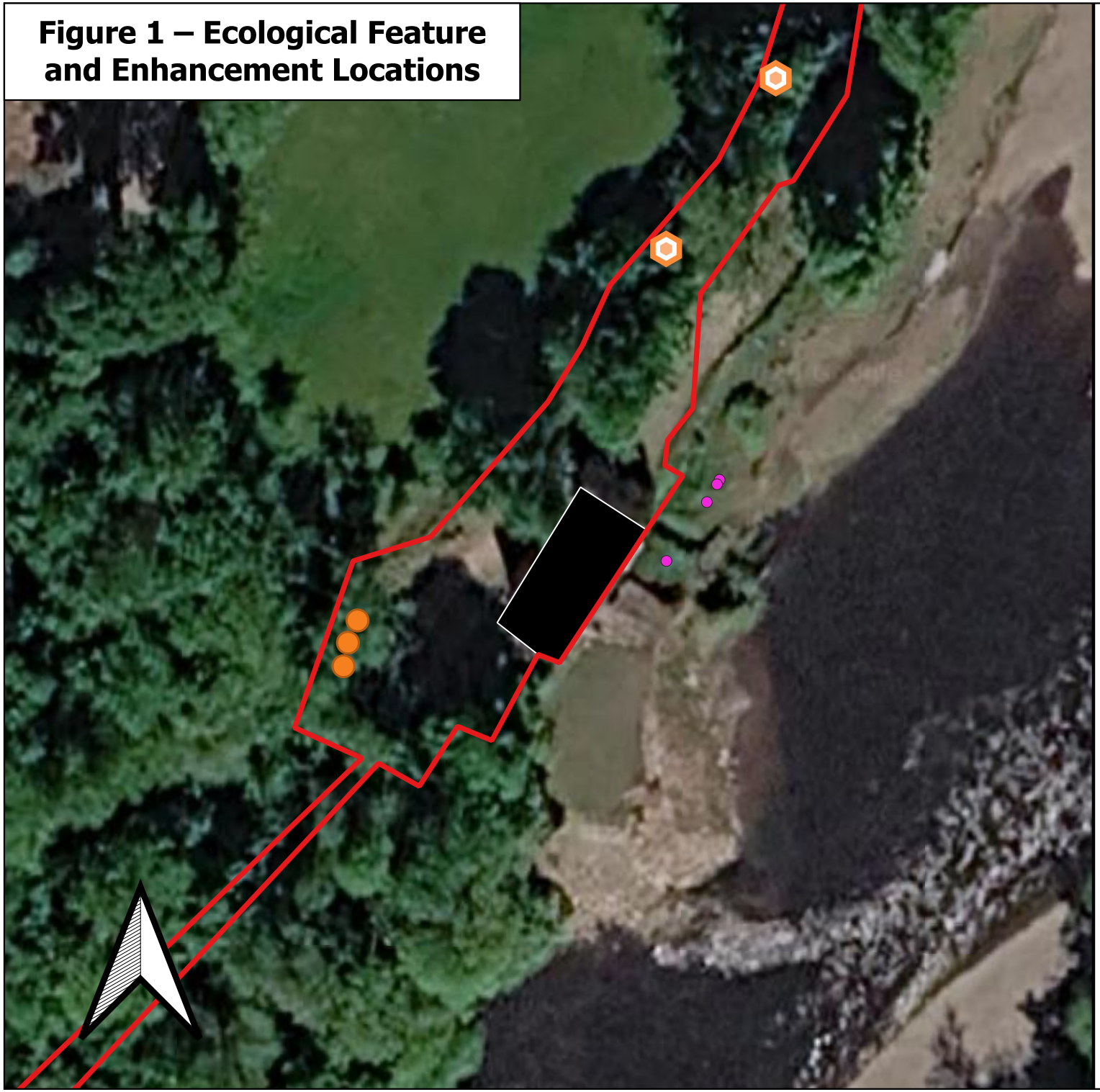
The site currently supports no nesting bird provision, no deadwood habitat, and a riparian margin degraded by the presence of an invasive non-native species. Following implementation of the measures set out above, the site will support net increase in discrete bat roosting features together with an extensive continuous crevice behind the cladding, six swift nest boxes, two habitat piles, and management of habitats adjacent to the riparian margin subject to an active programme of invasive species control.

