

Preliminary Ecological Appraisal

for

Cwmafan Childcare Units



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Contents

1	SUMMARY	1
1.1	SITE ASSESSMENT	1
1.2	RECOMMENDATIONS	1
2	INTRODUCTION	2
2.1	THE PROPOSED DEVELOPMENT	2
2.2	STUDY AIMS	3
3	METHODOLOGY	4
3.1	STUDY SCOPE	4
3.2	SURVEYOR QUALIFICATIONS AND EXPERIENCE	4
3.3	STUDY LIMITATIONS	5
3.4	DESK STUDY	5
3.5	PHASE 1 HABITAT SURVEY	5
3.6	ASSESSMENT OF PROTECTED/NOTABLE SPECIES POTENTIAL	6
4	RESULTS	7
4.1	SITE CONTEXT	7
4.2	HABITATS	7
4.3	PROTECTED/NOTABLE SPECIES	9
5	ASSESSMENT	11
5.1	PLANNING POLICY CONTEXT	11
5.2	IMPACTS ON DESIGNATED SITES	14
5.3	IMPACTS ON HABITATS	14
5.4	IMPACTS ON PROTECTED/NOTABLE SPECIES	14
5.5	ENHANCEMENTS	16
6	RECOMMENDATIONS	17
6.1	BIODIVERSITY ENHANCEMENTS	17
6.2	RECOMMENDATIONS DURING CONSTRUCTION	17
6.3	REPEAT SURVEYS	18
7	REFERENCES	19

1 Summary

1.1 Site Assessment

- 1.1.1 A Preliminary Ecological Appraisal (PEA) – including a Phase 1 Habitat survey and assessment for protected/ notable species suitability – has been completed for an area of land in Cwmafan in relation to a proposed new childcare unit.
- 1.1.2 The Site comprises areas of amenity grassland and existing tarmac roads/ hard standing, and is surrounded by a network of roads, houses and shops. As a result no significant ecological features are considered likely to be impacted on by the development proposals.

1.2 Recommendations

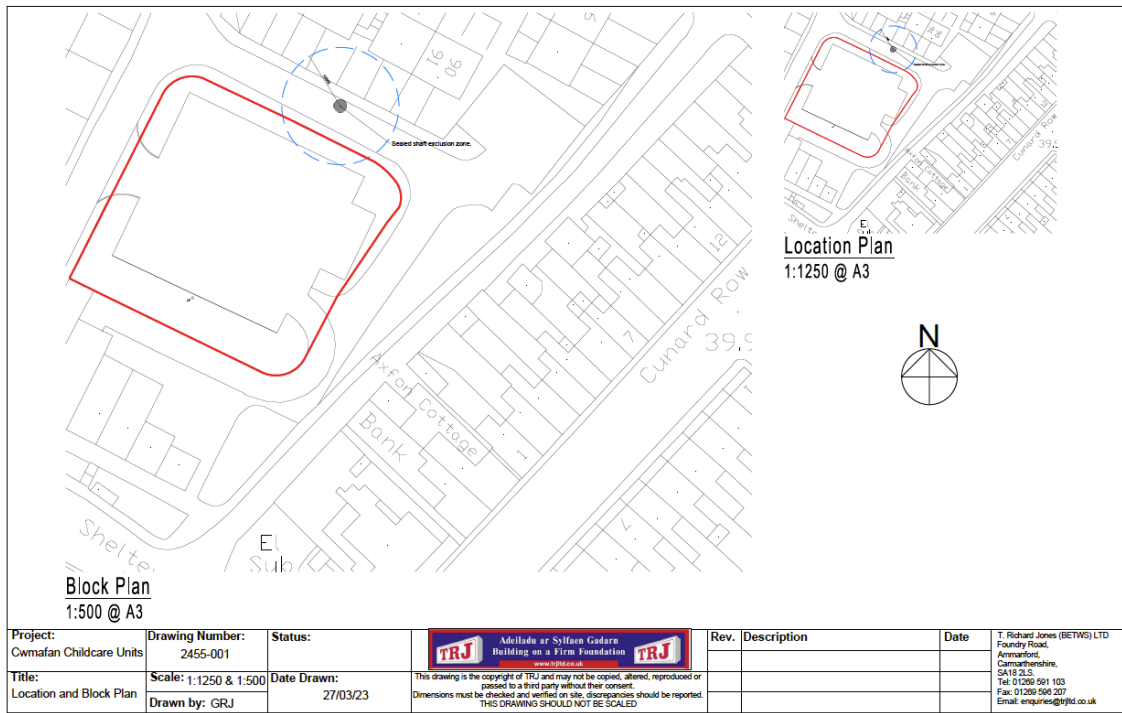
- 1.2.1 A number of simple recommendations are given in the report in order to provide net benefit for biodiversity. These are given within Section 6 of this report.
- 1.2.2 Repeat surveys are recommended if a period of more than two years elapses between the date of this survey and commencement of the works, even if planning consent has already been granted.

