MONMOUTHSHIRE HOUSING ASSOCIATION

LAND EAST OF A465, ABERGAVENNY

PRELIMINARY ECOLOGICAL APPRAISAL

DECEMBER 2024

4 Stangate House,
Stanwell Road,
Penarth,
Vale of Glamorgan,
United Kingdom.
CF64 2AA

Telephone:- 033 00 13 00 12
e-mail:- enquiry@soltysbrewster.co.uk
Web Site:- www.soltysbrewster.com

MONMOUTHSHIRE HOUSING ASSOCIATION

LAND EAST OF A465, ABERGAVENNY

PRELIMINARY ECOLOGICAL APPRAISAL

DOCUMENT REF: E24127901/DOC 01 – 10 DECEMBER 2024

Issue	Revision	Stage	Date	Prepared by	Approved by	Signed
1	-	Draft for review	10 December 2024	Daniel Jones (Associate Ecologist)	Dr. M Watts (Director)	M. WATTS

CONTENTS

SUMMARY

Soltys Brewster Ecology were commissioned by Monmouthshire Housing Association to undertake a preliminary appraisal of an area of land to the east of the A465 carriageway in Abergavenny, Monmouthshire. The area is being promoted as a candidate site for mixed use development as part of the LDP review process. The ecological baseline conditions at the candidate site and wider strategic site were initially established in October 2020 through a combination of desk study and Extended Phase 1 Habitat Survey. An updated desk study and field survey of the candidate site within the area being promoted by MHA were undertaken in October 2024 to confirm the baseline conditions.

Desk based consultation confirmed that the candidate site does not hold any designations for nature conservation. However, the small watercourses at the site have hydrological links to the River Usk Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) and River Gavenny Site of Importance for Nature Conservation (SINC) which are located over 400m west of the candidate site.

The desk study returned an extensive list of records for protected fauna and flora within 2km of the candidate site and wider strategic site. This included records of roosting bats, foraging/commuting bats, protected and priority bird species, Great Crested Newt, Badger and common reptiles.

The Extended Phase 1 Habitat survey identified that the majority of the candidate site comprises of grazed improved grassland. Other habitats present include poor semi-improved grassland, broad-leaved woodland, dense scrub, scattered trees and a hedgerow network. The linear habitat features such as the woodland corridors and hedgerow network were considered to have the greatest ecological value within the context of the site. The habitats at the candidate site were considered likely to support roosting and foraging/commuting bats, nesting birds, Hazel Dormouse and to a lesser extent Great Crested Newt (GCN) and common reptiles. The site also supports a main Badger sett.

Dependant on the development impacts at the candidate site, further survey work would be recommended to establish the use of the site by foraging/commuting bats and the likely presence/absence of roosting bats, Hazel Dormouse and GCN within adjacent ponds. In addition, further site investigation would be recommended to establish the potential of buildings and trees at the site to support roosting bats and Barn Owl. The proposed development will also need to considered the presence of priority habitats (hedgerows and lowland mixed deciduous woodland) and implement measures to maintain and enhance these features.

Other measures to provide a net benefit for biodiversity could include native meadow grassland seeding, the use of native trees and shrubs within any soft landscape design, new native tree, hedgerow and woodland planting and the design of attenuation features to maintain a small volume of water throughout the year.

1.0 INTRODUCTION

1.1 Soltys Brewster Ecology (SBE) were commissioned by Monmouthshire Housing Association (MHA) to undertake a preliminary ecological appraisal of an area of land to the east of the A465 carriageway in Abergavenny, Monmouthshire. The area is being promoted as a candidate site (reference number: CS0213) for mixed use development as part of the LDP review process with proposed use including residential (C3), employment (B1), retail (A1), leisure, education and community use (D1, D2). A survey to establish the ecological baseline conditions and identify any ecological constraints or opportunities with the site was initially undertaken by SBE in October 2020 (SBE 2021). An updated appraisal is required to confirm baseline conditions remain consistent with the previous survey work.

1.2 The candidate site is located to the east of Abergavenny along the A465 carriageway (central grid reference SO308137) and comprises a large area of approx. 24.75ha in size. The indicative masterplan (included within the RLDP deposit plan and considered as part of the 2020 & current survey) is included in Appendix I. The area shown on the plans in Appendix I & III is that being promoted by Monmouthshire Housing Association and is referred to in the current report as the Candidate site. The candidate site and survey area primarily consists of grazed improved grassland and hedgerow margins. The site also contains a number of buildings at Garth Farm and Roc House Farm.

1.3 The current report presents the findings of an updated ecological desk study and Extended Phase 1 Habitat survey undertaken at the candidate site in October 2024. The current report describes the existing ecological conditions as well as identifying any potential ecological constraints/opportunities associated with development at the site.

2.0 METHODOLOGY

2.1 In order to establish the current baseline ecological conditions at the candidate site, a combination of desk-based consultation and Extended Phase 1 Habitat survey were undertaken in October 2024.

Desk study

2.2 The desk study involved consultation with the South East Wales Biodiversity Records Centre (SEWBReC) to identify any records of rare, protected or notable flora and fauna at the candidate site and within a radius of 1km extending from the central point of the candidate site. The search criteria also included information relating to the location and citation details (where available) for any sites designated for their nature conservation interest such as Sites of Special Scientific Interest (SSSIs) or Sites of Importance for Nature Conservation (SINCs). A review of the survey work undertaken in 2020 (SBE, 2021) was also undertaken regarding the type and distribution of habitats and other features at the Candidate site.

Extended Phase 1 Habitat Survey

2.3 The fieldwork was undertaken on 24th October 2020 by two suitably experienced ecologists[1] and followed standard Phase 1 Habitat Survey protocol (JNCC, 2010) as amended by the Institute of Environmental Assessment (1995). The survey area covered all land within the candidate site boundary excluding one field parcel to the south-west which is owned by a separate landowner. All habitats within and immediately adjacent to the site boundary, where possible, were classified and mapped as accurately as possible. Habitats considered to have potential to support rare, protected or otherwise notable species of flora and fauna were noted, as were any direct signs of these species (e.g. Eurasian badger *Meles meles* setts and dung-pits). Incidental observations of birds on or flying over the site were also recorded and any incidence of invasive weed species (e.g. Japanese knotweed *Fallopia japonica*) noted.

2.4 A map of habitats was drawn up and target notes were used to identify features of ecological interest. Where possible, habitats were cross-referenced to any relevant important UK or Wales priority habitats as identified under Section 7 of the Environment Act (Wales) 2016.

2.5 During the field survey any trees or structures (e.g. agricultural buildings and farm houses) at the candidate site and within the wider survey area were assessed for their potential to support roosting bats and were categorised in relation to the bat roosting features (BCT, 2023). The categories are as follows:

[1] Associate Members of the Chartered Institute of Ecology & Environmental Management (CIEEM) with previous knowledge of the site.

Trees:

- **PRF-I** – Potential Roost Feature (PRF) is only suitable for individual bats or very small numbers of bats either due to their size or lack of suitable surrounding habitats;
- **PRF-M** – PRF is suitable for multiple bats and may therefore be used by a maternity colony;
- **Negligible** – Negligible habitat features on site likely to be used by roosting bat.

Buildings:

- **Known or confirmed roost**
- **High** - A structure 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. These structures have the potential to support high conservation status roosts;
- **Moderate** – A structure 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;
- **Low** – A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year;
- **Negligible**[2] – 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.
- **None** – No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).

External Building Inspection

2.6 The Extended Phase 1 Habitat survey also comprised of an external inspection of the existing farmhouse and outbuildings within the red-line boundary, where access allowed. The focus of the building inspection was to establish the likelihood that the buildings could be used by roosting bats (or nesting birds) and aimed to identify:

- If bats are, or have been, present within the building and if so, which species are present;
- The type of roost (e.g. day roost, feeding perch, night roost, hibernaculum);
- How bats use the building (e.g. location of exit and entrance points to potential roosts).

[2] Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) bit it is unlikely that they actually would (due to another attribute).

2.7 The external inspection of the buildings involved the use of binoculars to identify possible access/entry points into the structures and any evidence of use by bats such as droppings, prey remains, staining etc. The buildings were assigned to the relevant categories listed in paragraph 2.5.

Survey Constraints

2.8 The Extended Phase 1 survey was conducted in October 2024 and whilst habitat characterisation was possible, some of the flora was no longer in flower. A full assessment of the ground-flora species associated with the grassland, woodland and hedgerow habitats was not possible at the time of writing although this was not considered to affect the broad habitat categorisation and subsequent mapping.

3.0 RESULTS

Desk Study

SEWBReC Records

3.1 Consultation with SEWBReC confirmed that the candidate site does not contain any designations for nature conservation. The internationally designated River Usk Special Area of Conservation (SAC) and SSSI is located approx. 450m west of the candidate site (Table 1), and although both sites are separated by residential development and transport corridors there are a number of small issues and drains at the candidate site which likely flow into the River Usk. The locally designated River Gavenny SINC is also located approx. 400m west of the candidate site boundary, and supports migratory fish species, Otter *Lutra lutra* and White Clawed Crayfish *Austropotamobius pallipes* and has a direct hydrological link (tributary) to the River Usk. Similarly, the small watercourses at the candidate site are likely to drain into the River Gavenny. The candidate site's eastern boundary also contains part of an ancient woodland site at Ysgyryd Fach. Summary plans to illustrate the SEWBReC records are included in Appendix II.

