



Preliminary Ecological Appraisal

Ty'n Yr Heol House, 1 Henfaes Road, Tonna, SA11 3EQ

A report for Emily Byrne

December 2024

Report Reference: 318/R2/2024/V1

Rev No.	Status	Author	Date
1	Draft for Review	CG	19/12/2024

1.0 Introduction

- 1.1** Herdwick Ecology was commissioned by Emily Byrne to undertake a Preliminary Ecological Appraisal (PEA) at Ty'n Yr Heol House, 1 Henfaes Road, Tonna, SA11 3EQ (Grid Reference: ST76919860) in May 2023, updated in August 2024. The proposals will comprise a new residential development.
- 1.2** This report has been prepared to support a planning application to Neath Port Talbot County Borough Council (NPTCBC) and aims to:
- Describe and evaluate the habitats present within the study area;
 - Collate relevant biological records and assess their significance;
 - Identify any protected species issues or potential issues that may exist;
 - Assess possible ecological constraints to development and make recommendations for net gain or mitigation opportunities in line with relevant planning policy, legislation and other published guidance; and
 - Set out a Green Infrastructure Statement.
- 1.3** This report has been prepared by Ceri Griffiths, director at Herdwick Ecology, who is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Reference is made to CIEEM Guidelines for Preliminary Ecological Appraisal¹ and BS 42020:2013 Biodiversity - Code of practice for planning and development². It provides an update to the initial PEA that was prepared to support the pre-application in June 2023.

2.0 Legislation and Planning Policies

- 2.1** In carrying out this assessment relevant legislation and planning policies were consulted and include:
- Conservation of Habitats and Species Regulations 2017 (as amended);
 - Wildlife and Countryside Act 1981 (as amended);
 - The Environment (Wales) Act 2016
 - Planning Policy Wales (PPW) 11th Ed. February 2021
 - Technical Advice Note 5 (TAN5) Nature Conservation and Planning 2009
 - Supplementary Planning Guidance SPG15 (Biodiversity and Geodiversity)
 - Local Development Plan (LDP): NPTCBC LDP (2011-2026)

¹ CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal* (2nd. Ed.) CIEEM

² BSI (British Standards Institute) BS4202:2013 *Biodiversity – A code of practice for planning and development*. BSI, London.

3.0 Methodology

Data Search

- 3.1 The South East Wales Biological Records Centre (SEWBRc) was contacted in May 2023 to request records for priority and notable species and locally designated sites for within 1km of the site. Non-statutory designations are also commonly referred to in planning policies as local wildlife sites, although this sites are generally considered to be of County level importance. designations are In Neath Port Talbot, these designations are known as 'Sites of Importance for Nature Conservation' (SINCs). In addition, Ancient Semi Natural Woodland (ASNW) should also be considered where the woodland is not covered by any other designations, together with Neath Port Talbot Watercourses that are covered by a generic designation for those that retain a predominantly natural form i.e. are not culverted.
- 3.2 In addition, an online data search was undertaken using MAGIC³ and NBN Gateway⁴.
- Internationally designated sites within 10km⁴
 - Nationally designated sites within 2km⁴
- 3.3 This data can provide important contextual information to gain an understanding of the site and surrounds. In addition, the NPTCBC planning portal was reviewed for nearby applications that may have been supported by detailed ecological surveys.

Preliminary Ecological Appraisal

- 3.4 The site was surveyed on 4th May 2023 by Ceri Griffiths, Director of Herdwick Ecology, with full membership of Chartered Institute of Ecology and Environmental Management (CIEEM). Weather conditions were dry, overcast with a temperature of 7°C. Habitats and obvious features within the site were assessed following the Joint Nature Conservation Committee's Phase 1 Habitat Survey Method⁵ (JNCC, 2010) as amended in 1995 by the Institute of Environmental Assessment⁶ (IEA, 1995) The potential for the site to support protected or notable species was also assessed. The survey was updated in August 2024 to confirm the condition of the habitats.
- 3.5 Where access allowed, adjacent habitats were also considered in order to assess the site within the wider landscape, and to provide information with which to assess possible impacts of the proposed development.