2 Introduction

2.1 The Proposed Development

- 2.1.1 Koru Ecology Associates was commissioned in March 2023 Nicholas Richards at Neath Port Talbot Council (“the Applicant”) via Gareth Jones of TRJ (“the Agent”) to complete a Preliminary Ecological Appraisal (PEA) of an area of land in Cwmafan (“the Site”).
- 2.1.2 The Site is centred on approximate National Grid Reference SS7850192482, and its location is shown in Figure 1 below. A copy of the proposals available at the time of the survey is shown in Figure 2 below.

Figure 1. Site location.



- 2.1.3 This report has been prepared as part of a planning application to Neath Port Talbot Council for the development of a new childcare facility, including all access and associated infrastructure.

Figure 2. Site proposals available at the time of the survey.



2.2 Study Aims

2.2.1

This report considers the potential impacts of the proposed development on ecological features identified within the Site, and/or its surroundings. The report details the methodology (Section 3) and results (Section 4) of the survey, describing features of ecological value found to be present, and impacts that may occur (Section 5). The report also gives recommendations for actions that should be undertaken by the Applicant to help minimise development impacts, as well as result in net benefit to biodiversity (Section 6).

3 Methodology

3.1 Study Scope

3.1.1 Koru Ecology Associates was commissioned by the Applicant in March 2023 to complete a PEA of the Site, based on standard methods set out by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017). This included the following:

1. **Desk-based study.** Written consultation with consultees, together with interrogation of online databases, to identify statutory and non-statutory designated sites of nature conservation importance, as well as records of protected and/or notable species.
2. **Phase 1 Habitat Survey.** To record the nature and extent of vegetation and habitats within and immediately adjacent to the Site.
3. Identification and/or assessment of potential for protected/otherwise notable flora and fauna that may require **further species-specific surveys**, together with any requirements for mitigation or potential mitigation.
4. Identification of **opportunities for net benefit for biodiversity**.

3.1.2 A more detailed description of tasks 1 – 3 is provided in Sections 3.4 – 3.6 below.

3.2 Surveyor Qualifications and Experience

3.2.1 Diana Clark MSc MCIEEM led all survey work and wrote this report. Diana has worked as a consultant ecologist since 2003 and holds two degrees in related disciplines. She is also a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), and Koru Ecology Associates is a CIEEM Registered Practice.

3.2.2 This report has been subject to technical review by Siân Musgrave MCIEEM. Siân has worked as a consultant ecologist since 2008 and is a full member of CIEEM.

3.3 Study Limitations

- 3.3.1 Every effort was made during the field visit to complete a comprehensive survey and produce a detailed description of the Site. However, no investigation can ensure the complete characterisation and prediction of the environment 100% of the time. Natural and semi-natural habitats change over time, and thus results given in this report may become less reliable in the future. Repeat surveys are usually recommended if a significant period of time elapses between when surveys were completed and when works commence. Further details are given in Section 6 of this report.
- 3.3.2 No significant constraints were noted in relation to this project.

3.4 Desk Study

- 3.4.1 Desk study data is normally a requirement of most PEAs, however following completion of the site visit it was considered that due to a combination of a) low ecological interest on the site, b) the location of the Site (i.e. entirely surrounded by existing roads, housing and other infrastructure) and c) the nature of the development proposals (i.e. small scale), obtaining desk study data would not add any further information to the assessment than that which could be obtained by just completing the site visit. On this occasion, it was therefore considered that a desk study would not be necessary.
- 3.4.2 However, it should be noted that the local planning ecologist was contacted and asked to supply information relating to the nearest Sites of Importance for Nature Conservation (SINCs) (Pers. Comm., L. Palmer, 30th May 2023).

