



Preliminary Ecological Appraisal:

**Land off the A474 - Neath Road,
Cilybebyll, Rhos,
Neath Port Talbot SA8 3JB**

**A report prepared for:
Messrs David and Marc Mahoney**

BY

4 SEASONS ECOLOGY

December 2021

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Site Location:	Land off the A474 - Neath Road, Cilybebyll, Rhos, Neath Port Talbot SA8 3JB
Grid Reference:	Approximately at SN 74053 02008
Client:	Messrs David and Marc Mahoney
Report Reference:	P212226/FINAL02/PEA/LBT
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Architect	Tecta Associates Ltd
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Notice to Readers

The advice contained in this report is based on the information available and / or collected during the period of study and within the resources available for the project. We cannot eliminate completely the possibility of important ecological features being found through further investigation and / or by survey at different times of the year, or in different years. Reference to sections or paragraphs of this document taken out of context may lead to misrepresentation. 4 SEASONS ECOLOGY takes care to ensure that balanced advice is provided based on the information available at the time.

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Summary

- S.1. This report has been prepared by 4 Seasons Ecology on behalf of Messrs Mahoney. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of a parcel of land (inclusive of the application site and a wider area within the landownership of Messrs Mahoney) off the A474 - Neath Road, Cilybebyll, Rhos, Neath Port Talbot SA8 3JB, to inform a planning application for the construction of an agricultural store and associated access track. The precise route of the access track was not known at the time of writing, but its anticipated route is from existing gated access to the south-east of the wider area, and between the eastern boundary and an apple orchard. Whilst the PEA covered the entire area of land within the ownership of Messrs Mahoney, the focus was on a smaller section which formed the application site, where the agricultural store and a portion of the access track is proposed.
- S.2. The entire site occupies a parcel of land (approximately 1 ha in size) that is situated immediately adjacent to the A474 - Neath Road. The site slopes gently from east to west and is dominated by regularly mown poor semi-improved grassland, with mainly alder *Alnus glutinosa* woodland along its western boundary (which is damp in places) and a small orchard (with several apple trees - *Malus sp.*) at its southern boundary. The northern and eastern boundaries contain scattered trees, scrub, and fences. The application site itself consists solely of regularly mown poor semi-improved grassland, this habitat is considered of site ecological importance only.
- S.3. One statutorily designated site lies within 2km of the site; Fforest Goch Bog Site of Special Scientific Interest (SSSI) – designated for its lowland raised bog and marshy grassland habitats and associated species, lies immediately adjacent to the site's western boundary. Lowland raised bog is a rare resource in Wales, particularly in south Wales, and Fforest Goch Bog represents "by far the best and much the least disturbed site when compared with the other three possible examples within the West Glamorgan and Llanelli area of search" (Countryside Council for Wales SSSI Citation, 2011). No non-statutory sites lie within 2km of the site.
- S.4. Due to the limited size and scale of the application site (the agricultural store will occupy 300m² of poor semi-improved grassland and will be used for the storage of machinery and the materials required for the operation of an arboricultural business), no perceived detrimental impacts to the statutorily protected site adjacent to the wider site's western boundary (*i.e.* Fforest Goch Bog SSSI) is anticipated as a result of the proposed development, and therefore no specific mitigation is considered necessary in this regard.
- S.5. The survey identified limited potential for protected and / or priority species within the wider site, namely amphibians, reptiles, birds and bats, which are mainly associated with the drainage ditch, poor semi-improved grassland, alder woodland, scattered trees and scrub habitats. The area of land that will be impacted by the planning application consists solely of regularly mown poor semi-improved grassland and is therefore considered to only have limited potential for foraging birds, badgers and bats.
- S.6. Mitigation strategies for amphibians, reptiles, birds and mammals (including bats and badgers) are described to ensure no harm comes to any species (if present), which includes provisions which can accommodate protected / priority fauna for the site and ensures that their favourable conservation status is maintained.

- S.7. Proposed measures to enhance the site include the creation of native wildflower margins (using high nectar seed mixes) around the poor semi-improved grassland within the wider site, the installation of three bird nest boxes within the alder woodland (along the wider site's western boundary) and the installation of two bat boxes within a mature tree on the edge of the alder woodland. A further enhancement could include the construction of a reptile / amphibian hibernaculum in the north-western corner of the wider site. Such enhancements will greatly mitigate for the loss of the grassland due to the siting of the agricultural store and its associated access track.
- S.8. It should be noted that areas of Japanese knotweed *Fallopia japonica* were recorded within the north-western corner of the wider site and along the northern margin of its eastern boundary (please note: Japanese knotweed was not recorded within the application site itself, or within the anticipated route of the access track). Japanese knotweed is listed as a Schedule 9 plant species within the Wildlife and Countryside Act 1981 (as amended), making it an offence to allow it to spread in the wild. The local Natural Resources Wales (NRW) team can provide information about the treatment and disposal of invasive non-native plants.
- S.9. Providing these mitigation strategies are implemented as described, the development will accord with planning policy and legislation. Such enhancements will also ensure a biodiversity gain on the site.

Section 1: Introduction, Site Context and Methodology

Introduction

- 1.1. 4 Seasons Ecology was instructed by Messrs Mahoney in November 2021 to undertake a Preliminary Ecological Appraisal (PEA) of a parcel of land off the A474 – Neath Road, Cilybebyll, Rhos, Neath Port Talbot SA8 3JB. This consisted of an area of land approximately 1 ha in size (hereafter referred to as ‘the wider site’), with a focus on a smaller section within the southern section of the wider site (hereafter referred to as ‘the application site’). A planning application is to be submitted to Neath and Port Talbot Council for the construction of an agricultural store (300m² in size) and an associated access track (the precise route and area occupied by the track was unknown at the time of writing, but its anticipated route is from existing gated access to the south-east of the wider site and between the site’s eastern boundary and an apple orchard). The application site centres on National Grid Reference SN 74053 02008 and its location is shown in Figure 1.

