

4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

Likelihood of the presence of protected species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat. The likelihood of occupancy of protected species is ranked according to the criteria listed in Table 1.

Where this report supports a planning application, the ecological interest of the study area (including the survey area) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity. It is clearly stated where a preliminary value can be given and where further information is required.

Likelihood of the presence of bats

There are three possible outcomes of the PRA element of the survey, each with specific recommendations. These are outlined below:

Confirmed bat roost

Best practice survey guidelines (Collins, 2016) recommend additional surveys for confirmed roosts. Three further surveys are required to characterise the bat roost present including species, roost type and access points to inform a European Protected Species Mitigation Licence (EPSML) application with Natural England. Surveys must be completed during the active bat season (May – September). At least two of the surveys should be completed during the optimal survey period mid-May to August, and at least one of the surveys should be a dawn re-entry survey (Collins, J. 2016).

Low, moderate or high likelihood of a bat roost present

Best practice survey guidelines (Collins, 2016) recommend additional surveys for features assessed as having low to high suitability for roosting bats. One, two or three further surveys are required to confirm presence/likely-absence of a bat roost, based on a low, medium or high roost likelihood evaluation. Surveys must be completed during the active bat season (May – September). If more than one survey is recommended, at least one of them should be completed during the optimal survey period mid-May to August, and at least one of the surveys should be a dawn re-entry survey (Collins, J. 2016). If two or one further survey is recommended these surveys must be completed during the optimal survey period (mid-May to August). For low and moderate roost likelihood evaluation the survey effort recommended at this stage is iterative and if bats roosts are confirmed in the building, a further survey will be required to provide sufficient information to inform an EPSML application to Natural England.

Negligible likelihood of a bat roost present

Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. However, if bats are found during any stage of the development, work should stop immediately and a suitably qualified ecologist should be contacted for further advice.

Appropriate justification for this assessment is provided in Section 2.3 of this report.

4.2 Evaluation

Taking the desk study and site survey results into account, the following conclusions for ecological factors has been reached.

Table 7: Evaluation of site

Ecological Factor	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations	Enhancements The Local Planning Authority has a duty to ask for enhancements under the NPPF (July 2018)
Designated sites	The site is not subject to any national or international designations. The site includes part of SINC 45 - Ynysowen/Merthyr Vale: A complex mosaic of ffridd habitats above the Afon Taf. These comprise mainly seminatural woodlands, acid grasslands, dry heathlands and bracken slopes. Other habitats include dense and scattered scrub, marshy grassland and neutral grassland. There is also a large disused quarry with associated spoil tips which have revegetated with heathland. In the north of the site is a large regraded colliery spoil tip supporting acid grassland with several species of interest.	The barn and green houses are not expected to generate any impact of significance on the integrity of the SINC site. The planting of trees could change the designated character of the SINC site.	A detailed management plan should be prepared for the SINC area under planning condition. This should set out short-, mid- and long-term management intentions for the landholding.	There is an opportunity to expand areas of acid grassland on the mosaic and in particular to encourage beds of lime-hating species such as heathers and bilberry which are present but becoming over dominated by bracken. A scheme of enhancement to be incorporated into the proposed management plan.
Notable habitats and plants	See SINC notification above	As above	As above	As above
Invasive / Non-native species	Bracken is over-dominant as a result of limited grazing pressure over a period of years	Unchecked the bracken will crowd out other mosaic habitat types of greater nature conservation value.	As above	As above
Bats	The site buildings (some stable sheds) have negligible habitat value for supporting roosting bats. Minor trees on site do not contain any potential roosting features (PRFs).	The site is likely to provide foraging for bats and no significant change is anticipated	No further surveys.	None

Birds	The site buildings do contain evidence of nesting birds. No evidence of barn owl usage was found. There is some limited potential for nesting by common and woodland bird species in existing site vegetation and the possibility of ground-nesting by species such as skylark.	The proposals are not considered likely to directly affect nesting birds. Some limited tree planting could, in time, increase nesting opportunity.	Vegetation clearance should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the buildings should be undertaken immediately prior to the commencement of works. All active nests will need to be retained until the young have fledged.	Install three Schwegler bird boxes on new barn e.g. Schwegler No 17 swift nest box Schwegler 1SP Sparrow Terrace Schwegler 1B nest boxes Schwegler 2H Robin Boxes Nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift nest boxes/nest cups should be positioned inside a building/covered area/outbuilding with open access for birds. Sparrow Terraces/nest boxes should be positioned at the eaves of the new building and can be incorporated into the fabric of the building during construction.
Reptiles	There suitable habitat on site for common reptiles.	The proposed development could result in the loss of habitat for common reptiles. Any reptiles present during the works could be injured or killed.	Reptile surveys may be required by the LPA to assess the presence/likely-absence of reptiles using the site. • Refugia would be placed around the site in suitable reptile habitat and left to 'bed in' for a minimum of two weeks. Seven separate site visits, conducted in suitable weather conditions, will be conducted to survey for reptiles. These surveys can take place in April, May and September. • Upon completion of the surveys a Mitigation and Enhancement Plan for reptiles will be prepared detailing methods to prevent harm to reptiles during the works and enhancements of the developed site. The authority might consider a destructive search/centre-out vegetation clearance	Waste materials created during the development e.g. log piles, brash, rocks etc. Can be used to create hibernacula and refugia for common reptiles. These should be positioned on the site boundaries.

			under ecological supervision is adequate to protect possible reptiles on site.	
Amphibians	There are three ponds within 500m of the site but all are on the far side of the Taff valley	The proposed development will have no significant impacts on common amphibians or GCN.	No further action required.	n/a
Invertebrates	The SINC areas contain extensive anthill complexes	The proposal is not expected to generate significant harm to these features	The proposed management plan should address the preservation of these invertebrate features	To be considered
Other Terrestrial Mammals	Badgers There are no observable badger setts on site and no evidence of badger use was found.	Badgers None	Badgers No further surveys are required. However, the following recommendations are given in order to mitigate against potential harm to badgers during the development works, as the species is very mobile: - Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. - Security lighting to be directed away from the undergrowth. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	Badgers Planting fruit-rich trees on the developed site will provide additional foraging resources for badgers.
	Water Vole No suitable habitat.	Water Vole The proposed development will have no impact on water voles.	Water Vole No further surveys.	Water Vole n/a

	Otter No suitable habitat.	Otter The proposed development will have no impact on otters.	Otter No further surveys.	Otter n/a
	Hedgehogs The site provides suitable habitat for hedgehogs.	Hedgehogs The proposed development will result in the loss of habitat for hedgehogs. Any hedgehogs present during the works could be injured or killed.	Hedgehogs No further surveys are required. However, the following recommendations are given in order to mitigate against potential harm to hedgehogs during the development works. • Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. • Security lighting to be directed away from the undergrowth. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	Hedgehogs Gaps should be created in new boundary fences to provide commuting routes through the developed site/new garden areas of the developed site for hedgehogs. Hedgehog houses could be incorporated into the developed site positioned beneath the hedgerow boundaries/site boundaries/in shady areas of the new gardens.

5.0 Bibliography

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Appendix 1a: Phase 1 Habitat Survey Map



Appendix 1b: Preliminary Roost Assessment Survey Map

Horse shed is only existing structure on site