Taking the above into account, the proposed development will deliver a net benefit for biodiversity when compared with the existing situation at the site, in accordance with the step-wise approach set out in Planning Policy Wales and with the requirements of Condition 4 of planning permission P/2025/0848.

Upon approval of this Net Biodiversity Benefit Plan by Wrexham County Borough Council, all measures will be implemented in accordance with the approved details and will be retained thereafter for the lifetime of the development.

Appendix

Figure 1 – Ecological Feature and Enhancement Locations



KEY

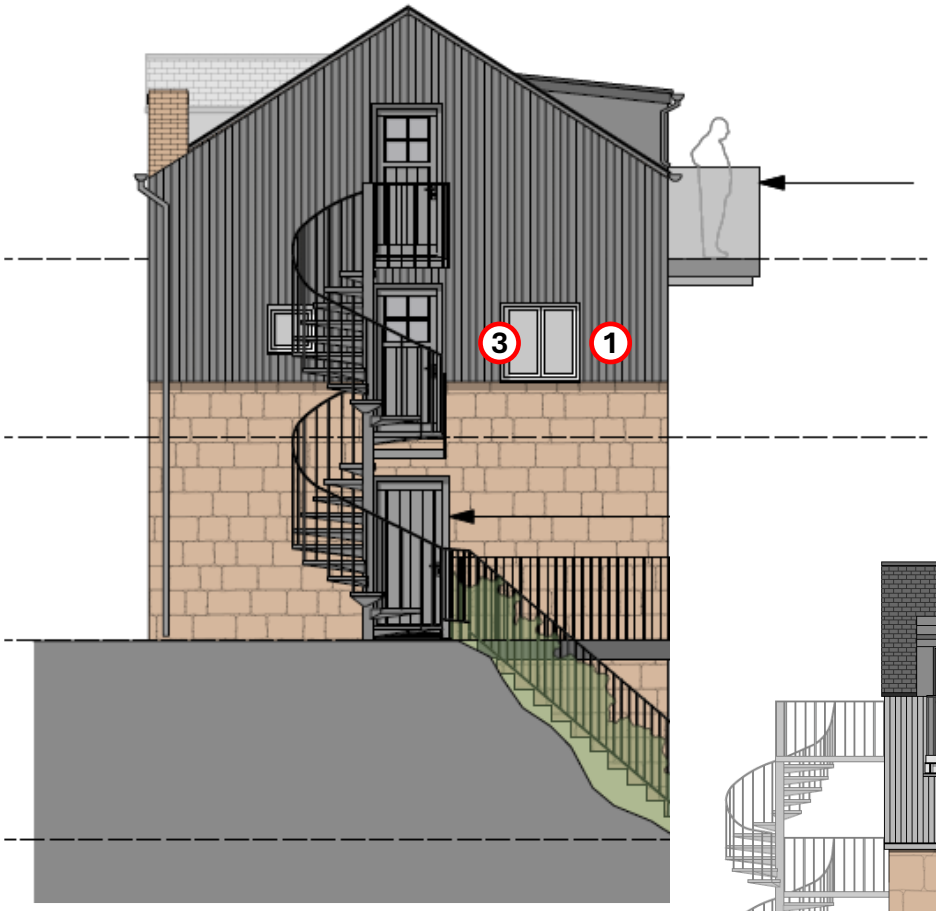
- Red Line
- Tree Box Location
- Building
- Japanese knotweed

See Figures 2 and 3 for Bat Roosting and Bird Box Features installed on Building exterior