³ <https://magic.defra.gov.uk/>

⁴ <https://nbnatlas.org/>

⁵ JNCC 2010. *Handbook for Phase 1 Habitat Survey*. Joint Nature Conservation Committee, Peterborough

⁶ IEA 2015 *Guidelines for Baseline Ecological Assessment* Institute of Environmental Assessment

Preliminary Roost Assessment

- 3.6 The perimeter of the building and structures across the site were systematically inspected, and the exterior assessed, with the aid of binoculars (Pentax 10 X 36) and high powered torch, where necessary. A description of the building was made, and the location of any potential access points or roost locations were noted. These included:
- Suitable cracks and crevices within stone or brick work;
 - Suitable access points via head of gable end and within lintels and gaps around windows
- 3.7 The surrounding habitat was also assessed for its suitability for foraging and commuting quality.
- 3.8 Following the inspection, an assessment was made of the building's suitability to support a bat roost, following the criteria set out in Table 3.1 below.
- 3.9 In addition, the trees were also assessed for their potential to support bats. This involved a ground based assessment using high powered torch and binoculars to look to features that could be used by bats such as: woodpecker, knot & rot holes, hazard beams, cracks and hollows, dropped branches etc.

Table 3.1 Suitability Assessment⁷

Suitability	Roosting Habitat
Negligible	Negligible features identified on the building or tree likely to be used by roosting bats.
Low	A building or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats
Moderate	A building or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status
High	A building or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

- 3.10 In many situations it is not possible to inspect all locations where bats may be present, or any bats that may be present, may not be visible at the time of the survey. Hence, an absence of bats does not

⁷ Collins, J (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd. Ed.) The Bat Conservation Trust, London (p.35)

necessary mean that a roost is not present and further activity surveys may be required to confirm presence or absence.

4.0 Baseline Conditions

Site Location

- 4.1 The site is situated in the village of Tonna, to the north-east of Neath. It is located to the south of Henfaes Road, along which are numerous residential properties of varying construction and age. A residential development, constructed in the 1990s, lies immediately to the south. The River Neath lies 140 to the northeast, beyond which lies the A465, 400m from the site. The wider landscape comprises agricultural land predominately of pasture, with large swathes of woodland and scattered trees.



Plate 1: Site Location (Google, May 2023)

Data Search

Statutory Sites

- 4.2 There are no statutory designated sites within 2km of the site boundary, with the closest site - Fforest Goch Bog Special Scientific Interest (SSSI) lying 4,4km to the north. This site is designated for its lowland raised bog and marshy grassland habitats and associated species.
- 4.3 The Crymlyn Bog Ramsar Site, Special Area of Conservation (SAC) and underlying Crymlyn Bog SSSI lies 6.7km to the southwest. This site is the largest example of valley floodplain topogenous mire in South Wales, and one of the largest surviving fens in the west of Britain. The site supports a substantial

population of the nationally rare slender cotton-grass *Eriophorum gracile*, 199 vascular plant species including 17 regionally uncommon and one nationally rare and a rich invertebrate fauna including many rare and highly localised species.

Non-statutory Sites

- 4.4 There are no SINC within or immediately adjacent to the site boundary. However, there are six within 1km of the site, together with NPT ANSW within 96m and watercourses (blanket designation). The SINC are listed in Table 4.1 below

Table 4.1 Non-Statutory designated sites within 1km of the site

Designation	Distance from Site	Reason for Selection
Neath Canal	134m north & northeast	H13: Standing open water & canals. The Neath Canal supports outstanding aquatic and emergent flora. . Areas of wet grassland and carr woodland form adjacent habitat, together with brownfield and industrial sites
Neath Estuary	354m North & northeast	H4:1 Coastal and floodplain grazing marsh; H12:1 Rivers; H18:1 Coastal saltmarsh; H18:2 Intertidal mudflats As well as the River Neath itself, the Neath Estuary site includes a variety of wetland habitats . It forms the central core of wetland habitats SINC's running along this length of the River Neath. Contiguous SINC sites include both the Neath and Tennant Canals, Catwg Wetland, Square Pond, Crymlyn Burrows and Baglan Bay.
Tennant Canal	446m north	H13: Standing open water & canals. The canal supports exceptional aquatic and emergent flora and links to the Crymlyn Bog SAC.
Catwg Wetland	432m north	H1:4 Scrub communities; H9:4 Reedbed A narrow site on the floodplain of the Neath Valley, sandwiched between the Neath Canal and the Heads-of-the-Valleys-Road to the south-east side of Cadoxton Juxta-Neath. The soils comprise alluvial clay, silt, sand and gravel which have been excavated in places resulting in flooded pits. Other parts of the site also flood and are more-or-less permanently wet. A very effective wildlife corridor.
Ffynnon Dawel	589m north	H5:1 Lowland Meadows The primary habitat is semi-improved neutral grassland, with a scrub and young woodland component.
Gnoll Country Park	592m south	H1:3 Native woodlands An area of woodland (some of which is designated on the Ancient Woodland Inventory), and several ponds which lie within and adjacent to the Gnoll country park

- 4.5 The following sections provide a description of the habitat onsite as illustrated on Figure 1. Additional photos are provided in Appendix 1.