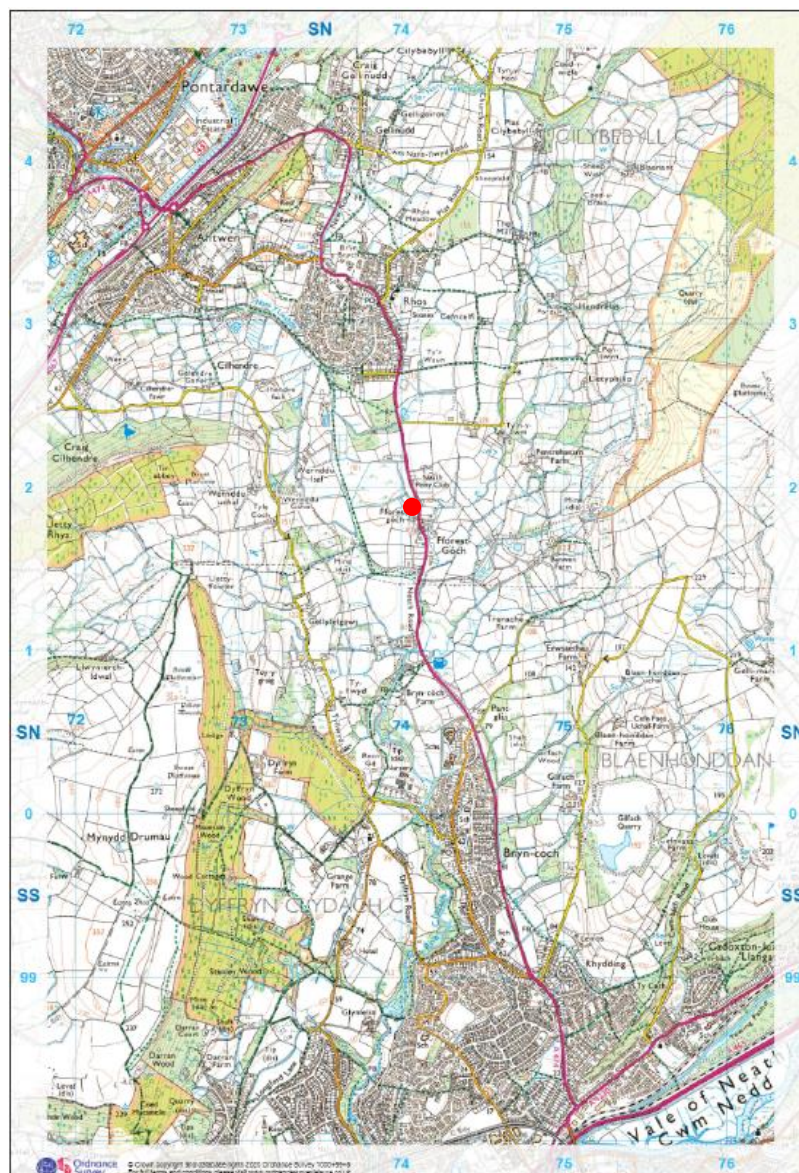


Figure 1: Approximate site location of the application site (shown by red dot)

The purpose of this report is to:

- Use available background data and results of a field survey to describe and evaluate the ecological resources present within the likely 'Zone of Influence' (Zoi)¹ of the proposed development;
- Assess ecological issues and opportunities as a result of the development; and
- Where appropriate, describe mitigation and enhancement proposals, to ensure conformity with policy and legislation.

Site Context

- 1.2. The site is located off the A474 - Neath Road near Fforest Goch in the community of Cilybebyll, Neath Talbot county borough, in South Wales. It is situated approximately 1km to the south of the village of Rhos and approximately 5km to the north of the market town of Neath. The wider area consists of scattered residential properties and farm buildings to the south, east and west, and the residential area of Rhos village to the north. Blocks of broadleaved woodland lie to the south, east and west, with more extensive coniferous plantation forestry further to the north-east, and mixed woodland to the west. This woodland is relatively well connected by an extensive hedgerow network. Grazing land lies further to the east and south-west.

Methodology

- 1.3. This PEA has been informed by the following:
- Desk Study. An internet only data search was undertaken to source information regarding legally protected sites and species within 2km of the site (hereafter referred to as the 'study area'). Requesting data from South East Wales Biodiversity Records Centre (SEWBReC) was not considered necessary in this instance due to the limited size and scale of the proposed works. The online data search undertaken was inclusive of NBN Atlas Wales website (<https://wales.nbnatlas.org/>) to identify species records within the study area, and DEFRA's Multi-Agency Geographical Information for the Countryside (MAGIC) website (<https://magic.defra.gov.uk/>), to identify the location of any statutory site designations within the study area, including, European designated Natura 2000 sites (*i.e.* Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) and internationally designated Ramsar Sites. Google Earth imagery (https://www.google.co.uk/intl/en_uk/earth/) and the Ordnance Survey (OS) Maps online mapping - <https://explore.osmaps.com/>) were used for the assessment of the wider habitats; and
 - Phase 1 habitat survey². A walkover of the site was undertaken by Lee Bullingham-Taylor, an experienced field surveyor and Full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), on the 02nd November 2021. Notes of the habitat types on both the wider site and the application site were taken, as well as any evidence of protected species, in respect of any impacts the proposals may have.

¹ Defined as the areas / resources that may be affected by the biophysical changes caused by activities associated with a project (CIEEM, 2019. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. Winchester)

² 2010, JNCC. Handbook for Phase 1 Habitat Survey – A technique for Environmental Audit

- 1.4. The above scope of work has informed the description and assessment of importance of ecological features - in line with (CIEEM) guidelines³ - the consideration of opportunities and constraints to development, and mitigation and enhancement requirements to ensure conformity with legislation and policy.
- 1.5. Limitations to survey
- 1.6. The survey was carried out when a number of plants would not have been apparent. However, it is considered that sufficient vegetation was identified during the survey to provide an understanding of the site and any potential implications this may have on the proposal. However, as plants are not always obvious, depending on the time of year of the survey, 4 Seasons Ecology accepts no liability for the presence of any invasive or protected species present that were not recorded during the site survey.
- 1.7. Data obtained using on-line databases is historical information, and datasets may be incomplete, inaccurate, or missing entirely. It is therefore important to note that even where data is held, a lack of records for a defined geographical area does not necessarily indicate that a given species is absent from that area; the area may simply be under-recorded.
- 1.8. It is worth noting that a botanical survey at a more optimum time of year would be expected to increase identification / detection of other plant species within the poor semi-improved grassland habitat.

Quality Assurance

- 1.9. Lee Bullingham-Taylor is a member of CIEEM and abides by the Institute's Code of Professional Conduct

³ CIEEM, 2019. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. Winchester.

Section 2: Ecological Features

- 2.1 Ecological features within the entire site (*i.e.* the wider site and the application site) and the wider study area are described below, together with an assessment of their relative importance using a geographical frame of reference advocated by CIEEM³.