3.5 Phase 1 Habitat Survey

- 3.5.1 Diana Clark MSc MCIEEM conducted a Phase 1 Habitat Survey of the Site on the 3rd May 2023. Vegetation types and habitats present were described and mapped during a walkover of the Site, based on standard published guidelines for Phase 1 Habitat Survey (JNCC, 2010). Features of particular interest were recorded as Target Notes (TNs).

3.6 Assessment of Protected/Notable Species Potential

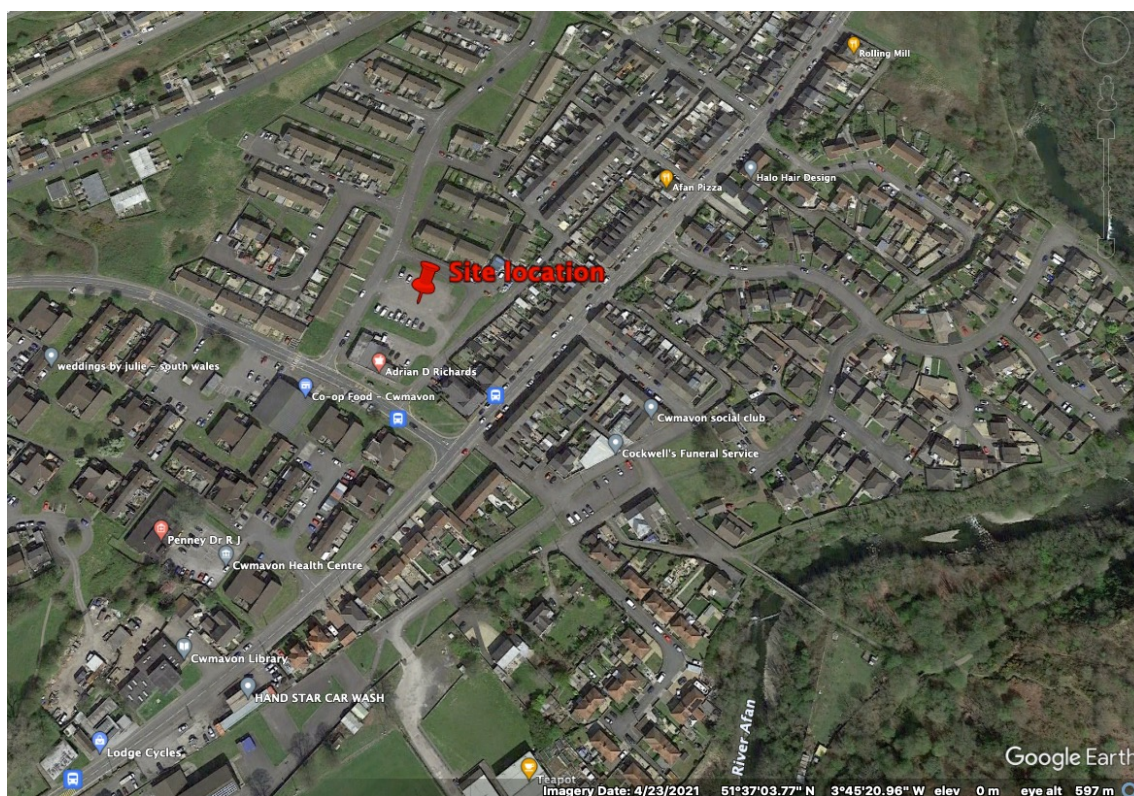
- 3.6.1 In addition, the habitats within the Site were appraised for their suitability to support protected or notable species, or assemblages that could be sensitive to the proposed development, in accordance with 'Guidelines for Baseline Ecological Assessment' (IEA, 1995).
- 3.6.2 The protected and notable habitats and species referred to above include those listed under the Wildlife and Countryside Act 1981 (as amended); The Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019); and Species and Habitats of Principal Importance in England/Wales – currently listed under the Natural Environment and Rural Communities (NERC) Act 2006 but also endorsed by the Environment (Wales) Act 2016 (see Section 5 for more information).
- 3.6.3 During the survey, consideration was given to features such as potential breeding bird habitat, bat roosting locations, reptile habitat and the suitability of other features for protected/otherwise notable species. Exotic and invasive species (e.g. Japanese knotweed (*Reynoutria japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*)) were noted by the surveyor, if present.
- 3.6.4 The survey approach taken is designed to identify broad habitat types and the potential of these habitats to support notable/protected species, thereby providing an overview of the ecological interest at a site. It is the most widely used and professionally recognised method for initial ecological site appraisal.