Table 1 – Statutory and non-statutory designated sites within 1km of the candidate site boundary.

Site Name	Citation	Distance from candidate site boundary.
River Gavenny SINC	River Gavenny known to support anadromous fish species as well as resident populations of Brown/Sea Trout and Bullhead. White Clawed Crayfish, Otter and Dipper also present.	Approx. 400m west
River Usk SAC	Designated for the presence of Annex II species including Sea Lamprey, Brook Lamprey, River Lamprey, Twaite Shad, Atlantic Salmon, Bullhead and Otter. Supports Annex I habitat; Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation.	Approx. 450m west
River Usk (Lower) SSSI	See above. The River Usk (Lower Usk) is a rare example of a large mesotrophic lowland river which has not been subject to significant modification by man. The River Usk (Lower Usk) supports a wide range of riverside breeding birds, important assemblages of craneflies including rare and scarce species, Otter and also provides valuable feeding and roosting habitats for several bat species including Daubenton's bat.	Approx. 450m west

3.2 The data search returned an extensive list of protected species records within a 1km radius of the candidate site boundary. Protected species records directly associated with the site itself included field records of foraging/commuting Common and Soprano Pipistrelle *Pipistrellus pipistrellus/pygmaeus* and Brown Long-Eared bat *Plecotus auritus* within the site boundary. The desk study search returned a total of 59no. individual bat records within a 1km search radius of the candidate site. Other bat records included the identification of separate bat roosts for Whiskered bat *Myotis mystacinus*, Common and Soprano Pipistrelle and Brown Long Eared bat within 150m of the candidate site boundary, with additional field observations of foraging/commuting Noctule *Nyctalus noctula* and Lesser Horseshoe bat *Rhinolophus hipposideros* recorded at the same location. Further afield from the candidate site boundary separate bat roosts for Lesser Horseshoe bat, Natterer's bat *Myotis nattereri* and Common and Soprano Pipistrelle were identified approx. 700m from the site boundary. In the wider area there are forging/commuting field observations of Nathusius's Pipsitrelle *Pipistrellus nathusii*, Serotine *Eptesicus serotinus*, Daubenton's bat *Myotis daubentonii* and other unidentified Myotis species within a 1km radius of the candidate site, with many records associated with the habitats along the River Usk.

3.3 Other mammalian records in the data search results included multiple Otter sightings along the River Gavenny and field signs (e.g., spraints) recorded at the River Usk, located within 500m of the candidate site boundary. A historic record (dated 2005) of a Badger sett located Ysgyryd Fach was included in the data search. There was also a Badger road kill reported along the A465 carriageway approx. 500m south-west of the site, as well as an additional road kill sighting and field sign (latrine) recorded approx. 1km east of the candidate site. The data search also included a recent Hazel Dormouse *Muscardinus avellanarius* record (2022) associated with the habitats along the A40, approx. 1.33km south of the site. Other S7 priority listed small mammals recorded in a 2km radius of the candidate site include Hedgehog *Erinaceus europaeus*, Polecat *Mustela putorius*, Stoat *Mustela erminea* and Weasel *Mustela nivalis*.

3.4 The data search returned 3no. records of Great Crested newt *Triturus cristatus* located approx. 600m from the western site boundary within garden ponds within the centre of Abergavenny, although these records date from 2004-2007. Other amphibians such as Smooth Newt *Lissotriton vulgaris* and Palmate Newt *Lissotriton helveticus* have also been recorded within garden ponds located within 150m of the candidate site boundary. There are multiple records for Common Frog *Rana temporaria* and Common Toad *Bufo bufo* within the wider landscape, the nearest of which is located approx. 285m south-east. There were a limited number of recent common reptile records included in the desk study results, with only Slow-Worm *Anguis fragilis* recorded on four occasions within 1km of the northern site boundary, with the closest record located approx. 750m north-east near Tredillion Park.

3.5 Extensive number of protected and priority listed bird species records returned within the 1km search radius (189no. records), the majority of which were associated with the habitats along the River Usk to the west of

the site, although Red Kite *Milvus milvus* has been recorded immediately outside the candidate site boundary. In a 1km search radius from the candidate site, records of bird species listed under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended) include those for Barn Owl *Tyto alba*, Peregrine *Falco peregrinus*, Redwing *Turdus iliacus*, Fieldfare *Turdus pilaris*, Common Crossbill *Loxia curvirostra*, Brambling *Fringilla montifringilla*, Goshawk *Accipiter gentilis*, Hobby *Falco subbuteo* and Golden Oriole *Oriolus oriolus*. Records of S7 priority listed bird species include those for Cuckoo *Cuculus canorus*, Linnet *Linaria cannabina*, Spotted Flycatcher *Muscicapa striata*, Skylark *Alauda arvensis*, Curlew *Numenius arquata*, Tree Pipit *Anthus trivialis*, Kestrel *Falco tinnunculus*, Wood Warbler *Phylloscopus sibilatrix*, Marsh Tit *Poecile palustris*, Hawfinch *Coccothraustes coccothraustes*, Yellowhammer *Emberiza citrinella*, Yellow Wagtail *Motacilla flava*, Willow Tit *Poecile montana*, Lesser Redpoll *Acanthis cabaret*, House Sparrow *Passer domesticus*, Dunnock *Prunella modularis*, Song Thrush *Turdus philomelos* and Nightjar *Caprimulgus europaeus*. Given the size of the site and close proximity to the River Usk there is likely to be some interchange of species.

3.6 The data search returned some records of protected fish species, all associated with the River Usk and River Gavenny. There are records of Atlantic Salmon *Salmo salar*, Brown/Sea Trout *Salmo trutta*, Eel *Anguilla anguilla* and Sea Lamprey *Petromyzon marinus* within these watercourses.

3.7 The data search included a limited number of recent records of priority listed invertebrate species within close proximity to the candidate site. There were individual records of Small Blue butterfly *Cupido minimus* and Cinnabar moth *Tyria jacobaeae* both recorded at Ysgyryd Fach approx. 400m east of the candidate site.

3.8 Invasive species listed under Schedule 9 of the Wildlife and Countryside Act (1981) (as amended) such as Japanese Knotweed, Himalayan Balsam *Impatiens glandulifera*, Rhododendron *Rhododendron ponticum* and Giant Hogweed *Heracleum mantegazzianum* have been recorded within habitats in a 500m radius of the candidate site boundary.

Extended Phase 1 Habitat Survey

3.9 The distribution and extent of habitats recorded in October 2024 at the candidate site are illustrated on the Extended Phase 1 Habitat Plan with accompanying target notes in Appendix III. The candidate site supports a range of habitat types, consistent with its current agricultural use, including improved grassland, poor semi-improved grassland, broad-leaved woodland, dense scrub, running water and ditches, buildings and a hedgerow network. To help differentiate between field parcels and hedgerows at the candidate site, these features were assigned separate numbers (e.g. F12 and H9) and are shown on the Extended Phase 1 Habitat Plan.

3.10 In general the 2024 survey identified that the majority of the habitats present at the candidate site remained consistent with the 2020 appraisal. However, the survey did note minor changes to the categorisation of some

hedgerow boundaries (e.g., species-rich or species-poor) and fields, as well as trees with potential to support roosting bats. In addition, a new outbuilding has been erected within field 10.

Improved grassland

3.11 The majority of the candidate site consists of grazed improved grassland fields (18 fields out of 19 field parcels within site boundary) (see cover image and figure 1). At the time of the current survey the enclosed fields were grazed by a combination of horses and sheep. The grassland is characterised by a short sward height and low floral diversity with species present considered typical of improved grassland. Species recorded include Perennial Rye Grass *Lolium perenne*, Annual Meadow Grass *Poa annua*, Cock's Foot *Dactylis glomerata*, Yorkshire Fog *Holcus lanatus*, Creeping Bent *Agrostis stolonifera*, White Clover *Trifolium repens*, Creeping Buttercup *Ranunculus repens*, Dandelion *Taraxacum officinale*, Ribwort Plantain *Plantago lanceolata*, Broad-Leaved Dock *Rumex obtusifolius*, Knotgrass *Polygonum aviculare*, Common Mouse Ear Chickweed *Cerastium fontanum* and Common Sorrel *Rumex acetosa*. In addition, Bittersweet *Solanum dulcamara* was found to be frequent within the grassland sward with field parcel 1, and Marsh Cudweed *Gnaphalium uliginosum* found to be frequent along the margins of field parcels 5 and 8.

3.12 Field 5, located towards the south-eastern extent of the candidate site boundary, contains a spoil heap which has been colonised by improved grassland and is dominated by stands of Broad-Leaved Dock.