Main Building

- 4.6 The site comprises a derelict Grade II listed building and associated stone outbuildings that have collapsed in and overgrown in vegetation. The main building is a substantial structure that is lacking a roof, although some of the lower floors are still intact. The walls are red brick and stone that have been rendered all some elevations, with brick lintel and stone sills. Ivy is growing across the building and in through the pane-less windows and doors.



Plate 2: Western elevation of main house



Plate 3: Southern and eastern elevation of main house

- 4.7 The building was open with no fully enclosed dark areas reducing roosting opportunities for bats for free hanging bats. However, there were section of the brick work, in particular on the inside of the building around the chimney breast, where gaps and crevices were noted that may offer potential roost sites, as illustrated in Plate 3 below. Gaps were also noted above the lintels, however on closer inspection, these were superficial in nature and were not considered suitable for roosting. Given the exposed nature of the building, it is unlikely that a roost of high conservation significance is present, and the building is considered to be of **moderate** value to bats.



Plate 4: Internal chimney breast showing numerous crevices and gaps in the brickwork

Outbuildings

- 4.8 There were three collapsed stone outbuildings onsite. Only sections of the walls remained, which were reduced to a height of less than 2metres. Whilst some gaps were noted within the stone, they did not travel far back into the walls and are considered unlikely to offer suitable roosting opportunities and have negligible potential for bats.



Plate 5: Outbuilding



Plate 6: Outbuilding

Trees

- 4.9 There are numerous trees onsite and three were identified as having potential to support bats as detailed in Table 4.2 below.

Table 4.2 Trees with Potential Roost Features

Tree Number & Species	Potential Roost Feature and potential	Photo
T8 Beech	Beech has snapped off at 9m creating a crevice and wound on western side Moderate	
T16 Chestnut	Large crevice from dropped limb running up southern side of tree. Woodpecker holes within remaining trunk. Moderate	

T17 Sycamore	In a poor condition with some flaking bark. Woodpecker hole on western side Low	
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4.10 In conclusion, whilst no bats or evidence of bats were identified during the building inspection, **the building is considered to offer moderate potential for roosting bats** for crevice dwelling species. **In addition, two trees have been identified as having moderate potential.**

4.11 Further surveys were undertaken in August and September 2024, and no roosts were recorded onsite. A separate bat survey report has been prepared that provides full details of the surveys.

Habitats

4.12 SEWBRc returned records for bluebell *Hyacinthoides non-scripta* within 1km. In addition, there were a number of records for non-native plant species, including Japanese knotweed.

4.13 For ease of reference, this report has separated the site into four areas based on slight variation in species composition and maturity, although the site is covered by the broad habitat type of dense scrub, together with young self sown, and scattered mature and semi-mature trees, predominately around the periphery of the site. Under the Phase I Habitat Descriptions, the majority of the site would sit under the 'A2 Scrub' as:

- 'stands of *Rubus fruticosus* and *Rosa canina*
- 'all willow carr less than 5m tall'
- 'stands of young trees...less than 5m tall, where these represent more than 50% of the immature canopy cover'
- 'Stands of introduced shrub species'

- 4.1 In order to meet the definition for woodland, the goat willow and alder would need to be consistently over 5m in height. Sections of the site could meet the definition for 'semi-natural woodland' through successional habitat:

- *self-sown secondary stands of exotic species (for example sycamore...)*;
- *'stands of young trees...even when less than 5m.'*

However, ground flora woodland indicator species are lacking and species poor and historically the site comprises gardens with scattered mature native and ornamental species.