4 Results

4.1 Site Context

- 4.1.1 The Site is located towards the northern end of the settlement of Cwmafan, almost entirely surrounded by the road known as Waun Wen. To the north west, north east and south east there are a number of residential properties. To the south west there is a short row of retail outlets, beyond which is Heol Jiwbili and further shops and residential properties. The River Afan is located approximately 200m to the south east. The site context is shown in Figure 3 below.

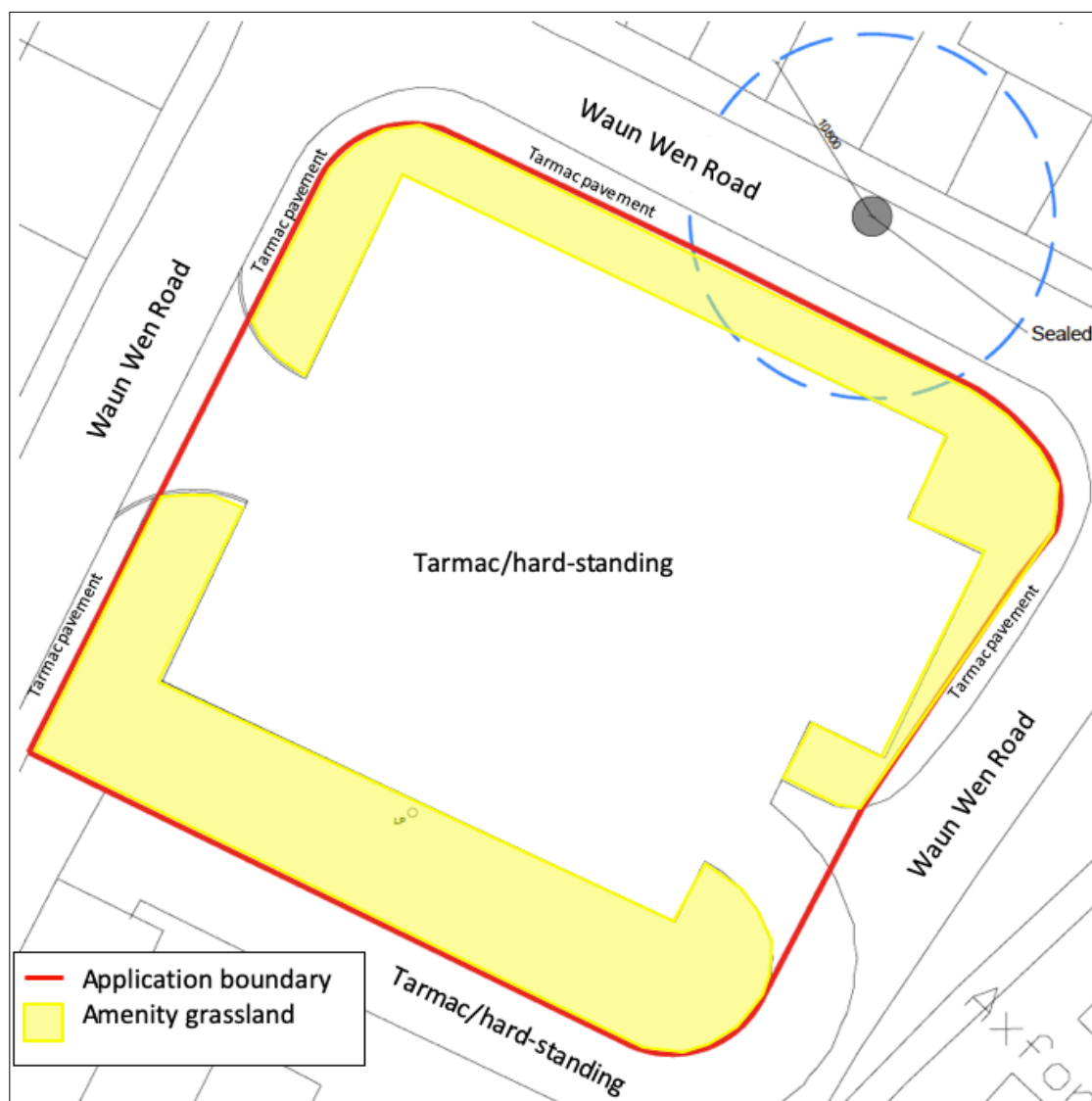
Figure 3. Site context.