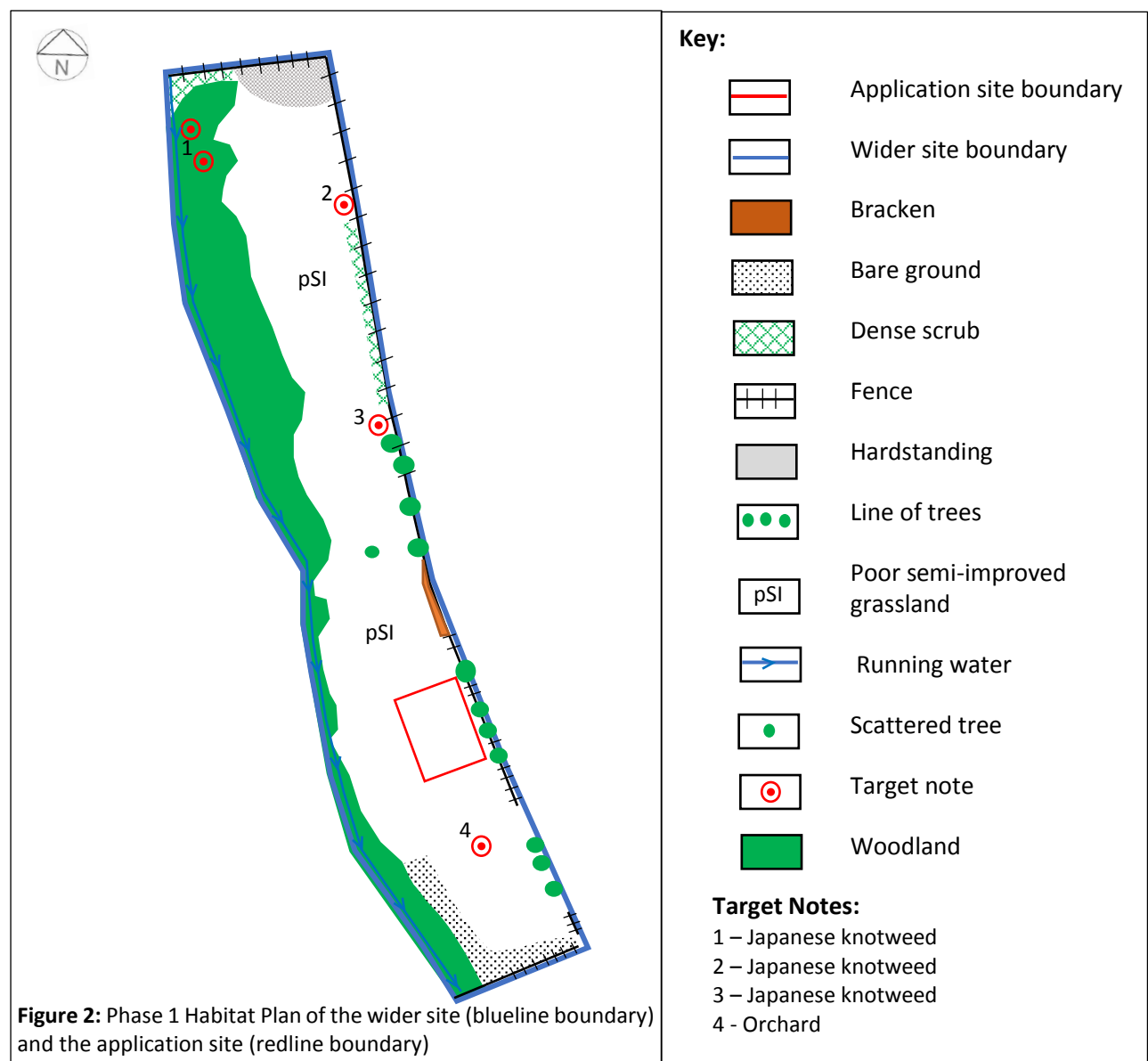
Protected Sites

- 2.2 The entire site is not covered by any statutory or non-statutory designation for nature conservation importance. One statutorily designated site lies within 2km; Fforest Goch Bog Site of Special Scientific Interest (SSSI) – designated for its lowland raised bog and marshy grassland habitats and associated species, lies immediately adjacent to the site's western boundary. No non-statutory sites lie within 2km.

Survey Findings

Habitats

- 2.3 Following the Phase 1 Habitat survey, the wider site and the application site were found to support the following habitat types (refer to Figure 2):



- **Dense scrub** – Dense scrub habitat was present along the eastern boundary of the wider site (Photograph 1) and to the north-west (Photograph 2) – both were dominated by bramble *Rubus fruticosus agg.*



Photograph 1: Dense bramble scrub along eastern boundary of the wider site



Photograph 2: Dense bramble scrub to the north-west of the wider site

- **Fence** – An old post and wire fence was present along the site's northern boundary (Photograph 3). A rusted metal fence was present in sections of the site's eastern boundary (Photograph 4). A newer post and wire fence was present along the site's southern boundary (Photograph 5).



Photograph 3: Post and wire fencing along the wider site's northern boundary



Photograph 4: Metal fence along sections of the wider site's eastern boundary



Photograph 5: A newer post and wire fence along the wider site's southern boundary

- **Hardstanding** – A parking area, consisting of compacted rubble and bordered by several large boulders, was present to the north-east of the wider site, adjacent to site access from the A474 – Neath Road (Photograph 6).



Photograph 6: Parking area located to the north-east of the wider site

- **Line of trees** – A line of trees formed the wider site's northern boundary and consisted of mature oaks *Quercus robur* and semi-mature silver birch *Betula pendula* (Photograph 7). Further lines of trees were present along the southern section of the wider site's western boundary (Photograph 8), consisting of alder, silver birch and oak, and also along a section of the wider site's eastern boundary (which will provide screening to the proposed agricultural store from the A474 – Neath Road), this consisted of multi-stemmed hazel *Corylus avellana*, a species of willow *Salix sp.*, and silver birch (Photograph 9).



Photograph 7: Line of trees along wider site's northern boundary



Photograph 8: Line of trees along southern section of wider site's western boundary



Photograph 9: Line of trees along a section of the wider site's eastern boundary

- Poor semi-improved grassland** – The wider site was dominated by poor semi-improved grassland (Photograph 10) and the entire footprint of the proposed agricultural store, within application site, consisted solely of this habitat (Photograph 11). The grassland had a short sward due to regular mowing. The dominant grass species present were perennial ryegrass *Lolium perenne* and Yorkshire fog *Holcus lanatus*, with annual meadowgrass *Poa annua* occasionally present where the ground had been disturbed in places. Other plant species recorded within the sward included frequent ribwort plantain *Plantago lanceolata* and creeping buttercup *Ranunculus repens*, occasional Meadow buttercup *R. acris*, a species of dock *Rumex sp.*, a species of thistle *Cirsium sp.*, and rarely occurring self-heal *Prunella vulgaris*.