Poor semi-improved grassland

3.13 Along the candidate site's eastern boundary a steep sided field parcel was categorised as poor semi-improved grassland (Field 10), see figure 2. The grassland field appears unmanaged (no grazing evident) and supports a tussocky sward with a greater floral diversity. Species present include Perennial Ryegrass, Creeping Bent, Timothy *Phleum pratense,* Yorkshire Fog, Meadow Foxtail *Alopecurus pratensis*, Sweet Vernal Grass *Anthoxanthum odoratum*, Red Clover *Trifolium pratense*, White Clover, Creeping Thistle *Cirsium arvense*, Silverweed *Potentilla anserina*, Common Knapweed *Centaurea nigra*, Creeping Cinquefoil *Potentilla reptans*, Selfheal *Prunella vulgaris*, Broadleaved Dock, Ribwort Plantain, Marsh Thistle *Cirsium palustre* and Common Bird's-Foot-Trefoil *Lotus corniculatus*.

Broad-leaved semi-natural woodland

3.14 The candidate site supports a wooded stream corridor located towards the southern extent of the site boundary (figures 3 and 4). The broad-leaved woodland corridor supports a diverse woodland canopy, including over-mature and veteran Oak *Quercus sp*. and Ash *Fraxinus excelsior* trees. The canopy also supports Sycamore *Acer pseudoplatanus*, Hazel *Corylus avellana*, Hawthorn *Crataegus monogyna*, Holly *Ilex aquifolium*, Field Maple *Acer campestre*, Apple *Malus sp*., Elm *Ulmus sp*., Rose *Rosa sp.* and Elder *Sambucus nigra*. The woodland contains a diverse ground-flora including several ancient woodland indicator species such as Dog's Mercury

Mercurialis perennis, Soft Shield Fern *Polystichum setiferum*, Enchanter's Nightshade *Circaea lutetiana* and Opposite-Leaved Golden Saxifrage *Chrysosplenium oppositifolium*. Other species noted include Hart's-Tongue Fern *Asplenium scolopendrium*, Male Fern *Dryopteris filix-mas*, Herb Robert *Geranium robertianum*, Ground Ivy *Glechoma hederacea*, Wood Avens *Geum urbanum*, Ivy *Hedera helix* and Bramble *Rubus fruticosus*. The woodland corridor was considered to be of local importance and represents the habitat at the candidate site with the greatest ecological value.

3.15 The candidate site is bordered by additional parcels of broad-leaved woodland around Caederwen Farm (Target Note 16) and along the eastern site boundary to Ysgyryd Fach (east of Field 19). The woodland surrounding Caederwen Farm is diverse and contains a mixture of mature Oak, Sycamore, Ash, Alder *Alnus glutinosa*, Horse Chestnut *Aesculus hippocastanum*, Birch *Betula sp.*, Hawthorn and Holly as well as several unidentified ornamental species. The woodland edge along the eastern boundary largely consists of Oak, Ash, Hazel and Birch.

3.16 In addition, the narrow section of the site boundary to the northern is bordered by a second wooded stream corridor (north of Field 20). This woodland corridor contains a mixture of coniferous and broad-leaved species with Larch, Sycamore, Oak Willow *Salix sp.*, Ash, Elder and Hawthorn present (see figure 7).

Dense and scattered scrub

3.17 There are some small areas of dense/continuous scrub within the candidate site boundary. This habitat is mainly confined to the field margins of fields 2 and 12, consisting of dense Bramble as well as Gorse *Ulex europaeus* and Hawthorn.

Hedgerows

3.18 The candidate site supports a large hedgerow network containing a mixture of defunct and intact species-rich and poor hedges. In total, 26no. separate hedgerows were categorised within the candidate site boundary.

Intact species-rich

3.19 The candidate site supports 7no. hedgerows that were identified as species-rich hedgerows (H5, H14, H18, H19, H21, H23 and H24). These hedgerows contain five or more woody species within a 30m section including Ash, Hazel, Hawthorn, Elm, Blackthorn *Prunus spinosa*, Dogwood *Cornus sanguinea*, Elder, Holly and Dog Rose *Rosa canina*. The hedgerow ground-flora comprises of Common Nettle *Urtica dioica*, Cleavers *Galium aparine*, Broad-Leaved Dock, Ivy, Herb Robert, Hedge Bindweed *Calystegia sepium*, Traveller's Joy *Clematis vitalba* and Bramble.

Intact species-poor

3.20 The majority of the hedgerows located at the candidate site were categorised as intact species-poor (see H1, H3, H4, H6, H8, H9, H10, H17, H22 and H26). Species-poor hedgerows at the site consisted either of a single species (namely Hawthorn) or a small mixture of Hawthorn, Hazel and Field Maple. Most of these hedgerows were also found to be intensively managed and had been cut/trimmed to a height of approx. 1.5 – 2.0m. In addition, the ground-flora layers of hedgerows enclosing the grazed areas of grassland were noted to be sparse due to grazing livestock (see figure 5).

Defunct species-rich

3.21 A single hedgerow at the site was assessed to be defunct species-rich (see H20). The hedge contains a similar species composition to that described in paragraph 3.20 but was found to also contain numerous gaps and was supported by a post and wire fence.

Defunct species-poor

3.22 A small number of hedgerow margins were found to be defunct species-poor (see H2 and H12). Similarly to the hedgerows described in paragraph 3.20, the defunct hedges at the site consisted either of a single species or a small mixture of woody species. The hedgerows were found to be 'gappy' and no longer stock proof (supported by wire fencing). It also appears that livestock have eaten away at lower/ground vegetation at the base of hedges.

Species-rich with trees

3.23 The candidate site contains 4no. field boundaries that were classified as species-rich hedgerows with trees (see H7, H15, H16 and H25 (figures 6 and 8). These hedgerow are similar is species composition to those described in paragraph 3.20 but support a number of mature Oak and Ash trees. A species-rich hedgerow with trees also lines the border of the candidate site to the A465 carriageway (H36). The hedge contains a number of mature Sycamore, Oak, Hazel, Ash, Field Maple, Birch and Willow trees.

Species-poor with trees

3.24 The remaining hedgerow boundaries were classified as species-poor hedgerow with trees (H11 and H13). Both hedgerows are defunct. Hedgerow 11 contains a number of tall Ash trees, with H13 supporting over-mature Poplar *Populus sp*. and Willow.

Running water

3.25 The site supports a series of small streams and wet ditches. The largest watercourse at the site is located within the woodland corridor towards the southern extent of the candidate site (figure 3). The stream comprises of a rocky and muddy substrate and is narrow, slow-flowing, steep-sided and shallow in depth (<5cm) although

flow and depth are likely to be seasonal. The stream corridor also contains a lot of woody debris and leaf litter, and larger pools have formed where fallen trees have created small dams/barriers. The stream flows from east to west before entering a culvert under the A465 carriageway. A review of OS Mapping indicates that the stream later joins the River Gavenny located over 450m to the west of the candidate site (which links to the River Usk).

3.26 There are also a number of small streams running at the base of the hedgerow network (see H4, H8, H13, H16, H17, H20, H21 and H23). These streams are approx. 10cm wide and 5cm deep and likely only hold water following periods of heavy rainfall. Similar to above, the streams converge before entering a culvert off-site which later links to the River Gavenny. Aquatic species present within the ditch network include Fool's Water-cress *Helosciadium nodiflorum*, Water Mint *Mentha aquatica*, Soft Rush *Juncus effusus*, Marsh Woundwort *Stachys palustris* and Brooklime *Veronica beccabunga*.

Bare ground

3.27 There are small areas of bare ground (gravel and rock) associated with the main farmyards at Roc House and Garth Farms.

Buildings

3.28 The site contains a number of buildings associated with Roc House and Garth Farm. Buildings at the site were subject to an external inspection (dependant on access) with the findings summarised in paragraphs 3.47 – 3.52.

Invasive species

3.29 The survey found no incidences of any invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981) (as amended) at the candidate site.

Figure 1: Grazed improved grassland (field 13)

Figure 2: Poor semi-improved grassland (field 10)

Figure 3: Woodland corridor

Figure 4: Woodland corridor

Figure 5: Species-poor hedgerow with wet ditch (H8)

Figure 6: Species-rich hedgerow with trees (H16)

Figure 7: Off-site woodland, proposed emergency services access

Figure 8: Species-rich hedgerow (H7)

Fauna

3.30 In the course of the survey, a search of field signs for protected or notable species was undertaken and the potential of the habitats to support these species considered. In the context of this report, these species meet any of the following criteria:

- Species protected by British or international law;
- Priority species included on Section 7 (Environment Act, Wales);
- Nationally rare or nationally scarce species;
- Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists);

Those of relevance to the candidate site include:

Badger

3.31 A Badger sett was discovered within the candidate site boundary[3] . The sett contained at least 16no. well-used entrances with fresh spoil. Within the surrounding area (the sett extends at least 20 – 30m) more evidence of badger activity was found including fresh latrines, well-used mammal paths and guard hairs (attached to wire fencing). Based on the evidence found, the sett was considered to be an active main sett.