- 4.2 Area A: There are a number of mature trees predominately around the periphery of the site and in particular along the road, with semi-mature and self sown trees extending down the eastern boundary. Species include a large mature copper beech *Fagus sylvatica* 'Purpurea', two monkey puzzle *Araucaria araucana*, lime *Tilia x europaea*, sycamore *Acer pseudoplatanus* and beech *Fagus sylvatica*. There are also a number of ash *Fraxinus excelsior*, although the majority of these have ash die-back. The understorey along the road included different types of laurel *Aucuba* spp, hazel *Corylus avellana*, self seeded beech and sycamore, holly *Ilex aquifolium*, pheasant berry *Leycesteria Formosa*, pendulous sedge *Carex pendula*, bramble *Rubus fruticosus* agg, elder *Sambucus nigra*, Himalayan honeysuckle *Leycesteria Formosa*, and Buddleia. There is limited ground flora due to the dense understorey with ivy *Hedera helix* dominant and occasional tufted hair-grass *Deschampsia cespitosa*, lesser celandine *Ficaria verna* and male fern *Dryopteris filix-mas*



Plate 7: Area A, Mature trees along Road (Northern side of site)

- 4.3 Area B: Historically, there were landscaped gardens around the main house and this area is now overgrown with a mix of ornamental and native scrub and self sown trees, with a large proportion being sycamore and goat willow *Salix caprea*. Other species include horse chestnut *Aesculus hippocastanum* along the north-western boundary, elm *Ulmus procera* with a similar understorey to that within Area A. The native species of ground flora dominated by ivy that extends up the building and larger trees. Additional species include ground ivy *Glechoma hederacea*, wood avens *Geum urbanum*, nettle *Urtica dioica*, false oat grass *Arrhenatherum elatius*, Herb-Robert *Geranium robertianum*, cleavers *Galium aparine*, rosebay willowherb *Chamaenerion angustifolium*, broad leaved dock *Rumex obtusifolius* and *Euphorbia* sp,
- 4.4 Sycamore saplings are growing up through the outbuildings, together with honeysuckle, traveller's joy *Clematis vitalba* and bramble. Maidenhair spleenwort *Asplenium trichomanes* and Hart's tongue fern *Asplenium scolopendrium* are within the gaps in the stonework.



Plate 8: Area B, Self sown sycamore and dense ivy cover across the ground that extends over the main building

- 4.5 Area C & D lie to the southwest of the site and during the initial survey in 2023 comprised an area of wetter woodland with a more open area of water. The water was very stagnant and considered to be polluted, with a strong smell of effluent or similar and hence has poor water quality and no aquatic or marginal plants. There were extensive stands of Himalayan balsam *Impatiens glandulifera* and its likely this will become increasingly dominant over the spring/summer. Additional species include soft rush, pendulous sedge, broad leaved dock and winter heliotrope winter *Petasites pyrenaicus*. Dense

bramble scrub runs along the southern boundary adjacent to the fence line, with a single mature oak,

- 4.6 In August 2024, an update survey was undertaken, and the area was entirely dry, and no longer boggy or waterlogged. It was assumed that there had been some runoff from the adjacent residential area that created a temporary wet area. There was a decrease in all vegetation within the area, although Himalayan Balsam is present across the eastern section, and along the ditch, which is still damp.



Plate 9: Area of self sown ash and willow

- 4.7 Area D lies to the southeast and comprises a slightly damp area of goat willow scrub and occasional alder that has been partially cleared with the brash stacked up. The trees are all small and self-sown with ground flora including Himalayan balsam, again which is likely to outcompete other species throughout the growing season. Other species include remote sedge *Carex remota*, rosebay willowherb, pendulous sedge, bramble and nettle.
- 4.8 Within the areas where the trees have been removed there is creeping buttercup *Ranunculus repens*, cleavers *Galium aparine*, pendulous sedge, forget-me-nots, bittercress *Cardamine hirsuta*, Spanish bluebell, tufted hairgrass. A block wall runs along the boundary of the adjacent property.



Plate 11 Area D, self sown goat willow scrub with emerging Himalayan balsam

- 4.9 A row of holly trees run along the eastern boundary with sycamore and ash. A ditch runs from beneath the fence line from the adjacent residential development, although damp, it was not running at the time of the survey, or during the update inspection in August 2024.

Species

Bats

- 4.10 SEWBRc returned multiple records of bat species within 1km of the Application Site including records for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* Noctule *Nyctalus noctule*, Daubenton's *Myotis daubentonii*, Natterer's *Myotis nattereri* and

whiskered *Myotis mystacinus*.

- 4.11 One record for common pipistrelle was for a maternity roost that lies 840m to the southwest of the site. There is also a Daubenton's bat roost of unknown status that lies 1.47km southwest of the site.

Bats – Roosting

- 4.12 The preliminary roost assessment identified the building is considered to offer moderate potential for roosting bats for crevice dwelling species. In addition, two trees have been identified as having moderate potential.
- 4.13 Further surveys were undertaken in August and September 2024 and no roosts were recorded. A separate bat report accompanies this PEA.