4.2 Habitats

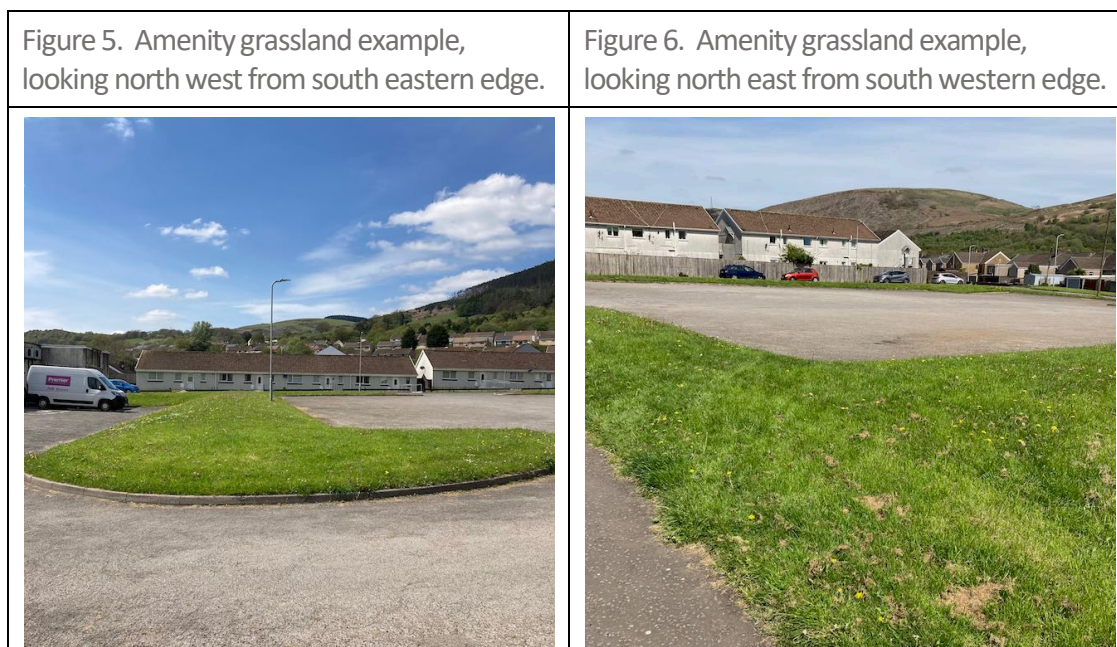
- 4.2.1 The habitat types recorded during the Phase 1 Habitat Survey of the Site itself are described within the following paragraphs and shown in Figure 4 below. Scientific names are given after the first mention of a species; thereafter, common names are used. Nomenclature follows Stace (2019) for vascular plant species.

Figure 4. Phase 1 Habitat sketch.