3.32 Further entrances were found in close proximity to the sett above, these were considered to be either partially used outlier or annexe/subsidiary setts. The findings are consistent with the 2020 survey work.

3.33 Other evidence of Badger activity was found within F1 located towards the south-east corner of the site (Target Notes 1). Guard hairs indicative of Badger were found attached to the wire fencing. Clear mammal paths associated with hedgerow and woodland boundaries were also found throughout the candidate site. The habitat sat the candidate site (e.g., woodland, hedgerow and field margins) support suitable habitats for foraging badger and the site boundary supports at least one badger clan.

Bats

3.34 Whilst the majority of the habitats at the site (i.e. improved grassland) provide limited foraging resources for the bats (other than Noctule for example), the linear habitat features such as the hedgerow network, woodland/stream corridors and woodland edge habitats were considered suitable to support a range of foraging and commuting bat species and are likely to act as important habitat corridors for bats in the wider landscape.

3.35 The survey identified a number of trees at the candidate site with potential to support roosting bats. This included 11no. trees with PRF-M potential to support roosting bats and 12no. trees with PRF-I potential (see

[3] Sensitive information – references to the exact location of Badger setts at the site have been removed from this document and supporting plans.

Target Notes for full descriptions). The mature Oak and Ash trees located within the woodland corridors were also collectively considered to be of a PRF-I potential to support roosting bats. The scattered trees at the site were found to contain a number of potential roost features (PRFs) in the form of woodpecker holes, cavities, split bark, deadwood and thick ivy stems. In particular the majority of the mature trees located within the hedgerow boundaries were found to be in a poor condition and contained numerous PRFs including large cavities and were considered suitable to support multiple roosting bats and maternity colonies.

3.36 An external inspection of buildings located within the site boundary was undertaken during the Extended Phase 1 Habitat survey. The findings are summarised in paragraphs 3.47 – 3.52.

Birds

3.37 A number of birds were seen/heard at the candidate site during the survey. This included Robin *Erithacus rubecula*, Wren *Troglodytes troglodytes*, Magpie *Pica pica*, Great Tit *Parus major*, Blue Tit *Cyanistes caeruleus*, Carrion Crow *Corvus corone*, Blackcap *Sylvia atricapilla*, Goldfinch *Carduelis carduelis*, Redwing *Turdus iliacus*, Buzzard *Buteo buteo* and Blackbird *Turdus merula*. Redwing is listed as a protected species under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended) although this protection is only applicable to any breeding (nesting) birds – in the UK Redwing is typically seen as an autumn migrant or winter visitor and only a small number breed in the UK[4]. In addition, Wren is an amber listed species as part of the latest Birds of Conservation Concern (Stanbury *et al.,* 2021).

3.38 The habitats at the candidate site, such as the hedgerow network, dense scrub, woodland and scattered trees were considered likely to support a number of nesting and foraging bird species. Some of the trees assessed to have PRF-M potential to support roosting bats also contained suitable features (i.e. large cavities) for use by nesting Barn Owl. The desk study also contained 11 records between 2004-2011 of nesting Barn Owl within trees at Ysgyryd Fach located immediately east of the candidate site.

3.39 The open areas of improved grassland were considered of limited suitability for ground-nesting birds (e.g., Skylark or Lapwing) due to the regular presence of livestock (both horses and sheep) and associated disturbance.

Great Crested Newt

3.40 No waterbodies were identified within the immediate candidate site boundary. However, a review of OS mapping indicates that a pond(s) is present within the grounds of Caederwen Farm (which is located immediately adjacent to the candidate site). In addition, OS maps identified several ponds within 1km of the

[4] https://www.rspb.org.uk/birds-and-wildlife/redwing

candidate site to the north of the B4233. The hedgerow and woodland edge habitats at the site were considered to be of suitability to support Great Crested Newt (GCN) within their terrestrial phase and likely provide some foraging and refuge resources. However, the majority of the site (grazed improved grassland) was considered to be of limited value for GCN. At the time of the current survey no access was permitted to Caederwen Farm (which falls outside of the red-line boundary).

3.41 The desk study also returned records of GCN within a 1km radius of the candidate site. GCN are known to disperse up to 250m from breeding ponds and may travel further in search of higher quality habitats e.g. woodland patches within an arable/agricultural landscape (Langton *et al.,* 2001). As such, the habitats at the candidate site (particularly the hedgerow boundaries and woodland edge to the north of the site) were considered to have a low potential to support GCN within their terrestrial phase.

Hazel Dormouse

3.42 The desk study included a single recent record of Hazel Dormouse located approx. 1.33km south of the candidate site. The linear habitat features at the site such as the species-rich hedgerow margins and woodland corridors were considered suitable to support the species. These features contain a number of potential food sources (e.g. Hazel, Oak, Bramble), are structurally suitable containing a continuous understorey layer and have existing connectivity to larger woodland parcels in the wider landscape which could support a source population (e.g. at Ysgyryd Fach and A465 corridor). Many of the hedgerows located towards the central section of the candidate site (i.e., around the grazed improved grassland fields) were found to either be defunct or intensively managed (regularly cut/trimmed) and were not considered suitable to support dormouse.

Reptiles

3.43 The majority of the habitats located at the candidate site (e.g. grazed improved grassland) were considered of limited suitability to support reptiles. The grazed areas of improved grassland lack any suitable cover or shelter for reptiles and are limited in foraging resources. However, the fields containing poor semi-improved grassland (F10) are located on a steep slope and border the adjacent woodland and scrub. These areas provide suitable cover, foraging resources and basking opportunities and could potentially support a small number of common reptiles such as Slow-Worm, which has been recorded within 300m of the candidate site's boundary.

Otter and Water Vole

3.44 The habitats at the site were not considered suitable to support Otter or Water Vole *Arvicola amphibius*. The larger watercourse running through the woodland corridor and drainage ditches are both small in size/depth and are unlikely to support sufficient prey resources for Otter. However, the occasional use of the stream corridor by commuting Otter cannot be precluded. The wet ditches (as described in paragraphs 3.25-3.26)

lack any bankside vegetation capable of supporting foraging Water Vole. As such, no further consideration is given to Water Vole during the current report.

White-Clawed Crayfish

3.45 Although the SEWBReC search did not return any records of White-Clawed Crayfish *Austropotamobius pallipes* within 2km of the candidate site, the designation description for River Gavenny SINC includes reference to the presence of the species within a tributary just within the Brecon Beacons National Park boundary. A search of NBN Atlas[5] identified two historic crayfish records dating from 1993 and 2000 associated with watercourses approx. 2km north and 3km north of the candidate site. The watercourse within the woodland corridor was considered of limited suitability to support White-Clawed Crayfish (Target Notes 7). Although the watercourse at Target Note 7 contains a rocky substate, soft banks and suitable refuges (e.g. rocks, logs and fallen leaves) the stream was slow-flowing and very shallow at the time of the survey (water depth <5cm). Crayfish are typically associated with watercourses 0.75m to 1m in depth but have been known to occasional use shallow watercourses with a water depth of around 5cm (Holdich, 2003). However, it is unlikely a watercourse this shallow could continually support a crayfish population in the long-term. In addition, there are no direct hydrological links to the watercourses where the historic crayfish records are located. No further consideration is given to the development impacts on White Clawed-Crayfish.

[5] https://nbnatlas.org/

External Building Inspection

3.46 An external building inspection was undertaken at the buildings at Garth Farm and Roc House Farm. In total, 6no. buildings were included in the assessment, the locations are shown on the Extended Phase 1 Habitat Plan in Appendix III.

Building 1

3.47 Farmhouse (Roc House Farm) to the west of Field 9. The surveyor did not access the garden and so the assessment of the building took place from suitable vantage points. The concrete render is in good condition with no obvious cracks/features. Tiled roof also appears to be in good condition with no missing/lifted tiles, as well as lead flashing on chimney. Some small gaps may be present under the wooden fascia and soffits but could not be fully assessed from distance. Based on the limited access available, the building was assessed as of at least Low potential and would require a more detailed internal/external inspection when accessed can be arranged to establish if further surveys were required (dependent on development impacts).

Building 2

3.48 Building 2 comprises of a barn/outbuilding located north of the main farmhouse at Roc House Farm. The barn consists of a concrete breeze block base with corrugated metal and wooden board cladding and a corrugated roof. It is currently used for storage of hay bales. The internal structure is light and exposed and was considered to have negligible potential to support roosting bats. The barn was considered to have a low suitability to support Barn Owl, although no evidence found to suggest this (e.g. feathers, splashing, pellets).

Building 3

3.49 Stables comprising of concrete breeze block structure with corrugated metal roof. No evidence of roosting bats present and the stable is open/exposed to the elements. The structure was considered to be of negligible potential to support roosting bats. An old/dis-used bird nest (possible Swallow cup) was found in the building.