Bats – Foraging

- 4.14 The habitats, in particular the mature native trees onsite will provide some opportunities for bats, however given the size of the site and location, it is considered unlikely to be of significant value to foraging and commuting bats especially when taking into account the habitats within the wider landscape that will support a greater diversity of invertebrates, such as the SINC and APAWS all within 500m of the site. Avoidance, mitigation and enhancement measures to be implemented are provided in Section 6 below.
- 4.15 During the bat surveys on the building and trees, activity was generally quite low, although common pipistrelles were regularly heard, together with soprano pipistrelles. It was noted that the site was quite light from the adjacent road and nearby housing which may reduce the suitability for foraging bats.

Badgers

- 4.16 SEWBRc returned a number of records for badger *Meles meles* within 1km of the site, all of the records related to road casualties along the A465.
- 4.17 A small earth spoil mound was present towards the western boundary of the site. This had five entrances, three of which had collapsed in. Whilst one of the entrance had a characteristic 'D-shape' of a badger sett, it narrowed quickly inside the tunnel. There were rabbit droppings and hair, together with a strong smell of fox and it was assessed as being a rabbit warren. There was a mammal push under along the close board fencing to the south of the site. Again, there was no evidence to suggest that this was used by badgers and the hole was large enough to accommodate a small deer, such as a muntjac.

- 4.18 No evidence of badgers was recorded but the dense areas of scrub could hide a small or individual entrance sett, although the topography does not offer optimum sett building and its unlikely a significant main sett is present onsite. Badgers can quickly excavate old setts, or open up new ones and therefore an update check should be undertaken, ideally over winter or early spring when the vegetation has died back. Precautionary avoidance and mitigation measures to be implemented are provided in Section 6 below.

Breeding Birds

- 4.19 SEWBRc returned several records of bird species within 1km of the Application Site including those listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), and/or the Birds of Conservation Concern (BoCC) red/amber list.
- 4.20 Records for Schedule 1 species include kingfisher *Alcedo atthis*, peregrine falcon *Falco peregrinus*, hobby *Falco Subbuteo*, brambling *Fringilla montifringilla* Mediterranean gull *Ichthyaeetus melanocephalus*, red kite *Milvus milvus* greenshank *Tringa nebularia*, redwing *Turdus iliacus*, barn owl *Tyto alba* and lapwing *Vanellus vanellus*.
- 4.21 A blackbird nest was recorded within the main building in the stone work of the main building and the site will offer nesting and foraging opportunities for common species of bird. Given the scale of the impact, no further surveys are required, but avoidance, mitigation and enhancement measures to be implemented are provided in Section 6 below.

Dormice

- 4.22 SEWBRc did not return any records for dormice within 1km of the site boundary. Whilst the dense scrub will provide some suitable habitat, the young self sown trees such as the sycamore and willow are not considered suitable. In addition, the site is fragmented from the wider landscape with the residential development a barrier to dispersal. Therefore, dormice are considered to be absent from the site.

Amphibians - Great crested newts

- 4.23 SEWBRc did not return any records for great crested newts within 1km of the site boundary. There was a single record for a smooth newt recorded along the towpath of Neath Canal. Common toads were also recorded to the north of the A465 and within Gnoll Estate.
- 4.24 There are no ponds within 500m of the site, although canals can support newts and the Neath Canal lies 190m to the north, it is separated by residential properties and Henfaes Road. In

addition, it is of note that Neath Port Talbot are located at the edge of the range of this species within the UK. Combined with the absence of desk study records, this species is presumed absent from the site

Reptiles

- 4.25 SEWBRc returned a number of records for grass snake *Natrix helvetica*, with all except one located within Gnoll Park and dated between 2009-2010. There were two records for grass snake along Neath Canal, dated 2004/2005 and 2014.
- 4.26 Whilst the dense scrub and collapsed buildings many offer optimum habitat for reptiles, the site lacks the mosaic of habitats, including any basking areas that are also required to support a population of reptiles. The area to the east of the site is more open but this has only recently been cleared and unlikely to have been colonised by reptiles. In addition, whilst there are areas of excellent reptile habitat within the wider landscape, the site has been fragmented through the development to the south and the properties to the north of Henfaes Road. Therefore it is considered that reptiles are absent from the site. A precautionary site clearance approach would need to be adopted as detailed in Section 6 below.

Other Species

- 4.27 The site will provide suitable shelter and foraging habitat for weasel, stoat and hedgehog and the SEWBRc returned records for all three species. Avoidance, mitigation and enhancement measures to be implemented are provided in Section 6 below.

