

Date: June 2025 (VS 1)



## 2 CHESTER STREET, WREXHAM

GREEN INFRASTRUCTURE STATEMENT AND  
NET BIODIVERSITY BENEFIT

**above**  

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**zero**

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## 1.0 Introduction

### Context

- 1.1. This Green Infrastructure Statement has been prepared in relation to Chapter 6 of the updated Planning Policy Wales (PPW) Version 12 includes key changes to planning policy in Wales including green infrastructure and net benefit for biodiversity. The report is intended to support a full planning application made to Wrexham County Borough Council for the development of 27 dwellings within a single block at 2 Chester Road, Wrexham, LL12 7AD.

### Background to PPW Version 12

- 1.2. The updated PPW requires planning authorities to firstly 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 (Para 6.2.8).
- 1.3. 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 (PPW, Para 6.2.11).
- 1.4. A green infrastructure statement should be submitted with all planning applications. This must be proportionate to the scale and nature of the development proposed and will describe how green infrastructure has been incorporated into the proposal (PPW, Para 6.2.12).

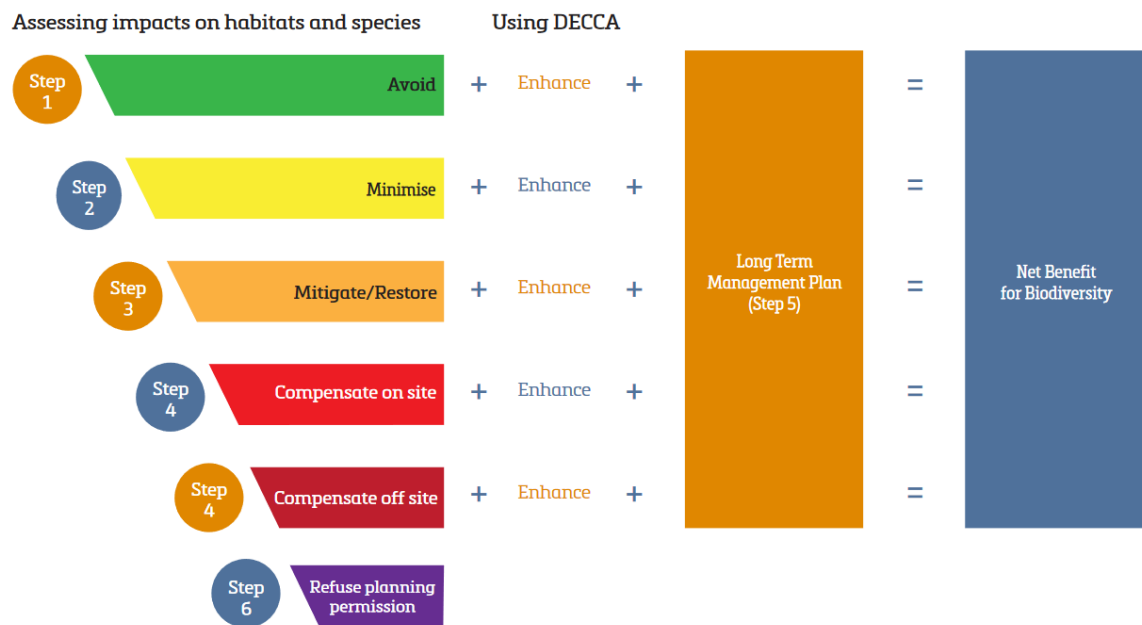
### Net Benefit and the Step-Wise Approach

- 1.5. The updated 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 and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems (PPW, Para 6.4.5)

- 1.6. 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 minimized, 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 (PPW, Para 6.4.11).
- 1.7. The stepwise approach requires the design of a development to follow the mitigation hierarchy whereby the proposals should initially avoid damage to biodiversity; where this is not possible, proposals should minimise the impacts on biodiversity through appropriate locational, siting and design options. Where measures to minimise impact on biodiversity and ecosystems could still result in damage or loss, the proposed development should mitigate that damage. Where like for like mitigation measures are not possible, it may be necessary to consider on site compensation measures in the first instance. As a last resort, off-site compensation for unavoidable damage must be provided. Figure 1 below is taken from the updated PPW and shows a summary of the 'Step-Wise Approach'.
- 1.8. As part of the development proposals, the application has considered recent changes within PPW 12 including adoption of the 'step-wise' approach to retention and incorporation of green infrastructure within the development and to enable the development to deliver a net benefit for biodiversity.