Photograph 10: Regularly mown poor semi-improved grassland dominated the wider site



Photograph 11: Poor semi-improved grassland forming the entire footprint of application site

Scattered trees – A number of scattered trees were present within the wider site, these included silver birch and a multi-stemmed willow species within the poor semi-improved grassland towards the middle of the wider site (Photograph 12), two alders and a goat willow *Salix caprea* towards the southern section of the western boundary of the wider site (Photograph 13), and a line of alders along a section of the wider site's eastern boundary (Photograph 14).



Photograph 12: Silver birch and a multi-stemmed willow species within the poor semi-improved grassland



Photograph 13: Two alder and a goat willow towards the southern section of the western boundary of the wider site



Photograph 14: Line of alder along the wider site's eastern boundary

- **Woodland** – A stand of alder woodland is present along the wider site’s western boundary (Photograph 15). This grew either side of a drainage ditch and was very damp in places, with no understorey and a scarce ground flora dominated by velvet bent *Agrotis canina*.



Photograph 15: Alder woodland along wider site’s western boundary

- **Other habitats (bare ground / bracken / ditch / orchard)** – Exposed bare ground was present within the wider site, along its southern boundary (Photograph 16) and along the southern section of its western boundary (Photograph 17). A patch of dense bracken was present within bramble scrub on the eastern boundary of the wider site (Photograph 1). A ditch, approximately 1m in depth, ran along the length of the wider site’s western boundary (Photograph 18). Running water was present at the time of the survey, and flowed from north to south, within a channel that had exposed bare earth sides and sparse vegetation. An orchard containing several apple cultivars *Malus sp.* was present to the south of the application site (Photograph 19), in proximity of the proposed agricultural store.



Photograph 16: Bare ground along wider site’s southern boundary



Photograph 17: Bare ground along southern section of wider site's western boundary



Photograph 18: Ditch with shallow running water on the wider site's western boundary



Photograph 19: Apple orchard to the south of the application site

- 2.4 Overall, the habitats within the wider site, namely drainage ditch, poor semi-improved grassland, woodland, scattered trees and dense scrub are generally common and widespread, and as such are considered to be of **site** ecological importance only (note: the alder dominated woodland on the wider site's western boundary and the apple orchard are considered to have **local** ecological importance).

Protected Species

- 2.5 The online data search undertaken revealed records within the 2km study area for numerous species, including 88 insect species, 93 bird species, 11 mammal species and 68 flowering plant species. Appendix 4 provides an overview of some of those species possessing higher conservation status' and with more relevance to the site.
- 2.6 No evidence of protected species was observed during the survey and the habitats on both the wider site and the application site are considered to have only limited potential to support protected species, as detailed in Table 2.1 overleaf. In addition, trees in close proximity to the east of the application site (*i.e.* a line of hazel which will provide screening the proposed agricultural store), and apple trees within the orchard to the south of the proposed agricultural store, have **negligible** potential for roosting bats.

Invasive species

- 2.7 Areas of Japanese knotweed were identified within the wider site, to the north-west and along the northern margin of the eastern site boundary (see Target Notes 1 to 3, Figure 2).

Species	Features	Ecological Importance
Amphibians	Whilst a ditch with running water was present to the west of the wider site, no standing water was recorded. It is therefore considered unlikely that amphibians would be utilising the site (wider and application) for breeding. Grassland margins (if left unmown) and boundaries to scrub habitats may provide habitat suitable for use by common amphibians (such as toads) in the terrestrial phase of their life-cycle for transit, foraging and refuge. However, due to a lack of a suitable sward structure, the grassland within the site is considered to provide only low potential for amphibians. This, together with the presence of more suitable habitat within the wider area, it is considered unlikely that any population utilising the site would be wholly reliant upon site resources.	<i>Negligible as unlikely to be present.</i> Nb: Great crested newt are a European Protected Species and common toad is a Species of Principal Importance (SPI) under the NERC Act (2006).
Reptiles	Grassland margins (if left unmown) and boundaries to scrub habitats may provide habitat suitable for use by common reptiles (such as slow worm) in the terrestrial phase of their life-cycle for transit, foraging and refuge. However, due to a lack of a suitable sward structure, the grassland within the site is considered to provide only moderate potential for reptiles. Due to the abundance of suitable habitat within the wider area, it is considered unlikely that any population utilising the site would be wholly reliant upon site resources.	<i>Site - if present</i> Nb: Reptiles are SPI under the NERC Act (2006).
Birds	The alder woodland, scattered trees and dense scrub habitats provide some nesting opportunities for common and widespread bird species. However, it is unlikely that any assemblage utilising the site would be solely reliant upon resources within. The presence of further woodland habitat within the wider area is likely to provide more extensive nesting opportunities.	<i>Site – if present</i> Nb: All birds are afforded legal protection whilst nesting under the Wildlife & Countryside Act 1981 (as amended), and many have moderate to high conservation status' <i>i.e.</i> those listed as 'Red' and 'Amber' on Birds of Conservation Concern 4: the Red List for Birds (2015).
Bats	A number of trees within the wider site (<i>i.e.</i> within the alder woodland to the west) had potential to support roosting bats, due to the presence of features suitable for roosting. However, trees in close proximity to the proposed agricultural store were all deemed to have negligible potential for roosting bats, due to lacking the features required to support roosting bats, <i>i.e.</i> crevices, rot holes, woodpecker holes, cracks and fissures. The poor semi-improved grassland may provide suitable foraging habitat for bats, and the alder woodland forming the wider site's western boundary, provides greater potential for bats to forage and commute, and is likely to provide connection to foraging resources within wider areas to the north and west.	<i>Site – if present</i> All bat species in the UK are European Protected Species.

	It is unlikely that any assemblage of bats in the area is reliant upon resources within the site.	
Badger <i>Meles meles</i>	No field signs of badger activity such as setts or foraging were identified within the site, or adjacent to the site (where access was possible). The poor semi-improved grassland had the potential to provide foraging habitat for badgers. Whilst no setts or evidence of badger activity were observed on site, it is possible that they use the site occasionally for foraging purposes. Loss of foraging habitat would be regarded as a relatively insignificant impact for this species given the abundance of similar habitat in the surrounding landscape.	Site - if present Badgers are protected under the Protection of Badgers Act 1992.

Table 2.1: Summary of potential for protected species on site.