5.0 Further Surveys

Bat presence/absence surveys

- 5.1 The surveys were conducted in August and September 2024 and no roosts were identified onsite. Avoidance, minimisation and enhancement measures have been included below.

6.0 Avoidance, Mitigation and Enhancement Measures

Development Description and Design Considerations

- 6.1 The proposals comprises the demolition of the derelict buildings onsite to allow for the construction of a new residential development of four units.

Habitats

- 6.2 Following the response from the pre-app, the design has been amended to accommodate the recommendations. Whilst the proposals will result in the loss of the willow scrub to the site, the designs accommodates a green ecological buffer along the southern and eastern boundaries, as illustrated in the Proposed Site Plan (AEA Ref: Dwg 1566-027). This will include the retention and protection of the ditch along the eastern boundary, together with the retention of the 32 mature trees along the northern, western boundary and wider site. There will be additional native and species rich planting within these buffers to maintain and improve the connectivity around the site.

Invasive Species

- 6.3 There were extensive stands of Himalayan balsam onsite, concentrated towards the southern side of the site. These species is listed under Schedule 9 of the Countryside Act 1982 (as amended) meaning that it is illegal to allow its spread in the wild. A specialist contractor will be employed to ensure its safe removal from site.
- 6.4 Whilst no stands of Japanese knotweed were recorded onsite, it is known to be prevalent in the area and should it be identified at a later date, this would also need specialist removal from site.

Green Infrastructure Statement

- 6.5 The site originally comprised of the main Grade II listed property, set within landscape gardens. It is surrounded on all sides by residential development. Since the abandonment and deterioration of the property, the building has fallen into a state of disrepair, with the gardens becoming overgrown. Willow and ash scrub has established across the southern side of the site, with bramble scrub encroaching over the buildings and around the mature trees. The habitats are considered to be common and widespread, with a lack of species diversity. Himalayan Balsam has spread extensively across the southern side of the site.
- 6.6 The proposals seek to avoid and minimise impacts through the retained and protection of 32 of the mature trees, together with the strengthening of the southern and eastern boundaries. This will include an specialist invasive species removal plan and the replanting of the boundaries with native species rich hedging and trees. This will ensure that there is a green and continuous link around the site, providing connectivity to the wider landscape. The mature trees will continue to provide shelter and foraging opportunities for species, together with the re-creation of the gardens associated with the new units.

Mitigation and Enhancement Measures

- 6.7 In line with National and Local planning policies, developments should seek to ensure the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species populations. Therefore the following section sets out additional avoidance and mitigation measures that should be implemented, together with enhancement opportunities, with the aim of delivering a net gain in biodiversity.
- 6.8 The following mitigation measure should be implemented during construction:
- Any vegetation and demolition removal should avoid the breeding bird season, which generally runs from March to August. If works are to be undertaken during this time then a check for breeding birds should be undertaken by an experienced ecologist prior to works starting. If an active nest is found then works will need to wait until the chicks have fledged or a suitable buffer implemented of around 5m to 10m depending on the location and species.
 - A sensitive and phased approach should be adopted for site clearance that should take place under a Ecological Clerk of Works (ECoW) when species are active
 - The lighting design should follow the principles set out in the ILP/BCT Guidance Note 08/on Bats and artificial lighting in the UK to minimise excessive light spill
 - Foundation trenches and all excavations must either be covered overnight or must have scaffolding boards, or similar, placed within them at a 45° angle to ensure that any animals, such as badgers, that fall in are able to escape.
- 6.9 The following enhancements should be incorporated into the design:
- Integral bird and bat boxes should be built into the each new unit. It is recommended that three Universal swift boxes are installed on the north/northwest elevations with in built bat boxes/tubes⁸ into the south/south elevations.
 - Where possible, areas should be seeded with a more diverse seed mix, or planters and raised beds should be planted with a wildlife friendly species to encourage invertebrates⁹.
 - Any margins, such as along the access road and pathways could be sown with a standard native meadow mix¹⁰. This mix includes high nectar bearing plants that can attract target invertebrates and are also low maintenance. The areas should be allowed to flower over the summer and cut late August/September with the arisings collected.
 - If any close board fencing is to be used, then occasional gaps (130x130mm) should be left at the base to allow movement of hedgehogs.

- 5.8 The proposals include the retention of a number of mature trees and the protection and strengthening of the boundaries. This will ensure that a green corridor is maintained across the site and to the wider landscape. The proposals also incorporate wider habitat and species enhancements, in line with National and Local Policy.