Building 4

3.50 Located in close proximity to the stables is another metal barn. The structure consists of two separate rooms. One half is occupied as a stable. This is light inside and exposed to the elements and of negligible potential for roosting bats. The second compartment was locked at the time of the survey so an assessment could only be undertaken through a view hole. This room, which is used to house farm machinery, is kept in darkness. A damaged section of wall/roof could allow bats/birds entry into the building although no evidence of roosting/nesting seen from the viewpoint. Further inspection of the this building would be required and it was assessed of at least Low potential based on the current survey.

Building 5

3.51 Corrugated metal building in poor condition located to the south of Garth Farm. At the time of survey the building was locked so the assessment was undertaken through gaps/holes in wall. One half of the building is used to store farming equipment. This area had wooden supporting beams and was dark inside and was considered suitable for use as a night roost/feeding perch (Low bat roost potential). The other room was inaccessible but is used as a radio transmitter post. As above, further inspection of this building would be required in order to fully assess the potential to support roosting bats.

Building 6

3.52 A large newly built barn at the southern extent of Garth Farm, currently used to store farming vehicles and hay bales. The building is constructed from corrugated sheet metal and steel beams. Likely to be disturbed regularly and the internal structure is light and exposed with a large open door. The building was considered to have negligible potential to support roosting bats.

4.0 POLICIES AND PLANS

4.1 The following local and national planning policy relating to nature conservation and biodiversity are considered of relevance to the site.

Planning Policy Wales (2024)

4.2 This document set out the land use planning policies of the Welsh Government with Chapter 6 dealing with Distinctive and Natural Places which covers Biodiversity and Ecological Networks. The advice contained within PPW is supplemented for some subjects by Technical Advice Notes (TAN's), with TAN 5 addressing Nature Conservation & Planning.

4.3 TAN 5 identifies a number of key principles, which the town and country planning system in Wales should consider. Those relevant are detailed below:

- Work to achieve nature conservation objectives through a partnership between local planning authorities, Natural Resources Wales (NRW), voluntary organisations, developers, landowners and other key stakeholders;
- Integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time;
- Ensure that the UK's international obligations for site, species and habitat protection are fully met in all planning decisions;
- Look for development to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally;
- Promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors;
- Local planning authorities should seek to protect trees, groups of trees and areas of woodland where they have natural heritage value or contribute to the character or amenity of a particular locality;
- The presence of a species protected under European or UK legislation is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat.

Updates to PPW Chapter 6: Distinctive and Natural Places (Feb 2024)

4.4 An updated version of PPW: Chapter 6 was published with immediate effect on 11th October 2023 in a published letter to Local Authorities from Julie James AS/MS – Minister for Climate Change. These updates were then incorporated into Edition 12 of PPW in February 2024. The new guidance provides an update on Net Benefit for Biodiversity and the Step-wise Approach, with extracts considered of relevance to the candidate site provided below:

Maintaining and Enhancing Biodiversity

4.5 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.

4.6 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). Even if the biodiversity value has been maintained, there must still be a pro-active process to look for and secure enhancement through the design and implementation of the development.

Environment (Wales) Act, 2016

4.7 Part 1 of the Environment Act Wales' came into force in May 2016 and sets out the approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act.

Section 6 - Biodiversity and resilience of ecosystems duty

4.8 Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'.

Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity

4.9 This section lists living organisms and types of habitat in Wales which are considered of key significance to maintaining and enhancing biodiversity in relation to Wales. The Welsh Ministers are required to take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Local Planning Policy

Monmouthshire County Council Local Development Plan (2011 to 2021)

4.10 The Monmouthshire County Council LDP was adopted in February 2014, replacing the Monmouthshire Unitary Development Plan (UDP) to become the adopted development plan for the County (excluding the part within the Brecon Beacons National Park). Following a review in 2018, the current plan will be replaced with a revised LDP (2018 to 2033) and is currently undergoing consultation. Policies of relevance to the proposed site within the current LDP include:

Key Policy:

3. VALUING OUR ENVIRONMENT

Rural Environment and Biodiversity

- *Monmouthshire has major biodiversity and landscape resources that need to be preserves and should be protected, managed and enhanced.*
- *There is a need to improve connectivity within the landscape through protecting and improving existing wildlife networks and corridors and creating new linkages to allow species to move and adapt to climate change impacts.*

The LDP seeks to influence these issues by:

- *Ensuring that new development does not cause harm to international, national and locally protected sites and species and that where appropriate and necessary, avoidance, mitigation and compensation measures are incorporated, while ensuring that new benefits for Biodiversity are explored.*
- *Undertaking a Habitats Regulations Assessment to ensure that the cumulative effects of development in Monmouthshire and adjoining areas do not result in harm to internationally designated nature conservation sites.*
- *Ensuring that biodiversity is considered in any development in order to protect any existing interest on the site and encourage biodiversity enhancements where necessary.*
- *Protecting high quality landscapes throughout the County, paying particular attention to those contained in the Wye Valley AONB and in the setting of the Brecon Beacons National Park.*

Detailed Policies:

STRATEGIC

Policy S13 – Landscape, Green Infrastructure and the Natural Environment. Development proposals must:

1. Maintain the character and quality of the landscape by:

(i) identifying, protecting and, where appropriate, enhancing the distinctive landscape and historical, cultural, ecological and geological heritage, including natural and man-made elements associated with existing landscape character;

(ii) protecting areas subject to international and national landscape designations;

iii) preserving local distinctiveness, sense of place and setting;

(iv) respecting and conserving specific landscape features, such as hedges, trees and ponds;

(v) protecting existing key landscape views and vistas.

2. Maintain, protect and enhance the integrity and connectivity of Monmouthshire's green infrastructure network.

3. Protect, positively manage and enhance biodiversity and geological interests, including designated and non-designated sites, and habitats and species of importance and the ecological connectivity between them.

4. Seek to integrate landscape elements, green infrastructure, biodiversity features and ecological connectivity features, to create multifunctional, interconnected spaces that offer opportunities for recreation and healthy activities such as walking and cycling.

LANDSCAPE AND NATURE CONSERVATION

Policy LC1 - New Built Development in the Open Countryside

"...new built development will only be permitted where all the following criteria are met:

d) the development will have no unacceptable adverse impact on landscape, historic / cultural or geological heritage, biodiversity or local amenity value"

GREEN INFRASTRUCTURE

Policy GI1 – Green Infrastructure

Development proposals will be expected to maintain, protect and enhance Monmouthshire's diverse green infrastructure network by:

a) Ensuring that individual green assets are retained wherever possible and integrated into new development. Where loss of green infrastructure is unavoidable in order to secure sustainable development appropriate mitigation and/or compensation of the lost assets will be required;

b) Incorporating new and /or enhanced green infrastructure of an appropriate type, standard and size. Where on-site provision of green infrastructure is not possible, contributions will be sought to make appropriate provision for green infrastructure off-site.

NATURE CONSERVATION AND DEVELOPMENT

Policy NE1 – Nature Conservation and Development

Development proposals that would have a significant adverse effect on a locally designated site of biodiversity and / or geological importance, or a site that satisfies the relevant designation criteria, or on the continued viability of priority habitats and species, as identified in the UK or Local Biodiversity Action Plans or Section 42 list of species and habitats of importance for conservation of biological diversity in Wales, will only be permitted where:

a) the need for the development clearly outweighs the nature conservation or geological importance of the site; and

b) it can be demonstrated that the development cannot reasonably be located elsewhere.

Development proposals shall accord with nature conservation interests and will be expected to:

i) Retain, and where appropriate enhance, existing semi-natural habitats, linear habitat features, other features of nature conservation interest and geological features and safeguard them during construction work;

ii) Incorporate appropriate native vegetation in any landscaping or planting scheme, except where special requirements in terms of purpose or location may dictate otherwise;

iii) Ensure the protection and enhancement of wildlife and landscape resources by appropriate building design, site layouts, landscaping techniques and choice of plant species;

iv) Where appropriate, make provision for on-going maintenance of retained or created nature conservation interests.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 The combination of desk study and Extended Phase 1 Habitat survey identified a range of habitats at the candidate site including grazed improved grassland (which occupies the majority of the site), poor semi-improved grassland, broad-leaved semi-natural woodland, dense scrub, running water and wet ditches, bare ground, buildings and a large hedgerow network. The type and distribution of habitats identified in the current survey was comparable to that recorded during surveys in 2020 (SBE 2021). The areas of grazed improved grassland were considered of limited ecological importance and represent the area of the candidate site most suitable for any proposed development. Habitat features of ecological interest at the site including the hedgerow network, scattered trees, woodland corridors/edge, dense scrub and poor semi-improved grassland were considered suitable to support protected and priority species, such as foraging and commuting bats, nesting birds, Hazel Dormouse and Great Crested Newt – for which further targeted survey work is recommended. The survey also identified a main Badger sett within the candidate site boundary. A large number of trees within the candidate site boundary were assessed to have potential to support roosting bats, as well as buildings within the site boundary.