Section 3: Implications of Proposed Works, Suggested Mitigation and Enhancement

Proposed Works

- 2.8 Proposals for the site include the construction of an agricultural store (see Proposed Site Plans in Appendix 1) which will result in the removal of approximately 300m² of poor semi-improved grassland, due to the excavation of foundations. Following the foundation works a frame will be constructed, followed by the installation of metal sheeting. It is anticipated that an associated access track will run from the existing gated access in the south-east of the wider site (Photograph 22 below) and then towards the application site, between the eastern boundary and the apple orchard (note: the precise location and area of the access track was not known at the time of writing). It is proposed that the access track is constructed using a 'no-dig' method (refer to BS 5837 Arboricultural Survey report prepared by Matthew Whitehead in October 2021⁴ as part of this planning application). Such a method involves no excavation, soil stripping or site grading (refer to Figure 3 overleaf).



Photograph 22: Existing gated access to the south-east of the wider site

⁴ Whitehead, M. (October 2021) BS 58837 Arboricultural Survey: Arboricultural Impact Assessment & Method Statement. Field at Neath Road, Neath Road, Cilybebyll, Rhos, Neath Port Talbot, Wales, SA8 3JB

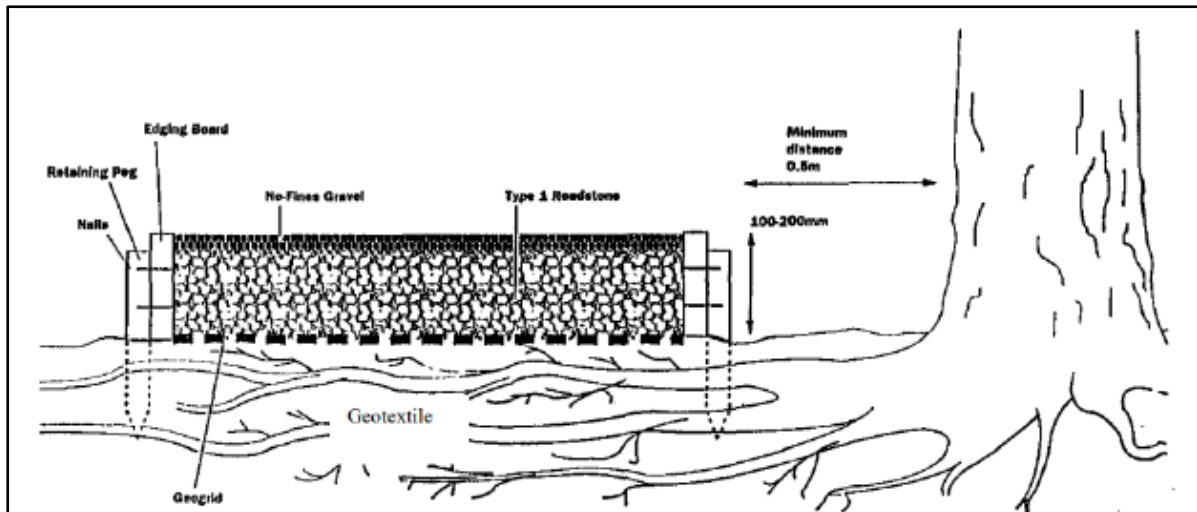


Figure 3: Potential 'no-dig' access track

- 2.9 Current planning policy requires that development projects minimise ecological damage and should contain elements of ecological enhancement. A variety of enhancements for a variety of species, and habitat creation options, have therefore been proposed for the site. The following are not statutory requirements but would be considered appropriate options for the site should the developer wish to offset the negligible negative impacts of the site's development.
- 2.10 The application site occupies a relatively small area of land (circa. 300m²). The proposed measures to enhance the site include the creation of native wildflower margins (using high nectar seed mixes) around the poor semi-improved grassland within the wider site, the installation of three bird nest boxes within the alder woodland (along the wider site's western boundary) and the installation of two bat boxes within a mature tree on the edge of the alder woodland. A further enhancement could include the construction of a reptile / amphibian hibernaculum in the north-western corner of the wider site. Figure 4 (overleaf) and Appendix 2 show the locations and detail of the proposed site enhancements.
- 2.11 Table 3.1 outlines the recommended mitigation and enhancement measures for the site.