- 4.2.2 The majority of the Site comprises tarmac hard-standing and appears to be used informally for car parking. The remainder of the Site comprises amenity grassland of low diversity, likely to have been planted as a standard basic grass seed mix in the past and containing species such as meadow-grass *Poa* sp., fescue *Festuca* sp. and perennial rye-grass *Lolium perenne* sp. In addition, annual meadow grass *Poa annua* was noted in places along more disturbed areas and below kerbstones, where it acts as a classic colonising grass, as well as Yorkshire-fog *Holcus lanatus* and cock's-foot *Dactylus glomerata* scattered in places.
- 4.2.3 Forb species are locally frequent but are far outweighed in terms of coverage by the grasses. They include dandelion *Taraxacum officinale* agg., daisy *Bellis perennis*, creeping buttercup *Ranunculus repens*, yarrow *Achillia millifolium*, white clover *Trifolium repens*, red clover *T pratense*, ragwort *Jacobaea vulgaris* and ribwort plantain *Plantago lanceolata*.

Greater plantain *P. major*, groundsel *Senecio vulgaris* and shepherd's-purse *Capsella bursa-pastoris* were also noted in more disturbed/colonising areas, and a small patch of herb-Robert *Geranium robertianum* was noted close to the building just off-site to the south west.



4.3 Protected/Notable Species

- 4.3.1 There is very limited potential for protected/notable species/species groups to be present on the Site or close by, these are summarised in Table 1 below.
- 4.3.2 A more detailed assessment of the potential for each species and/or species group to be present is given in Section 5 of this report, together with an assessment of likely impacts of the development proposals.

Table 1. Protected/Notable Species Summary.

Species	Notes
Bats	The Site contains poor habitat for bats and very limited surrounding linking habitat due to the presence of housing, retail outlets and associated road network entirely surrounding it. Residential property gardens are small and limited in terms of quality linking habitat, however it is possible that low numbers of the more common and light-tolerant bat species such as pipistrelles may occasionally fly over the Site.
Otter	No suitable habitat for otters is present on the Site and the likelihood of otters crossing the Site is very low. This species is therefore not considered further here.
Water vole	No suitable habitat for this species is present on or close to the Site, water voles are therefore not considered further here.
Amphibians	No suitable habitat for amphibians is present on the Site due to the obvious regular mowing regime that is employed on the grassland, together with the lack of any other suitable habitat and the extensive surrounding areas of tarmac hard standing. The likelihood of amphibians crossing the Site is very low, this species group is therefore not considered further here.
Reptiles	No suitable habitat for reptiles is present on the Site due to the obvious regular mowing regime that is employed on the grassland, together with the lack of any other suitable habitat and the extensive surrounding areas of tarmac hard standing. The likelihood of amphibians crossing the Site is very low, this species group is therefore not considered further here.
Breeding birds	No suitable habitat for breeding birds is present on the Site due to the absence of any trees, shrubs or buildings that might support them. Foraging opportunities are also very low, due to the management regime of the amenity grassland, although it is likely common passerines and scavenger species such as gulls do forage on the Site occasionally.
Badger	No evidence of badgers was noted on the Site, and it is considered unlikely that badgers would use the Site for commuting or foraging purposes, due to the built-up nature of the surrounding area. This species is therefore not considered further here.
Hedgehog	No suitable habitat for nesting or hibernating hedgehogs is present on the Site, however it is likely that this species is present within the local area and may occasionally cross the Site or feed within it.
Invertebrates	The Site is likely to support a low diversity of common invertebrate species.
Plants	No invasive species or other notable plants were recorded on the Site during the survey.

5 Assessment

5.1 Planning Policy Context

5.1.1 Planning Policy Wales (PPW) (11th Edition, February 2021) is the national planning document setting out the devolved planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs) and Circulars. Of particular importance is TAN 5 (Welsh Assembly Government 2009), which provides national policy guidance in respect of nature conservation and planning.

5.1.2 PPW, the TANs and Circulars should all be taken into account by local planning authorities in Wales when preparing development plans and assessing planning applications. Those of most relevance are discussed further below.

TAN5: Nature Conservation and Planning

5.1.3 TAN 5 Nature Conservation and Planning sets out the manner in which planning authorities should comply with their duty to “...have a regard, so far as is consistent with the proper exercise of [their] functions, to the purpose of conserving biodiversity”, as required by the NERC Act.