Badger

5.2 A main badger sett was discovered within the candidate site boundary. The sett contains at least 16no. well-used entrances. The current survey also found Badger guard hairs and well-used mammal paths at other locations across the site. It is likely the areas of improved grassland and woodland at the site are regularly used by foraging/commuting Badgers with the candidate site falling into the territory of at least one Badger social group.

5.3 Badgers and their setts are afforded legal protection under the Protection of Badgers Act (1992) meaning it is an offence to kill/injure individual Badgers as well as damage, destroy or obstruct access to a sett or disturb a Badger while it is occupying a sett. The presence of a Badger sett will not be a significant constraint on the delivery of any proposed residential development at the candidate site, however, the design of any future development layout will need to take in consideration the sett locations to avoid any potential disturbance or damage. The destruction of a sett should only be considered as a last resort. Works that are likely to disturb Badgers occupying a sett and would require a disturbance licence include (English Nature, 2002):

- Using very heavy machinery (generally tracked vehicles) within 30 metres of any entrance to an active sett;
- using lighter machinery (generally wheeled vehicles), particularly for any digging operation, within 20 metres;
- light work such as hand digging or scrub clearance within 10 metres.

5.4 It is recommended that the identified main sett and a minimum 30m buffer is retained as part of any development proposal and considered early in the design phase. Retention of the hedgerow and woodland habitats as far as practicable as part of a green-infra-structure strategy across the site will allow continued use of the area by Badgers. In the event that retention of the sett (and minimum 30m buffer) is not possible, further surveys (e.g. camera monitoring) are likely to be required to inform mitigation and/or licensing.

5.5 An updated walkover survey for Badgers across the whole site would also be recommended prior to the submission of a planning application (or within 12 months of the current survey) to verify the location/status of existing setts and check for any additional evidence.

Bats

5.6 The survey identified a number of trees with potential to support roosting bats including 11no. with a PRF-M potential and 12no. with PRF-I potential. Any future development at the candidate site should seek to retain any trees identified as having potential to support roosting bats. However, given the current condition of some trees at the site (e.g. standing deadwood and trees with damage) some would likely need to be removed or pruned for development and/or H&S reasons – in this case further survey work (presence/absence surveys) would be required. The best practice guidelines (BCT, 2023) recommend that for trees with PRF-M bat roost potential climbing inspection surveys are undertaken between May – September, supplemented by evening emergence checks where appropriate. The climbing inspection would involve the use of tree climbing equipment/ladder and endoscope to physically inspect potential roost features for evidence of bats (e.g. live/dead bats, droppings and feeding remains). This survey can be undertaken at any time of year although the optimal timing is as stated above.

5.7 Trees assessed to have a low or PRF-I potential do not require any further survey work under the BCT (2023) guidelines. However, on a precautionary basis if any trees with low potential were to be removed as part of any future development a soft-felling approach would be recommended. Trees should be section felled with cut tree limbs carefully lowered and left grounded overnight to allow any bats present to leave (Jackson, 2015).

5.8 A number of buildings at Garth Farm and Roc House Farm were subject to an external building inspection. However, further survey work may be required dependant on the development impacts i.e., if any of the buildings are to be demolished as part of any future development design. It is recommended that, as part of any future planning application, a more detailed external and internal building inspection is carried out to assess buildings for their potential to support roosting bats and search for any evidence of roosting bats and inform any potential mitigation or licencing requirements. During the current survey no access was permitted to inspect the internal structure of the main farm house buildings at the site, nor were surveyors able to get a full view of all elevations of the buildings at the site.

5.9 The linear habitat features at the candidate site such as the hedgerow network, woodland corridor and woodland edge were considered likely to support a range of foraging and commuting bats species – the desk study returned an extensive list of bat field records within a 2km radius of the site. Given the scale of the candidate site, further activity surveys (manual transects and automated surveys) would be required to establish how bats are using the candidate site to inform any particular mitigation/avoidance measures. Based on the availability of suitable habitats at the candidate site (the majority of the site comprises of grazed improved grassland of low suitability) the minimum level of survey recommended in the best practice guidelines (BCT, 2023) would be considered appropriate in the first instance to achieve a representative sample of bat activity across the candidate site[6]. This would comprise 3no. activity survey visits in spring, summer and autumn in appropriate weather conditions. Given the scale of the candidate site activity surveys are likely to consist of more than a single transect. Separate automated/static surveys (minimum one static per transect) would also be required, with each session recording for 5 consecutive nights *in situ* per season. The location of the static detectors (e.g. Anabat units) would be focused on the areas likely to be subject to development impacts (e.g. hedgerow breaches).

5.10 The design of any site lighting should also seek to reduce artificial light spill onto retained boundary habitats and linear features (e.g. hedgerows and surrounding woodland). These habitat features should be maintained as dark corridors for bats and other nocturnal wildlife (i.e., badger and otter). See lighting guidance note produced by BCT & ILP (2023) for advice on how to mitigate for impacts of artificial lighting on bats. Any future development proposal should also provision for the inclusion of bat boxes onto new residential units and retained trees.

Birds

5.11 The hedgerow network, scattered trees and areas of dense scrub and woodland at the candidate site were considered likely to support a number of foraging and tree/scrub nesting bird species. Under the Wildlife and Countryside Act (1981) (as amended) all wild birds and their nests are protected against damage or destruction whilst in use or being built. Given the high likelihood of nesting birds being present within the habitats at the candidate site any future vegetation works (i.e. hedgerow or tree removal) would be subject to seasonal constraints and should be undertaken outside of the nesting bird season (undertaken between September – February). If this is not possible an ecologist should be present to inspect habitats for nesting birds prior to removal.

[6] Further surveys may be required if these surveys reveal higher levels of bat activity than predicted.

5.12 A number of the scattered trees at the site (and barns) were also considered to be of some suitability to support Barn Owl. Multiple trees assessed to have PRF-M potential to support roosting bats were found to contain cavities of suitable size to support Barn Owl (approx. 80mm diameter). The data search also returned records of nesting Barn Owl within close proximity to the candidate site. As a Schedule 1 listed bird species Barn Owl is afforded more protection under the Wildlife and Countryside Act (1981) (as amended) meaning it is an offence to disturb any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young. Further targeted survey work for Barn Owl may be required dependant on potential development impacts (at this stage it is not known which trees or buildings may be impacted or are proposed for removal),

Great Crested Newt

5.13 Whilst no waterbodies are located within the immediate candidate site boundary, a review of OS mapping revealed the location of a pond within 250m of the site, located at Caederwen. No access was permitted at the time of the current survey. The candidate site was considered of low suitability to support Great Crested Newt in their terrestrial phase with the hedgerow margins, woodland and grazed pasture providing some hibernating and foraging opportunities. GCN are known to use terrestrial habitats up to 250m from breeding ponds (Langton *et al.,* 2001).

5.14 Great Crested Newt and their breeding and resting places are afforded legal protection under the Conservation of Species and Habitats Regulations (2017) and Wildlife and Countryside Act (1981) (as amended). As there is a low potential that GCN may be present within the habitats at the candidate site it is recommended that an initial eDNA survey is undertaken at the pond located within 250-500m of the candidate site, access permitting. An eDNA survey for GCN should be undertaken by a licensed surveyor during a single day time visit between mid-April to mid-June. Based on the eDNA survey findings, further survey work may be required at these ponds to establish the likely population size class assessment to inform any mitigation measures and licencing requirements at the candidate site. This would involve up to 6no. survey visits (e.g. torching, bottle trapping and egg search) between mid-March to mid-June.

Hazel Dormouse

5.15 The data search included a single recent Dormouse record (dated 2022) associated with the A40 carriageway approx. 1.33km south of the site. The species-rich hedgerows and woodland corridors at the candidate site were considered suitable to support the species. The candidate site is also located within the known range of the species (Bright *et al.,* 2006). Hazel Dormouse and their breeding and resting places are also afforded legal protection under the Conservation of Species and Habitats Regulations (2017) and Wildlife and Countryside Act (1981) (as amended). Dependant on the likely impacts of any future development layout at the candidate

site further survey work may be required to determine the likely presence/absence of Hazel Dormouse and inform any appropriate mitigation/avoidance measures or licencing requirements.

5.16 Further surveys would involve the deployment of nest tubes along the hedgerow margins, woodland corridor and woodland boundaries at the candidate site. As per best practice guidelines (Bright *et al.,* 2006), nest tubes should be deployed in March/April and checked at monthly intervals for the presence of Dormouse up until November. A minimum of 50no. nest tubes should be deployed to sample a site. Given the scale of the candidate site it is likely >50 nest tubes will be required to achieve full coverage and demonstrate an appropriate survey effort.

Reptiles

5.17 The majority of the habitats at the candidate site were considered to have a limited potential to support common reptiles in their current use (grazed by livestock). The grazed areas of improved grassland (in particular within the central section of the site) lack any suitable cover or shelter for reptiles. However, the field parcel located along the eastern boundary supports areas of poor SI grassland and is steep in topography. These areas of the candidate site were considered suitable to support individual/small numbers of common reptiles. Records of Slow-Worm were identified within 300m of the candidate site's boundary.