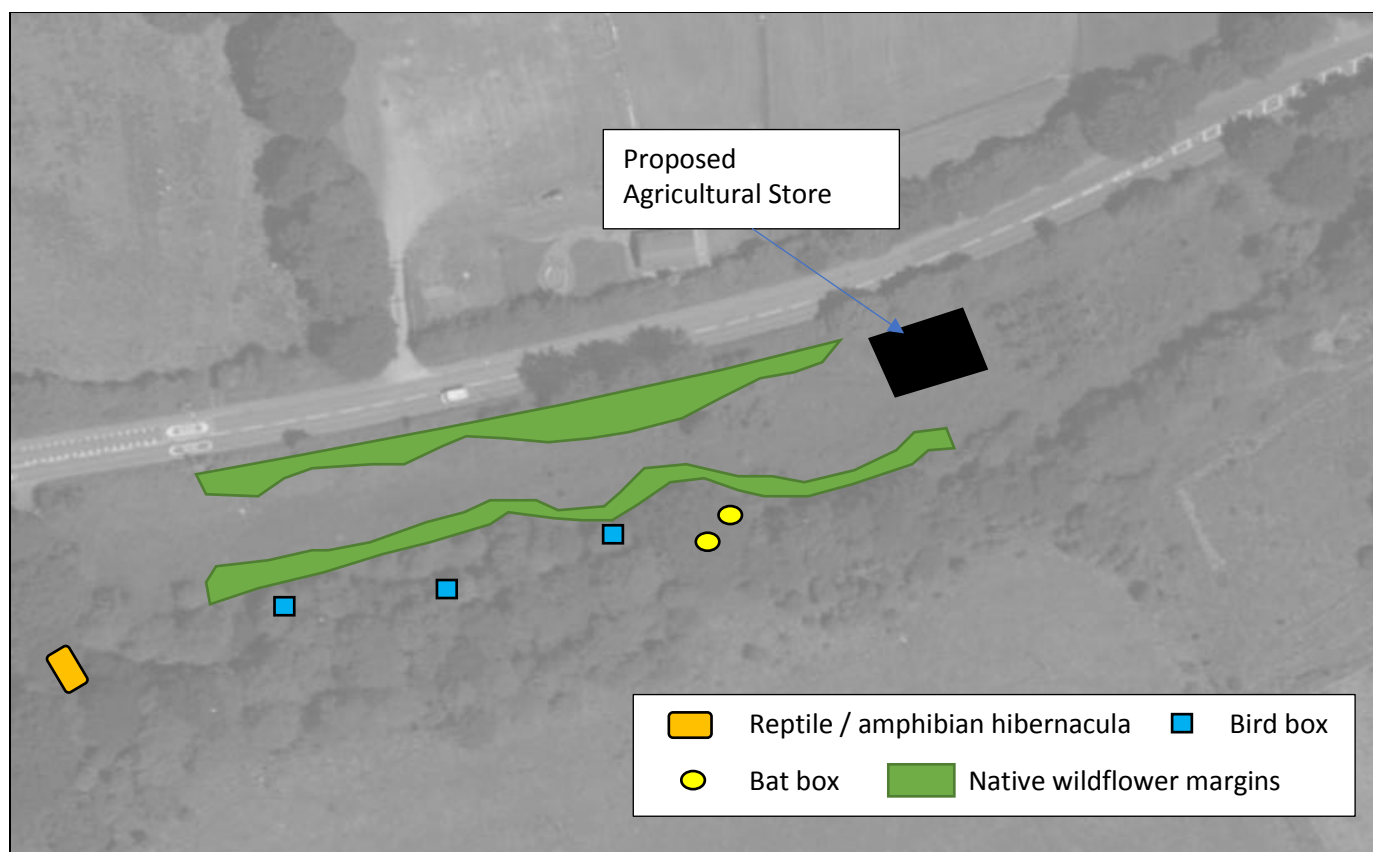


Figure 4: Location of recommended enhancements

Invasive Species

- 2.12 The presence of Japanese knotweed at several locations within the wider site will require management to prevent its spread. Prevention measures should be undertaken in conjunction with future management of the existing grassland and the creation (and subsequent management) of the proposed native wildflower margins. Specialist advice should be sought on the removal and destruction of the Japanese knotweed present within the wider site.

Constraints, Mitigation and Enhancement

- 2.13 Whilst the impacts of the proposed development are largely negligible, and the habitats present are considered overall to be of site ecological importance only, the following mitigation and enhancement measures are recommended to avoid or reduce impacts on habitats and species (if present).

Protected Sites

- 2.14 The only potential detrimental activities that may arise as a result of construction works, and post construction operation, concern the possible negligent use of plant machinery, the use of hazardous materials and the lighting of fires. However, given the limited size and scale of the development, no perceived detrimental impacts to the statutorily protected site adjacent to the wider site's western boundary (*i.e.* Fforest Goch Bog SSSI) is anticipated as a result of the development, and therefore no specific mitigation is considered necessary in this regard.

Habitats and Protected Species

3.1. Table 3.1 overleaf outlines the recommended mitigation and enhancements as a result of the proposals.

Receptor	Impacts	Mitigation	Enhancements
Habitats	Loss of approximately 300m ² of poor semi-improved grassland.	The loss of grassland can be mitigated for by the creation of native wildflower margins around the perimeter of the wider site.	The margins could be sown with a standard native meadow mix (Option 3 with Neath Port Talbot County Borough Council's 'Biodiversity Duty Plan' (2016). Such a mix includes high nectar bearing plants which can be utilised in marginal areas where there is less requirement for a 'tidy' appearance. These are also low maintenance and have high value for target invertebrate species. The meadow areas are mown as standard amenity grassland over autumn and winter, up to a final cut in April. The meadows should be allowed to flower over the summer and after flowering 'hay cut' can be taken in mid-September – cut back with a scythe, petrol strimmer or tractor mower to c.50mm. The 'hay' should then be left to dry and shed seed for 1-7 days and then removed from the site. Suggested wildflower mix It is suggested that the seed mix has a proportion of wildflower to grass species of at least 20:80. The mix should also contain species which are high in nectar and pollen, see below for examples: Wildflowers • Achillea millefolium Yarrow • Centaurea nigra Common Knapweed • Centaurea scabiosa Greater Knapweed • Daucus carota Wild Carrot • Echium vulgare Viper's Bugloss • Eupatorium cannabinum Hemp Agrimony • Galium verum Lady's Bedstraw • Knautia arvensis Field Scabious • Leontodon hispidus Rough Hawkbit • Leucanthemum vulgare Oxeye Daisy • Lotus corniculatus Birdsfoot Trefoil • Malva moschata Musk Mallow • Origanum vulgare Wild Marjoram • Primula veris Cowslip • Prunella vulgaris Selfheal • Pulicaria dysenterica Common Fleabane • Ranunculus acris Meadow Buttercup • Reseda lutea Wild Mignonette • Rhinanthus minor Yellow Rattle • Silene dioica Red Campion • Stachys sylvatica Hedge Woundwort • Trifolium pratense Wild Red Clover

			• Vicia cracca Tufted Vetch • Clinopodium vulgare Wild basil • Odontites verna Red bartsia • Thymus polytrichus Wild thyme • Vicia sativa Common vetch Grasses • Agrostis capillaris Common bent • Anthoxanthum odoratum Sweet Vernal-grass • Briza media Quaking grass • Cynosurus cristatus Crested dog's tails • Festuca ovina Sheep's fescue • Festuca rubra Slender-creeping red fescue • Phleum bertolonii Smaller cat's tail • Trisetum flavescens Yellow Oat grass
Amphibians / Reptiles	Loss of approximately 300m ² of poor semi-improved grassland.	Whilst amphibians and reptiles do not offer a constraint to the proposed development of the site, it is recommended that a precautionary approach to construction works should still be undertaken to minimise the risk to amphibians / reptiles (if present) being injured as a result of the works. Therefore, the clearance of grassland should be preceded by a hand search. Any reptiles or amphibians captured (<i>i.e.</i> slow-worm or common toad) would be safely moved to a suitable area outside of the construction footprint. The area of search would then be immediately stripped following the hand-search, which would render the habitat unsuitable for these species. If at any point during the development newts are found, work should be halted whilst the advice of a qualified ecologist is sought.	It is recommended that a reptile / amphibian hibernaculum is created in the north-western corner of the site, as per the following specification – see Figure 4 for location and Figure 5 for design: • The hibernaculum should be approximately 4m long, by 2m wide by 1m high. • The body of the hibernaculum should be filled with cut logs, brash, rocks etc., to provide numerous crevices within. Materials that will decompose should not be placed beneath heavy components such as rocks, to avoid the risk of collapse. Wood chippings or loose topsoil can be incorporated into the construction, to pack some of the larger cavities. • Access points for amphibians and reptiles should be left around the edges. These are best created by ensuring that timber or stones protrude from the edge, creating crevices that allow animals to get deep inside. • To reduce the risk of flooding an entirely above-ground structure should be created. Turf should be removed from the footprint of the hibernaculum so that it can be used to cover the completed construction. The areas of grassland removed from beneath the wooden structures during their construction could also be used for this purpose. The rapid establishment of vegetation cover is important to keep the structure together. If this cannot be achieved by use of turf, then seeding with a meadow mix may be required.
Birds	Loss of approximately 300m ² of poor semi-improved grassland.	Whilst no trees or scrub vegetation is planned to be removed as part of the application, it is recommended	By way of ecological enhancement three bird boxes could be installed on suitable trees within the entire site. These could include boxes suitable for a variety of