0 10 20 30 m

Map data ©2026 Google

Figure 2- Retained and Impacted Bat Roosts



Southwest elevation

Roost lost with number

Roost retained in situ with number

Southeast elevation

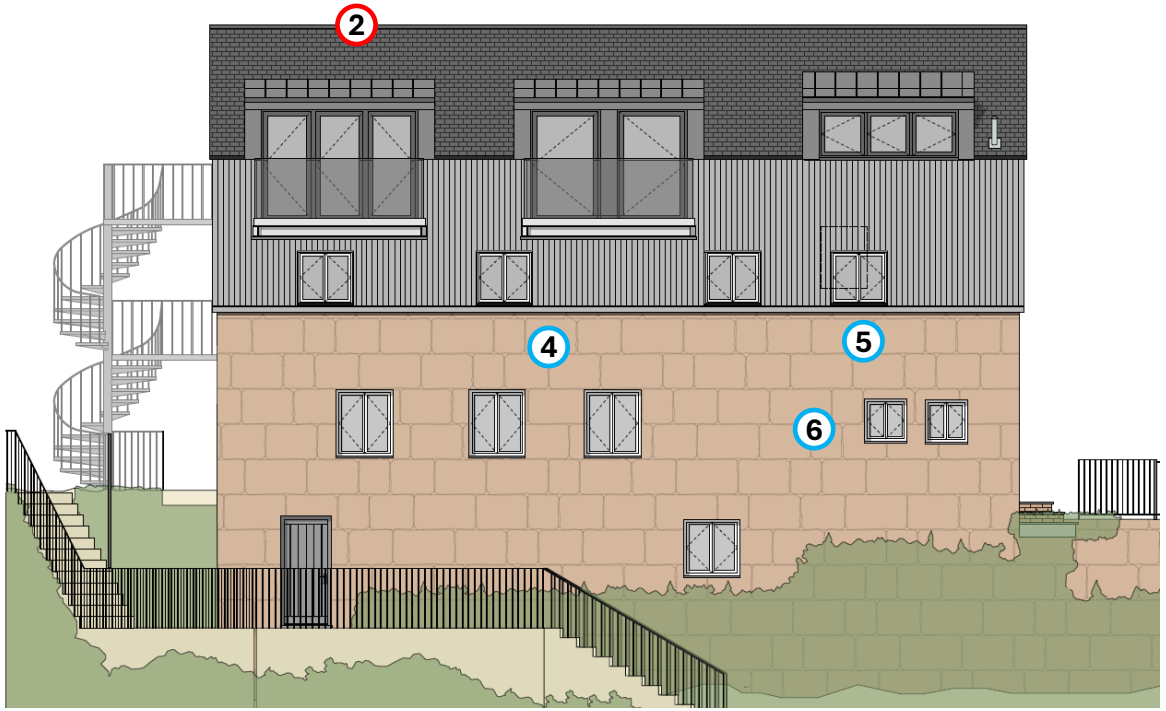
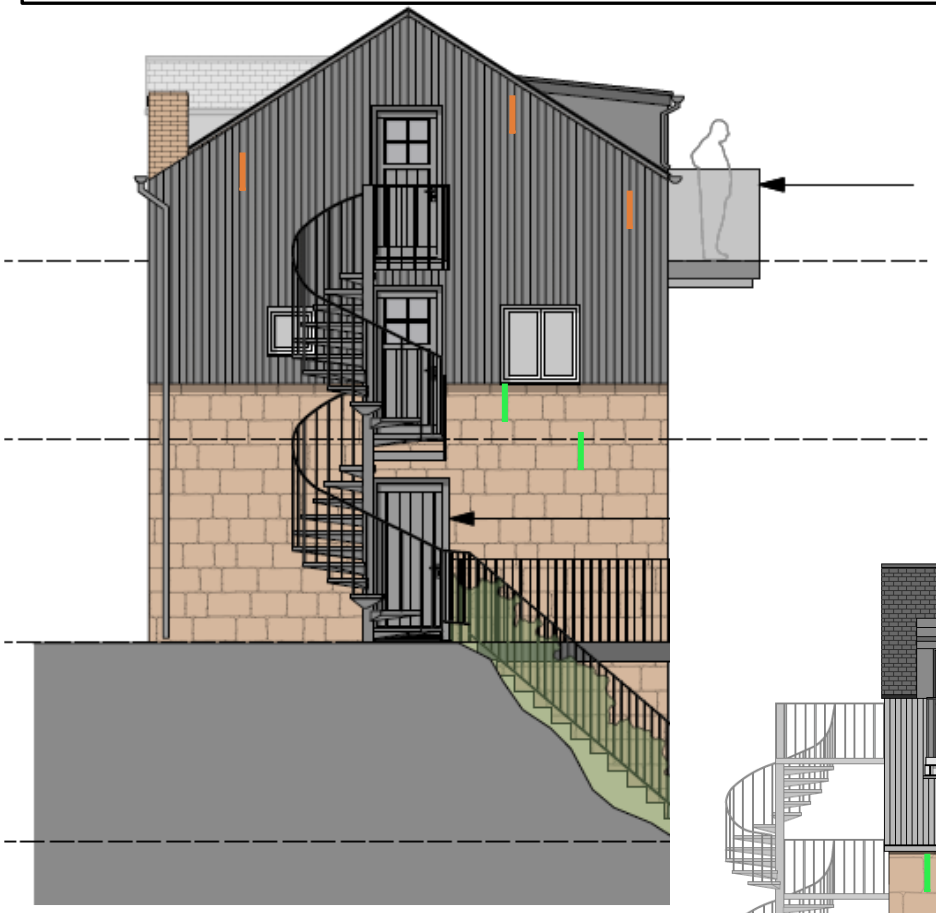