5.18 All UK reptiles are protected against intentional killing or injuring under Schedule 5 of the Wildlife and Countryside Act (1981) (as amended). As such, it is recommended that the presence of reptiles is considered for any habitat management or enhancement work along the eastern boundary of the site. This could include, for example the adoption of a phased, directional cutting methodology for any vegetation clearance and creation of habitat features as localised enhancements (e.g. log or brash piles).

Priority habitats

5.19 The candidate site contains an extensive hedgerow network. As priority habitats listed under Section 7 of the Environment Act (Wales) (2016) any future development at the candidate site should seek to retain and enhance hedgerow margins, where possible, or include the hedgerow network into the layout of any development design via a green-infrastructure management plan (see paragraphs 4.7 -4.9). This would also apply to broad-leaved woodland habitats at the candidate site which are also listed as priority habitats in Wales (as lowland mixed deciduous woodland). The latest illustrative layout (Appendix I) indicates that the majority these habitat features will be retained and widened and included into a strategic green-infrastructure network at the site.

Net-benefit for biodiversity

5.20 As per national planning policy (PPW Edition 12) 'all development must deliver a net benefit for biodiversity' (see paragraphs 4.4 – 4.6). The current indicative masterplan indicates that the majority of the linear habitat features at the site will be retained (e.g., priority habitats such as woodlands and hedgerows). However, the current plan will result in a net-loss of grassland resources, albeit of low ecological value. It is recommended, that during the design stage of any future planning application, any retained or new areas of grassland are designed to provide a net-benefit for biodiversity (via habitat condition rather than in total area) through reseeding with an appropriate species-rich native meadow mixture and through a long-term habitat management plan. Other features that could be designed to provide NBB include the design of SuDS/attenuation features to benefit biodiversity (for example, basins designed to hold water during most part of the year and seeded with native wetland mixture and shrubs) and the use of native tree and shrub species within any future soft landscape plan (trees, hedgerows or woodland planting).

Other considerations

5.21 As discussed in paragraphs 3.25 the small watercourses at the candidate site have existing hydrological links to the River Gavenny SINC and River Usk SAC SSSI. Any future development at the candidate site will need to take in consideration the potential for indirect impacts to designated sites such as changes to water quality through the discharge of surface water run-off during construction and operation. It is recommended pollution prevention measures should be included within a CEMP to accompany any future planning application.

5.22 Other mitigation or enhancement measures as part of any proposed development at the candidate site would include the inclusion of bat and bird boxes onto new buildings and retained trees and the creation of a 130mm x 130mm gap at the bottom of garden and boundary fencing as to allow continued connectivity through the candidate site for Hedgehog and other small mammals[7]. The plan also indicates that areas of the site along the eastern boundary will be retained and could be designed for both recreation use and ecological mitigation and enhancements purposes (see 5.20).

Avoidance, mitigation and enhancements

5.23 The avoidance, mitigation and enhancements described in the sections above are summarised below. Additional measures may be required following the completion of further survey work for foraging/commuting and roosting bats, Barn Owl, Badger, Hazel Dormouse and GCN;

Avoidance

- Retention of priority habitats at the candidate site as far as practicable (hedgerows and broad-leaved woodland);

[7] Based on the 'Hedgehog Street' principle advised by the People's Trust for Endangered Species (PTES) and other conservation groups: https://www.hedgehogstreet.org/

- Retention of trees with potential to support roosting bats;
- Implementation of 30m buffer from badger sett entrances and retention of access and foraging links;
- Vegetation clearance (tree, hedgerow, scrub removal) and site preparation to avoid nesting bird season and to be undertaken over the winter period (between September – February);

Mitigation

- Covering of any excavations overnight or means of escape provided during construction phase to minimise risks to badger, otter and any other small mammals that may become trapped;
- Design of site lighting to minimise artificial light spill onto retained linear habitat features for foraging/commuting bats and other nocturnal wildlife;
- New habitat creation (e.g., native wildflower meadow seeding, hedgerow, tree and woodland planting) to compensate for any loss of priority habitats and provide net benefit for biodiversity;
- Pollution prevention measures during construction to minimise indirect impacts to River Usk SAC/SSSI;
- External boundary fencing, if used, to include 130x130mm gap to provide continued connectivity for hedgehog and other small mammals through the development;

Enhancements

- Soft landscape plan to include native tree and shrub species or those with a known biodiversity benefit;
- Strengthening of existing defunct hedgerows with new native tree and shrub planting;
- Native wet meadow seeding and planting within SuDS basins;
- Inclusion of bat and bird boxes onto new residential units and retained trees;
- Creation of reptile and amphibian hibernacula.

REFERENCES

Bat Conservation Trust (2016) *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.

Bat Conservation Trust & Institution of Lighting Professionals (2018) *Bats and artificial lighting in the UK. Guidance Note 08/18*. Bat Conservation Trust, London.

Bright, P., Morris, P. and Mitchell-Jones, T. (2006) *The Dormouse Conservation Handbook: Second Edition*. English Nature, Peterborough

English Nature (2002) *Badgers and Development*. English Nature, Peterborough.

Froglife (1999) *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.

Gwent Ecology (2010) *Ecological Connectivity Assessments of Settlements in Monmouthshire*. Gwent Ecology, Monmouthshire.

Holdich D (2003) *Ecology of the White-clawed Crayfish*. Conserving Natura 2000 Rivers Ecology Series No. 1. English Nature, Peterborough

Institute for Environmental Assessment (1995) *Guidelines for Baseline Ecological Assessment*. E & FN Spon, Hong Kong.

Jackson, D. (2015) *Bats & Trees – Information Leaflet*. Bat Conservation Trust, London.

Joint Nature Conservation Committee (JNCC) (2010) *Handbook for Phase I Habitat Survey. A technique for environmental audit.* JNCC, Peterborough.

Langton, T. E. S., Beckett, C. L. and Foster, J. P. (2001) *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

Monmouthshire County Council (2014) Adopted Local Development Plan (LDP) 2011-2021.

Soltys Brewster Ecology (SBE) (2021) *Land East of Abergavenny – Preliminary Ecological Appraisal*. Document Ref: E2093401/Doc 01. August 2021.

Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds **114**: 723-747.

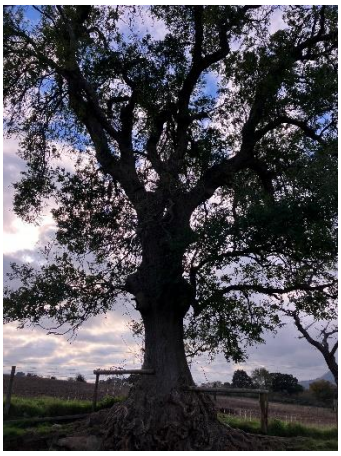
Welsh Assembly Government (2024) Planning Policy Wales Edition 12. February 2024.

Welsh Assembly Government (2009) Technical Advice Note 5: Nature Conservation and Planning.

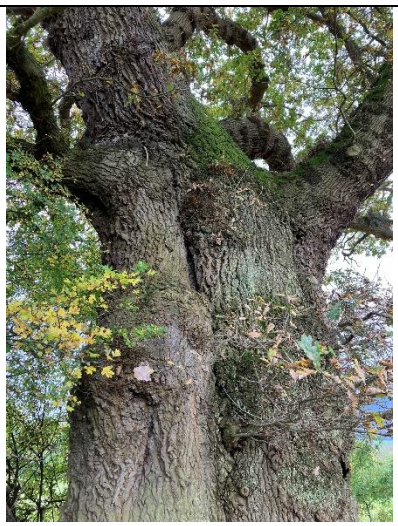
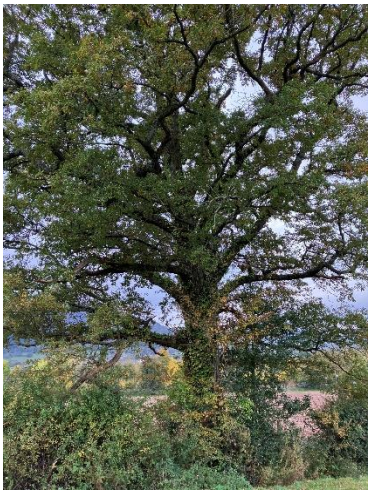
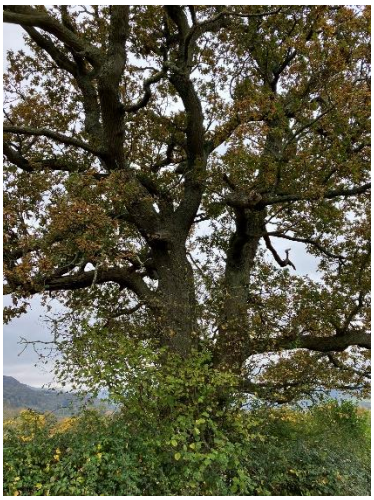
APPENDIX I INDICATIVE MASTERPLAN (2020)