		that should such features need removing that this be undertaken outside of the bird breeding season (March to August inclusive). If this was not possible and vegetation had to be removed during the bird-breeding season, an inspection should be undertaken to check for nesting birds. If nesting birds were found, a 5m buffer of no disturbance will be put in place around the nest until the chicks have fledged (as confirmed by a suitably qualified ecologist). If confirmed clear of nesting birds, works should commence within 24 hours to ensure compliance with legislation protecting breeding birds.	small birds and an owl box (within the alder woodland) – see Appendix 2 for suggested designs.
Bats	Loss of approximately 300m ² of poor semi-improved grassland.	For bats and other nocturnal species, any plan to light the development should ensure that boundary features and proposed enhancements for bats (<i>i.e.</i> new bat boxes) are not strongly illuminated and remain relatively dark. To help achieve this, lights should be directed to shine away from such features, with any lighting columns used to be short and hoods, cowls, shields, etc. fitted to minimise and manage light spill. Further advice is given in the Bat Conservation Trust guidance document Bats and Lighting in the UK (BCT 2009).	By way of ecological enhancement, two bat boxes could be installed in a suitable mature tree along the site's western boundary - see Figure 4 for recommended locations and Appendix 2 for suggested designs.
Badger	Loss of approximately 300m ² of poor semi-improved grassland.	No further survey is recommended for badgers, but as they are a mobile species, and the site offers a limited amount of foraging and commuting habitat for them, it is recommended that the developer of this site remains vigilant to the possible presence of badger and further	No specific enhancements are recommended.

		advice is sought should badgers setts be discovered at any time. Excavations of a significant size resulting from construction works should be covered overnight to prevent wildlife such as badgers falling in and failing to escape. If this is not possible then a strategically placed plank may provide a means of escape in larger excavations. Any large pipes should be capped at the end of the day to reduce the potential for badgers and other wildlife entering and becoming trapped.	
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Table 3.1: Mitigation and enhancement requirements.

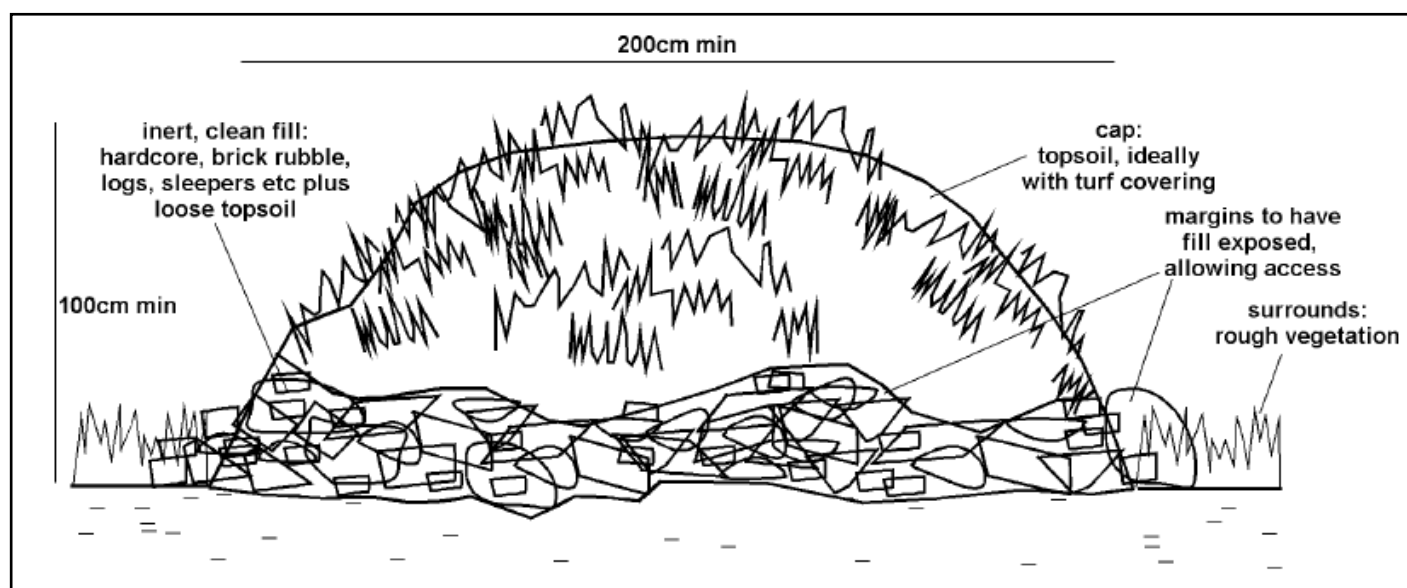
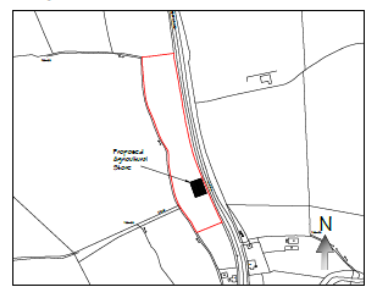
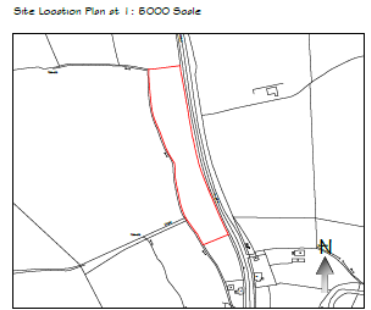
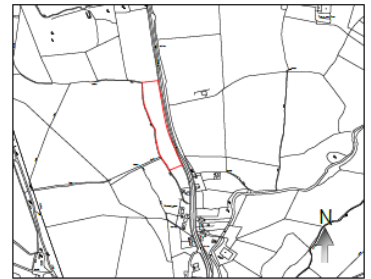
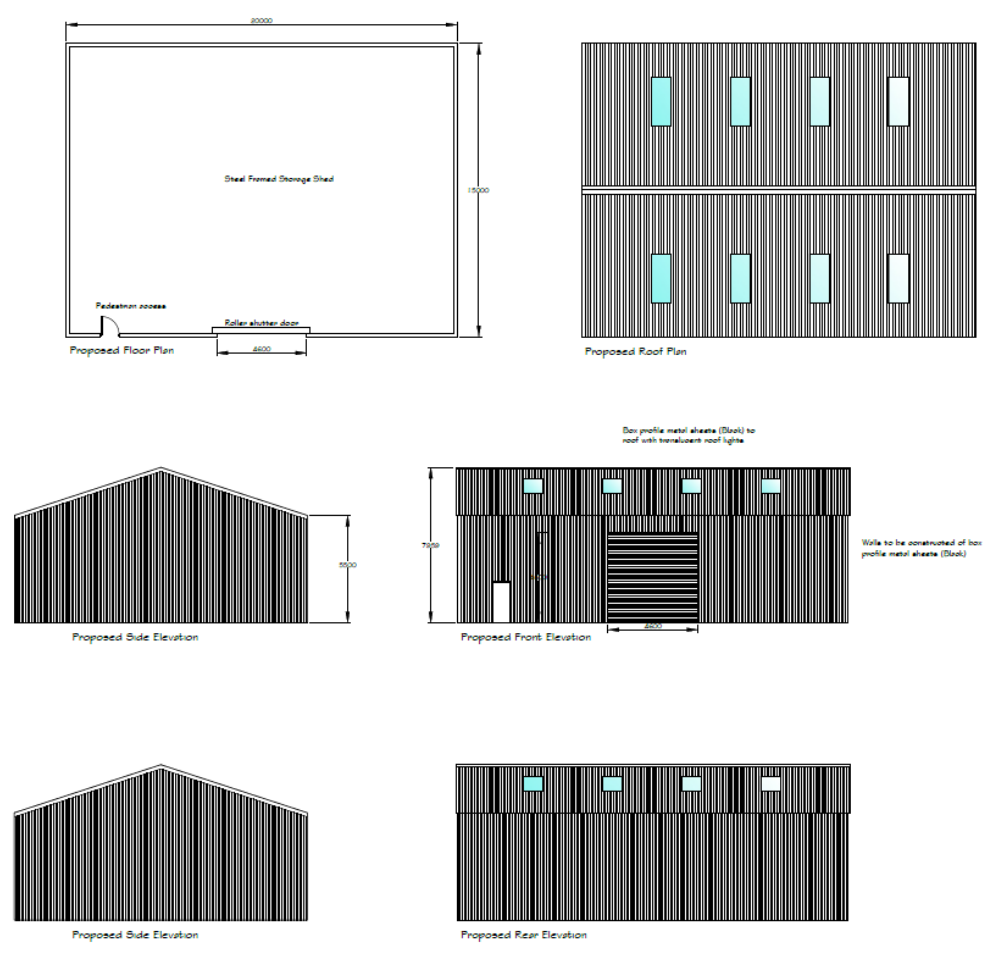