5.1.4 The key principles of positive planning for nature conservation in TAN 5 are:

1. Work to achieve nature conservation objectives through a partnership between local planning authorities, Countryside Council for Wales (CCW), the Environment Agency (EA) Wales (CCW and EA Wales are now collectively Natural Resources Wales (NRW)), voluntary organisations, developers, landowners and other key stakeholders;
2. Integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time.
3. Ensure that the United Kingdom’s (UK) international and national obligations for site, species and habitat protection are fully met in all planning decisions;
4. Look for development to provide net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally;

5. Help to ensure that development does not damage, or restrict access to, or the study of, geological sites and features or impede the evolution of natural processes and systems especially on rivers and the coast;
6. Forge and strengthen links between the town and country planning system and biodiversity action planning particularly through policies in local development plans and the preparation of supplementary planning guidance that adds value to Local Biodiversity Action Plans (LBAP) by highlighting the ways in which the planning system can help to deliver the objectives of LBAPs in practical ways;
7. Plan to accommodate and reduce the effects of climate change by encouraging development that will reduce damaging emissions and energy consumption and that helps habitats and species to adapt to climate change.

Local Policy Context

5.1.5 A number of local planning policies within the Neath Port Talbot Local Development Plan (NPTCBC, 2016) are relevant to biodiversity and nature conservation, these include the following:

1. **Strategic Policy 15 (Biodiversity and Geodiversity).** This relates to the protection, conservation, enhancement and management of important habitats, species and sites of geological interest through recognition of SACs, Ramsar sites, SSSIs and NNRs, as well as via identification and protection of sites of regional and local importance. Important natural heritage features will also be protected.
2. **Policy EN6 (Important Biodiversity and Geodiversity Sites).** The policy states “Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where a) they conserve and where possible enhance the natural heritage importance of the site; or b) the development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site. Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable”.

3. Policy EN7 (Important Natural Features): The policy states “Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows / field boundaries, watercourses or ponds will only be permitted where a) full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or b) the biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed”.

5.1.6 Consideration should also be given to Neath Port Talbot’s Biodiversity and Geodiversity Supplementary Planning Guidance (NPTCBC, 2018).

The Environment (Wales) Act 2016

5.1.7 Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions (Biodiversity and Resilience of Ecosystems Duty, or Section 6 Duty). This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity. In doing so planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

1. Diversity between and within ecosystems
2. The connections between and within ecosystems;
3. the scale of ecosystems;
4. the condition of ecosystems including their structure and functioning; and
5. the adaptability of ecosystems.

5.1.8 In fulfilling this duty, the Environment Act (Wales) 2016 requires public authorities to seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales. Public authorities must have regard to a list of living organisms and types of habitat which in their opinion are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This list must be prepared and published by the Welsh Ministers under Section 7 (1) of the same Act. Until this list has been published, the list of Habitats and Species of Principal Importance previously published under Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006, should be used.

5.2 Impacts on designated sites

- 5.2.1 The Site is located within a built-up area of the settlement of Cwmafan and is entirely surrounded by houses, retail outlets and their associated road network. No designated sites are present within 200m of the Site (Pers. Comm., L. Palmer, 30th May 2023), and the Site itself is not considered to be of SINC quality. In addition, the development proposals are small-scale and limited to the areas of amenity grassland and tarmac hard-standing already described. Impacts on designated sites as a result of the development proposals are therefore considered unlikely.

5.3 Impacts on Habitats

- 5.3.1 The PEA survey visit identified the presence of tarmac hard standing and amenity grassland on the Site. The grassland is of limited ecological value due to the low diversity of common and unremarkable species present, and the inability of this habitat to support protected/otherwise notable species. The loss of this habitat is not considered significant and there is an opportunity to increase diversity of the habitat within the proposals. This is discussed further in Section 6 of this report.