Figure 1- Step-Wise Approach Summary





## 2.0 Summary of Existing Habitats

### Overview

- 2.1. The proposed development at 2 Chester Road, Wrexham is for 27 new dwellings contained within one new building, electrical substation, car parking, access and green spaces. The site covers an area of approximately 0.17 hectares; the building footprint covers approximately 525m<sup>2</sup>.
- 2.2. The site (central grid reference SJ 33631 50682) is with the urban area of Wrexham approximately 600m north of the city centre. The site is surrounded by large commercial, educational and residential buildings as well as smaller more traditional two storey residential dwellings with front and rear gardens.
- 2.3. The site is accessed from Chester Road (A5152). The road flanks the western boundary. Public green space adjoins the site to the south and east. These green spaces contain a stone war memorial, hard standing, improved grassland and mature trees. Species include willow, sycamore, red oak and elm. The land to the south and east is higher than the site and retained with an existing brick boundary wall. A tall, 2-3m high, brick boundary, non-retaining wall forms the northern boundary.
- 2.4. A Preliminary Ecological Appraisal (PEA) was carried out by TEP (December 2024). The PEA identified five no. Statutory Wildlife Sites of International significance within 10km of the site and five no. Statutory Wildlife Sites of national significance within 5km of the site. However the report concluded that:

*'All designated sites are located at least 1km from the site and have no impact pathways relevant to the site or the proposed nature of the works, particularly given the urban setting of the site. No anticipated significant effect would arise upon these statutory wildlife sites, and they are therefore scoped out from further assessment'.*

- 2.5. The site was a former chapel and predominately made up of a large chapel building and associated hardstanding for access and car parking apart from a prominent, mature purple beech tree in the very south of the site. The site contains very little green space. Since the building has been demolished and the site left delict for a number of years some natural colonisation has taken place in the form of neutral grassland, scattered scrub and tall forbs. These are described in more detail below

### Preliminary Ecological Appraisal (PEA)

- 2.6. As described above a Preliminary Ecological Appraisal (PEA) for the site was carried out in December 2024 by TEP. The report also accompanies the planning application. A summary of findings is copied below:

- *The site does not fall within or adjacent to any designated wildlife sites.*

#### *Important Ecological Features*

- *The site has limited ecological value and does not provide suitable habitat for any protected or notable species beyond birds and hedgehogs.*
- *A line of mature trees immediately outside the eastern boundary provides some habitat connectivity for commuting bats and birds.*

#### *Recommendations*

- *Replacement shrub and herbaceous planting and sowing diverse seed mixes in amenity areas would increase the biodiversity of the site.*
- *Where avoidance of the nesting period is not practicable (typically taken to be March to August inclusive), a nesting bird check must be carried out by an ecologist no more than 24 hours prior to the works;*
- *A sensitive lighting scheme should be implemented to avoid adverse impacts to bats.*
- *A PWMS is recommended to avoid adverse impacts to hedgehogs.*

## Habitats

- 2.7. Sections of neutral grassland with secondary habitat, the largest being scattered scrub with *Buddleia davidii*, Willow *Salix* sp., Downy Birch *Betula pubescens* and occasional Sycamore- *Acer pseudoplatanus* and Field Maple- *Acer campestre*, the latter occupying a section along the western boundary line (TN1). A single mature Beech *Fagus sylvatica* tree occupies the southern corner of the site close to the road.
- 2.8. The eastern part of the site consisted of ephemeral/short perennial habitat with sloping, uneven ground (TN3). Tall ruderal species and herbs were starting to grow through but were sparse. Species included an abundance of Creeping Buttercup *Ranunculus repens* with frequent instances of Ivy and Nettle *Urtica dioica*. Occasional species included *Buddleia*, Rosebay Willowherb- *Chamaenerion angustifolium* and Bramble- *Rubus fruticosus* agg. with Yarrow- *Achillea millefolium*, Pendulous Sedge- *Carex pendula*, Dogwood- *Cornus sanguinea* and Ribwort Plantain *Plantago lanceolata* becoming rarer.
- 2.9. The northern section and a linear strip near the western boundary comprise of tarmac hard standing with vegetation largely confined to the north wall. Species included Ivy *Hedera helix* and isolated stands of Cherry *Prunus* sp., Holly- *Ilex aquifolium* and Snowberry- *Symphoricarpos albus* (TN2).

### 3.0 Avoid, Minimise, Mitigate

- 3.1. Wherever possible, the proposed development has avoided impacts upon identified key habitat features on site. Development proposals will retain the mature purple beech tree in the south of the site.
- 3.2. The development will not adversely affect any designated sites.
- 3.3. The area of hard standing and building will be recreated on site as per the former use, but in the form of a modern residential building with car parking areas. This provides the opportunity to provide a richer diversity in habitats and create a biodiversity benefit that can be tied into an agreed landscape management plan. Soft Landscape proposals are described below.

