

Green Infrastructure Statement

**Proposed dwelling at land adjacent to Mill House, Mill Lane, Castleton. Newport. CF3 2UT.
Reference WA.454.**



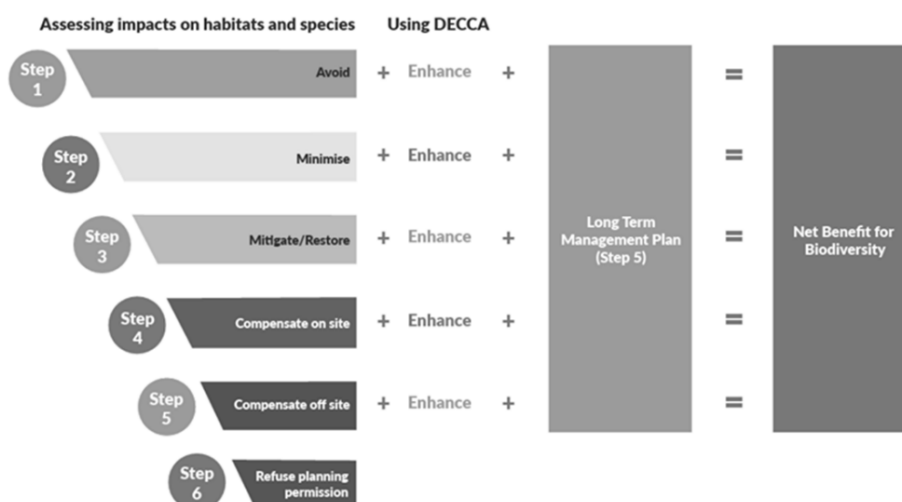
Proposed dwelling Computer Generated Image.

1.0 Introduction

The design for the development has used a holistic approach, incorporating ecological enhancements. The design was informed by the latest version of Planning Policy Wales, edition 12. Section 6 of PPW includes commentary relating to green infrastructure and how it can be integrated into developments, which should be protected and enhanced. A proactive approach to green infrastructure and biodiversity should be adopted to help reverse the decline in biodiversity and increase the resilience of ecosystems.

Paragraph 6.21 of Planning Policy Wales defines green infrastructure as *“the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places. Component elements of green infrastructure can function at different scales and some components, such as trees and woodland, are often universally present and function at all levels. At the landscape scale green infrastructure can comprise entire ecosystems such as wetlands, waterways, peatlands and mountain ranges or be connected networks of mosaic habitats, including grasslands. At a local scale, it might comprise parks, fields, ponds, natural green spaces, public rights of way, allotments, cemeteries and gardens or may be designed or managed features such as sustainable drainage systems. At smaller scales, individual urban interventions such as street trees, hedgerows, roadside verges, and green roofs/walls can all contribute to green infrastructure networks.”*

The development follows the Stepwise Approach set out in paragraph 6.4.21:



2.0 The site

The application site is of grassland, sloped grassland leading down the boundary brook to the North and a boundary hedgerow following Mill Lane to the South-West. A tree report and Tree Constraints Plan prepared by Treescene identifies the boundary hedge as G1.

Existing green infrastructure within the wider area comprises of the brook, grassland and tree groups.

3.0 Stepwise approach

The site layout was developed to minimise habitat loss and prioritising space for GI assets. Potential damage to on-site GI assets was mitigated with the production of a tree survey to assess and evaluate existing green infrastructure.

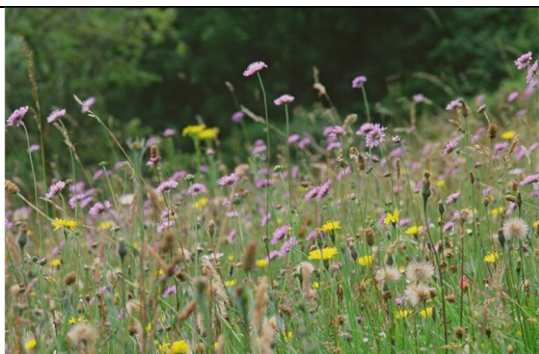
The table below sets out the stepwise approach in assessing impacts of a development on biodiversity.