Figure 3a – Mitigation and Compensation: South-West and South-East Elevations



Southwest elevation

Roost retained in situ with number

Crevice features in sandstone blocks (x8)

Crevices between over lapping wooden cladding (x 3 per face)

Southeast elevation

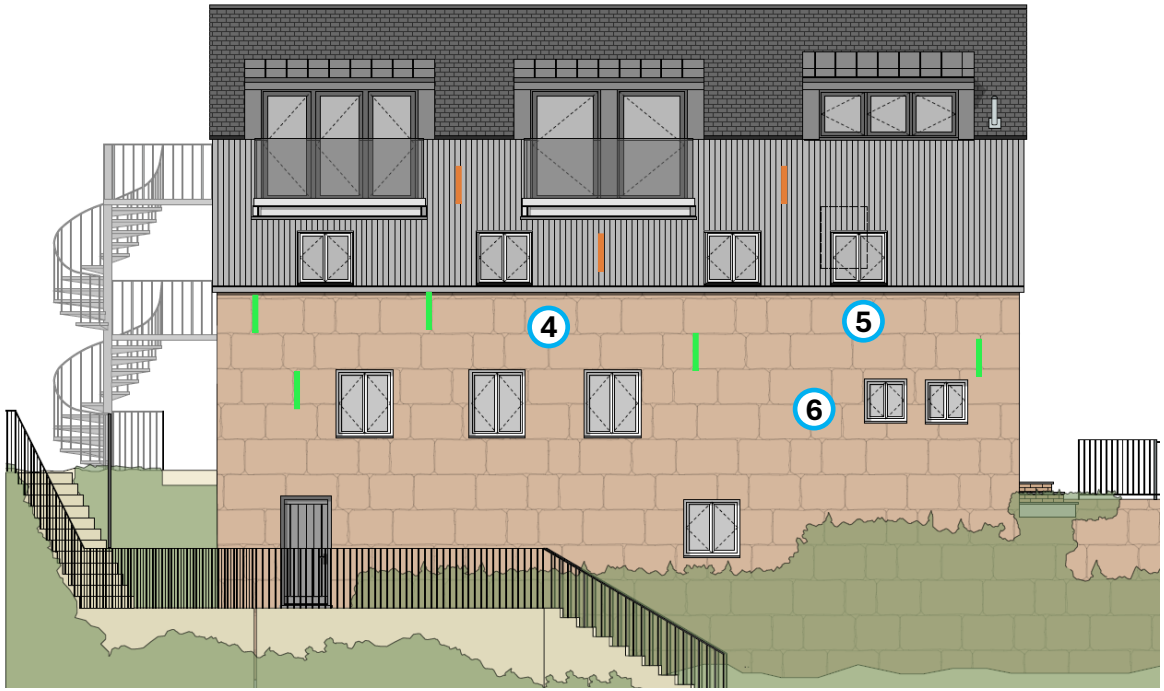


Figure 3b – Mitigation and Compensation: North-East and North-West Elevations



North east elevation

Roost retained in situ with number

Crevices between over lapping wooden cladding (x 3 per face)

6 x Swift Boxes

North west elevation