#### Landscape Proposals

- 3.4. Landscape proposals are shown on Above Zero drawings and appended to this report. References are as follows:
  - 123.01.01A- Landscape General Layout Plan
  - 123.01.02A- Planting Schedules
  - 113.01.03- Planting Specification
  - 113.01.05- Ecological Enhancement Plan
- 3.5. Green infrastructure and the step-wise approach have been an integral part of the design development progress. The rationale is improve on-site biodiversity with higher quality habitats and increase connectivity to greenspace in the wider landscape for the benefit of wildlife. This has been achieved by incorporating the following habitats into the development proposals:

#### Tree Planting

- 3.6. 4no. standard trees (Sorbus aria 'Magnifica') will be evenly planted on the north east boundary. The trees have been proposed where space allows for the trees to establish and mature into their natural shape and appearance.

- 3.7. The trees will offer a green connection with the existing green space and trees to the east of the site. The trees will be planted as heavy standard nursery stock. Species have been chosen as a cultivar of a native tree to the British Isles suitable for an urban environment, (which are experiencing hotter, drier conditions) as well as being suitable for the conditions within the site.
- 3.8. Sorbus aria have clusters of red berries (pomes) that ripen by late summer and are an excellent source of food for birds. The trees also produce an abundant of flowers in late spring. The tree has been identified as 'Plants for Pollinators' by the Royal Horticultural Society (RHS).

#### Hedgerow Planting

- 3.9. 54 linear metres of mixed species native hedgerow planting will be provided as part of the development. The species will include, hawthorn, holly, honeysuckle, guelder rose and dog rose. 23 linear m of ornamental hedgerow has been provided to the site frontage onto Chester Road. The hedgerow species has been informed by the Dwr Cymru/ Welsh Water species suitable for planting near to adoptable sewers
- 3.10. The hedgerow will provide connectivity north-south through the site, shelter and food for birds and hedgehogs and a further green connection with the existing green space to the east.
- 3.11. Hedges will be allowed to mature and then faced and topped annually early in the spring (outside nesting bird season) and therefore will provide a source of shelter and food for birds over the winter.

#### Water and Wetland

- 3.12. Water falling on the building will be directed into 2 no rain gardens within the site. The rain gardens will have slight depressions to allow water to temporarily pool before infiltrating into the soil and/or being used by plants. Plant species have been chosen which can tolerate differential soil saturation levels.

#### Wildflower and Grass Meadows

- 3.13. Approximately 270m<sup>2</sup> of wildflowers and grasses will be provided and managed as species rich grassland. Construction methods will be provided to ensure these areas are prepared with material and soil of low-fertility. This will restrict aggressive grasses and perennial 'weeds' dominating the meadow and promoted diversity.

#### Ornamental Planting

- 3.14. Approximately 58m<sup>2</sup> of ornamental planting will be provided. This will consist of shrubs grass and herbaceous perennial plants. Areas will be planted with a mix of perennials to provided pollen for insects and bees and also as food source for invertebrates.

#### Bird and Bat Boxes

- 3.15. 2no. bat boxes are proposed for installation into new buildings. These will comprise of Vivara Pro Build-in WoodStone Bat Boxes The bat boxes will be installed on the south face of the building. The bat boxes should be installed immediately below the building's eaves, and as high as possible. Bat boxes will be located at a minimum height of 4 m.
- 3.16. 2no. bird boxes are proposed to be installed within the buildings. These will comprise of Bird Brick Houses Sparrow Terraces and Schwegler Swift Bricks. Both boxes can be used by other small bird species so are considered a 'universal bird brick'.
- 3.17. The Swift and Sparrow boxes will be installed on the north face of the building. The Swift and Sparrow boxes would be installed immediately below the building's eaves, and as high as possible. Boxes will be located at a minimum height of 5 m.
- 3.18. Both the bat and bird boxes to be installed within the buildings are integral boxes which must be built into the brickwork of the housing. Therefore, the boxes

cannot be retrofitted and so must be considered during construction of each house.

- 3.19. 1no. tree mounted Schwegler 1FF bat box is proposed to be positioned on the retained mature tree located on the site. The box would be installed at a minimum height of 4m, positioned to avoid having a north facing aspect, and positioned so that the bat box entrance and bat flight lines below the entrance are not obstructed by vegetation (this may require some twigs and young branches to be removed within at least 1m beneath the bat box entrance).
- 3.20. The locations of all bat and bird boxes will be checked following installation by an appropriately qualified ecologist.”

#### Management and Maintenance

- 3.21. It is anticipated that soft landscape proposals and habitats will be managed and maintained under an agreed Landscape and Habitat Management Plan. This will include short and long-term habitat management objectives and proposals for the site.

## 4.0 Overview

- 4.1 The existing site contains little diversity and ecological interest and is principally made up of neutral grassland, scattered scrub and tall forbs. As described and illustrated, the development proposals offer the opportunity to provide a variety of landscape and habitat features that will increase the range and diversity of habitats on site and maximise the biodiversity benefits. Habitats on site will help connectivity across the site and interlink with green open spaces and habitats immediately adjacent to the site and in parks and gardens in the wider urban area. Habitats can be created, established and maintained through the provision of a Landscape and Habitat Management and Maintenance Plan.



## Appendices

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