5.4 Impacts on Protected/Notable Species

Bats

- 5.4.1 Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended), and by the Conservation of Habitats and Species Regulations 2017 (as amended). Taken together, these make it an offence to:
- a) Deliberately capture, injure or kill a bat;
 - b) Deliberately disturb any bat, in particular any disturbance which is likely to (i) impair their ability to survive, breed, reproduce or to rear or nurture their young; or in the case of hibernating or migratory species, to hibernate or migrate; or (ii) to affect significantly the local distribution or abundance of the species to which they belong.
 - c) To be in possession or control of any live or dead bat or any part of, or anything derived from a bat.
 - d) Damage or destroy a breeding site or resting place of a bat;

- e) Intentionally or recklessly obstruct access to any place that bat uses for shelter or protection;
- f) Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

- 5.4.2 A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.
- 5.4.3 Eight species of bat are listed as Species of Principal Importance under NERC Act 2006/The Environment (Wales) Act 2016, including barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, brown long-eared *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe *R. hipposideros*.
- 5.4.4 No trees, buildings or other structures suitable for roosting bats are present on the Site, and the habitats present are of poor quality for foraging bats. The area is well-lit and bat species that are averse to lighting are considered unlikely to commute or forage over the Site. Bats more tolerant of lighting, for example common and soprano pipistrelle bats may commute across the Site on infrequent occasions.
- 5.4.5 Impacts of the development proposals on bats are therefore likely to be minimal, and there is an opportunity for some enhancement measures for roosting and/or foraging bats, which are discussed in Section 6. Assuming these measures are followed, some positive impacts for bats are predicted.

Hedgehogs

- 5.4.6 Hedgehogs are listed as a Species of Principal Importance under the NERC Act 2006/Environment (Wales) Act 2016.
- 5.4.7 The habitat present on the Site may be used by hedgehogs on occasion, for commuting and/or foraging of invertebrates. Appropriate precautions should be taken during the works and are discussed further in Section 6 of this report. Assuming these precautions are followed, impacts on this species are considered likely to be negligible.

Invertebrates

- 5.4.8 A small range of common invertebrates is likely to be present on the development Site.
- 5.4.9 Recommendations are given in Section 6 of this report in relation to appropriate planting that would support a greater range of invertebrate species.

5.5 Enhancements

- 5.5.1 Planning Policy Wales 11 states *'planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity'*.
- 5.5.2 A number of opportunities for enhancement have already been suggested in the paragraphs above and are detailed more fully in Section 6 of this report.

6 Recommendations

6.1 Biodiversity enhancements

6.1.1 Opportunities for net benefit for biodiversity in relation to this project are fairly limited, however several simple measures can be taken in order to improve the habitat diversity and in turn support a greater range of invertebrates and the animals that feed on them, as well as provision of new opportunities for roosting bats and nesting/foraging birds. These are set out in the bullet points below.

1. **Appropriate planting scheme.** Appropriate planting should be designed into the scheme. Where possible, this should include the planting of new trees and hedgerows. Any trees/hedgerow planted should be diverse in species and ideally be native and of local provenance. However, if this is not possible, they should be of species known to provide a diverse range of food (such as nuts and berries) for birds and invertebrates.
2. **Bat and bird box installation.** In order to provide new opportunities for nesting birds and roosting bats, bird and bat boxes should be installed on the new building, ideally built into the fabric of the walls. If that is not possible, then externally attached bat and bird boxes can be used. Boxes should be of types that are suitable for species known to be in the area, or likely to colonise, and be installed at appropriate densities and in appropriate locations.

6.2 Recommendations during construction

6.2.1 A number of recommendations during the works are made within the following paragraphs, in relation to the construction phase of the project.

1. **Avoidance of night working.** As far as possible, construction works should not take place during the hours of darkness, due to the requirement for keeping impacts on foraging/commuting bats and hedgehogs to a minimum.
2. **Appropriate precautions in relation to small mammals such as hedgehogs.** Any trenches/excavations created during the works, for example for service connections or foundations, should be covered over at night to prevent animals such as

hedgehogs and other species from falling in and becoming trapped. If that is not possible, an adequate means of escape must be provided, for example, a gently graded side wall or provision of gently sloped wooden plank or equivalent. All excavations should be checked for trapped wildlife each morning prior to commencing activities.

6.3 Repeat Surveys

- 6.3.1 If the Site remains undeveloped for more than two years from the date of this survey, repeat survey work may be necessary, even if planning permission has already been granted. This is to ensure that no significant changes have taken place to the Site in the meantime, that impacts on protected species/habitats have remained the same, and that mitigation measures are still appropriate for the scheme. Any significant changes that may occur should be addressed appropriately if this happens.

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