	Steps	Assessment	Enhancement	Long Term Management Plan	Net Benefit for Biodiversity
1.	Avoid	N/A	1no. House Sparrow Nest Box	Cleaning and repairing.	YES
2.	Minimise	Approx 4.4m length of hedgerow would be lost to accommodate the entrance access. This will be mitigated by planting boundary hedgerows to the East and West site perimeter.	2no. Bat box	Cleaning and repairing.	YES
3.	Mitigate/ Restore	N/A	Pollinator friendly shrubs, ornamental plants and flowers.	Garden maintenance.	YES

4.	Compensate on wider site	N/A	Native hedgerows to both West and East boundaries.	Garden maintenance.	YES
5.	Compensate off site	N/A	Hedgehog Home	Cleaning and repairing.	YES

4.0 Proposed Enhancements

Given the scale of the proposal, it is considered that the provision of a house sparrow nest box, 2no. bat box, hedgehog home, pollinator friendly planting and native boundary hedgerows will provide adequate ecological enhancements.

Enhancement	Description	Example
House Sparrow Nest Box	Provides three separate nest boxes in one timber terrace, each with its own 32mm entrance hole. The box will be placed directly below the eaves on the side elevation facing east to avoid it getting too hot or wet and ideally not over a window. After the end of each breeding season, all nest boxes should be taken down, old nesting materials removed, and the box should be scalded with boiling water to kill any parasites. Annual cleaning should only be carried out at the end of the breeding season, from late September to February. Under <u>the terms of the Wildlife and Countryside Act 1981</u>, if unhatched eggs are found in the box, they can only legally be removed from October to January inclusive, and they must be destroyed – it is illegal to keep them. www.wildlifetrusts.org	 RSPB Sparrow terrace nest box. https://shopping.rspb.org.uk/bird-feeders-boxes-tables/bird-houses-nest-boxes
Pollinator friendly planting to amenity areas.	Three small trees of hazel, rowan or silver birch will provide habitat and early pollen. The new trees will be maintained in an appropriate manner; any diseased trees or trees that die will be removed and replaced within five years.	

	Shrubs of dog rose, guelder rose and honeysuckle will provide pollinator friendly blooms. Herbaceous perennials will be planted in clusters of three to five. Early spring – primrose, red campion, ajuga. Summer – Field scabious, oxeye daisy, Bird’s-foot Trefoil. Autumn - Common Knapweed, Devil’s-bit Scabious, yarrow. Clover sown within the lawn will elongate the bee season. Bulbs of bluebells, crocus and snowdrop planted in autumn ensures an early pollinator boost. Appropriate neutral wildflower seed mixes will be sown to the rear sloped area near the brook. All plant stock will be of British native origin. Planting will be undertaken during the autumn to allow seedling roots to establish over the winter. The brook will be maintained and safe exit points will be established for wildlife.	
Hedgehog Home	The hedgerow boundaries will allow hedgehogs to move freely through the site to neighbouring properties and the wider countryside to the rear. A hedgehog home will be placed against the East hedgerow boundary to the rear amenity of the site with the entrance facing South/ West to avoid cold Winter winds. After winter use, late March/early April, the house can be cleaned if there is nobody in residence (though they will also get reused if left alone).	RSPB Hedgehog home https://shopping.rspb.org.uk/wildlife-friendly-garden/wildlife-habitats/hedgehog-houses/rspb-silhouette-hedgehog-home.html  Example of pre-made home (above) but a design guide is provided by The British Hedgehog Preservation Society https://www.britishhedgehogs.org.uk/hedgehog-homes/

2no. Bat boxes	The bat boxes will be placed high under the eaves of the house. Once installed, the box will require no maintenance. Bat roosts cannot be legally disturbed without a licence. Bats are a Schedule 1 protected species under the Wildlife & Countryside Act, therefore it is illegal for any member of the public to disturb a roost, handle or kill any bat. Bat boxes, therefore, must only be inspected by licensed bat workers.	RSPB Double chamber bat box 
Native boundary hedgerow to the East and West perimeters.	Hedgerow to be planted in a double staggered row to provide shelter to wildlife. At least 40cm will be left between each row and that 4-6 plants are planted per metre. Any plants that die in the first few years may need to be replaced to prevent gaps developing. Small hedging whips to be slot-planted to ensure minimal disturbance to any tree roots.	Native species such as hawthorn, hazel, holly, blackthorn, guelder rose. Locally sourced and of appropriate local provenance. Plants grown from indigenous, preferably local, seeds or root stocks. These will be adapted to local conditions and will be more likely to establish successfully.

The proposed dwelling at land adjacent to Mill House, accords with the stepwise approach set out in the published advice. The proposal provides an ecological enhancement proportionate to the scale of the development. The proposed enhancements are a net benefit to biodiversity as a result of the development. Should the scheme be acceptable to the Local Planning Authority, the landscaping design will be developed, detailed and specified by a suitable consultant to enhance both site ecology, biodiversity and the proposed dwelling.