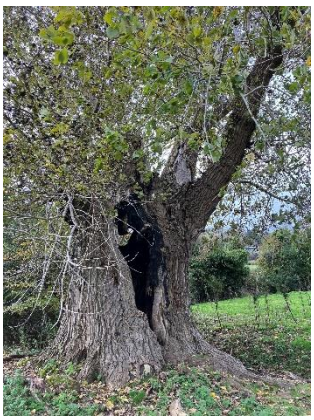
APPENDIX II DESK STUDY INFORMATION RECEIVED FROM SEWBReC

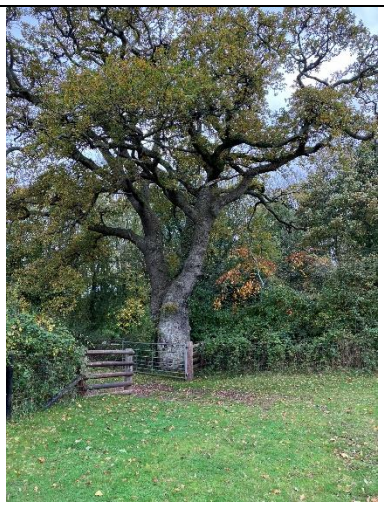
APPENDIX III EXTENDED PHASE 1 HABITAT SURVEY PLAN (2024) & TARGET NOTES

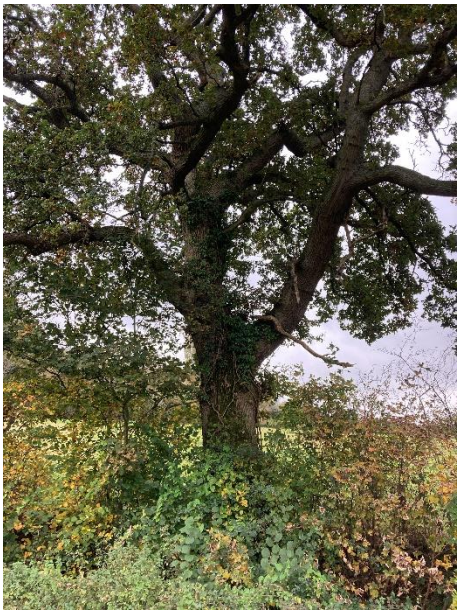
Target Note	Description/Comment
Birds seen/ heard: Robin, Wren, Magpie, Great Tit, Blue Tit, Carrion Crow, Blackcap, Goldfinch, Redwing, Buzzard and Blackbird.	
1	Well-used mammal pathway leading under boundary fence. Badger guard hairs caught in fence. 
2	Ash on field boundary. Several small features such as knot holes and cracked/lifted bark that may support individual/small numbers of roosting bats – **PRF-I**. 
3	Ash on field boundary. Several openings, woodpecker holes etc that appear to lead into larger cavities within the trunk/major limbs – **PRF-M**. 
4	Another well-used mammal path leading under boundary fence and into stream corridor. Badger guard hairs in fence.

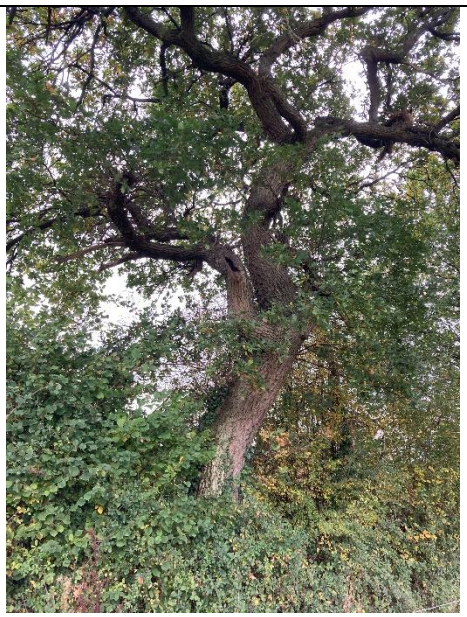
	
5	Outlier sett on edge of field parcel. Sett consists of a single entrance hole that appears to lead away from the field and into the adjacent stream corridor. The tunnel has well-worn sides/flooring although leaf litter and debris within its entrance indicate that it has not been used recently. Some rocks appear to have been places across the entrance to the sett. Grid reference: SO 30983 13365 (+/- 3m). 
6	**Sensitive Information** [redacted]
7	Stream corridor contains a large number of very mature/veteran broadleaved trees, many of which contain features suitable for roosting bats (**PRF-I & PRF-M**). The understory and ground flora layers are diverse and species-rich, containing several ancient woodland indicator species such as Dog's Mercury, Soft Shield Fern, Enchanter's Nightshade, Wych Elm, Field Maple, Opposite-leaved Golden Saxifrage. Other species noted include Hart's-tongue Fern, Male Fern, Herb Robert, Ground Ivy, Wood Avens, Ivy and Bramble.
8	Mature Oak of considerable age/size. Large number of PRFs including a vertical split in its trunk, cracked/lifted bark, knot hole and damaged limbs. **PRF-M**.

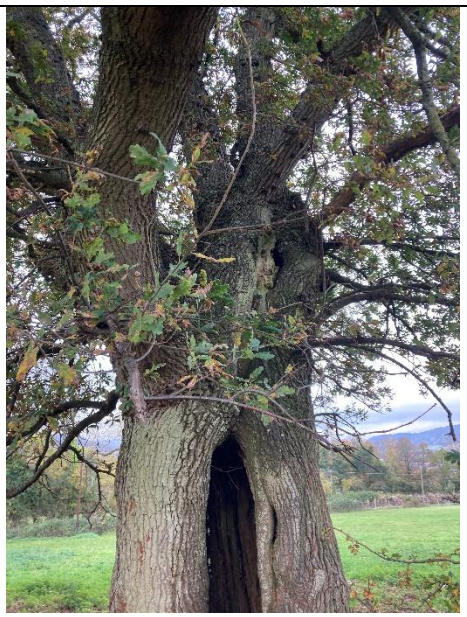
	
9	Mature Oak on western site boundary. Lower reaches of tree is covered in Ivy and Bindweed which may have concealed PRFs. Western elevation of tree was inaccessible and therefore couldn't be assessed. **PRF-I**. 
10	Mature Oak on western boundary of the site. Several small/shallow features including cracked bark, knot holes and damaged limbs. Western extent of tree inaccessible. **PRF-I**. 
11	Mature Ash. Several features which appear to lead into cavities within the tree – **PRF-M**.

	
12	Ash in poor condition. Main trunk has snapped, creating several small cracks/features – **PRF-I**. 
13	Mature Black Poplar of considerable size/age. Significant fire damage with very large cavity in main trunk of tree. This is open at the top allowing the elements inside, but smaller and more sheltered cavities appear to lead up into the tree's limbs -PRF-M. Adjacent to the Poplar are two Willows in poor condition. Both contains several small features – **PRF-I.**  
14	Mature Oak with very large cavity that appears to lead up into the trunk – **PRF-M**.

	
15	Mature Black Poplar in very poor condition next to Building 4. Tree has significant fire damage. There are several openings and woodpecker holes leading to cavities within the tree – **PRF-M**. 
16	Woodland edge along path/farm access track. Large number of mature trees with features suitable for use by roosting bats (some with limbs overhanging path). Woodland to the west falls outside the redline boundary and within the property of the adjacent residential house. This has parkland characteristics. 
17	Mature Oak on edge of field parcel (within redline boundary). Several woodpecker holes and knot holes etc – PRF-M. The adjacent strip of woodland to the north is mixed woodland. Large

	number of very mature trees (possibly ancient woodland). A concrete drainage channel runs along the base of the woodland strip. Several well-used mammal pathways also lead through this woodland, with Badger guard hairs found in the boundary fence in multiple locations. Considered likely to contain a badger sett. 
18	Collection of two mature Oak trees with small PRFs such as desiccation fissures, knot-holes and dense ivy cover – **PRF-I** potential. 
19	Mature Oak at end of hedgerow with major cavity of secondary trunk capable of supporting multiple roosting bats – **PRF-M** potential.

	
20	Mature Oak within hedgerow margin with two medium sized cavities associated with knot-holes, as well as long vertical crevices between two adjoining limbs. **PRF-M** potential. 
21	Mature Oak within hedgerow boundary with large cavity at base which appears to extent into the main trunk (hollow trunk). Cavity capable of supporting multiple roosting bats, likely to be of suitability for maternity colony and hibernating bats. **PRF-M** potential.

	
22	Oak tree within hedgerow boundary with small PRFs including ivy cover and knot-holes – **PRF-I** potential.
23	Veteran Ash within hedgerow boundary with small PRFs such as desiccation fissures and split bark **– PRF-I** potential.
24	Tall Ash within hedgerow boundary with shallow crevices associated with knot-holes and pruning cuts – **PRF-I** potential.