Figure 5: Indicative design for amphibian / reptile hibernaculum

Section 4: Conclusion

- 4.1. Whilst the impacts of the proposed agricultural store and access track within the application site are largely negligible, and the habitat present (*i.e.* regularly mown poor semi-improved grassland) is considered to be of site ecological importance only, the implementation of the recommended mitigation and enhancement measures will both reduce impacts on protected species (if present) and provide a net biodiversity gain at the site. This will conform with relevant planning policy (see Appendix 5) and accord with Neath Port Talbot Biodiversity Unit's document 'Bees and Development', which provides information on including bee-friendly landscaping within developments in Neath Port Talbot.
- 4.2. Furthermore, it is recommended that the current presence of Japanese knotweed (a Schedule 9 plant species) within the wider site is addressed. Whilst it is not an offence for a landowner to have Japanese knotweed growing on their land and they don't have to report its presence, it may become an offence under Section 14 of the Wildlife and Countryside Act 1981 (as amended) if it is allowed to spread.
- 4.3. Waste material from these plants is classed as 'controlled waste' under the Environmental Protection Act 1990 and must be disposed of at a suitably licensed or permitted waste site (<https://naturalresources.wales/evidence-and-data/maps/find-details-of-permitted-waste-sites/?lang=en>). Certain herbicides and plant material containing herbicides may also be considered as hazardous waste under the Hazardous Waste Regulations. If using a carrier to move this waste off site, you must ensure they are a registered waste carrier. Furthermore, the use of herbicides near to the ditch containing water to the west of the wider site (and in close proximity to the adjacent Fforest Goch Bog SSSI), may need prior written approval from Natural Resources Wales – for further information call NRW on 0300 065 3000, or via the following email: enquiries@naturalresourceswales.gov.uk.

Appendix 1: Proposed Site Plans



Tecta Associates Ltd
Mobile:- 07766000406
E-mail:- info@tecta-associates.co.uk

Title:	Date:	Scale:
Land At Neath Road, Phared Ooth, Pontardawe Proposed Agricultural Storage	June 2021	1:100 (As A1)
Client:	Number:	
Mr Marc O'Mahoney 15 Moss Y Den, Cefnau, Neath, SA10 6LT	TAL21/2401	

Do not scale from this drawing, all dimensions must be checked on site. © Tecta Associates Limited

Appendix 2: Proposed Biodiversity Enhancements



Three bird boxes are recommended for installation on suitable trees present within the woodland to the west of the wider site. These could include boxes suitable for a variety of small birds – as shown.

Plans for making nest boxes can be found here:

[Where To Put A Bird Box | Nestboxes - The RSPB](#)



Seed mixes used to create a native wildflower garden can be sourced online.



Two bats boxes (Kent Box shown) are recommended for a mature tree on the western boundary of the wider site.

Plans for making this type of box can be found here:

[Bat Box Information Pack May 2018\[1\]](#)
bats.org.uk

Appendix 3: Species List

Common name	Name (Stace 1999)
Alder	<i>Alnus glutinosa</i>
Annual meadowgrass	<i>Poa annua</i>
Apple species	<i>Malus sp.</i>
Blackthorn	<i>Prunus spinosa</i>
Bracken	<i>Pteridium aquilinum</i>
Bramble	<i>Rubus fruticosus agg.</i>
Cock's-foot	<i>Dactylis glomerata</i>
Common daisy	<i>Bellis perennis</i>
Common ivy	<i>Hedera helix</i>
Creeping buttercup	<i>Ranunculus repens</i>
Dandelion	<i>Taraxacum officinale</i>
Dock species	<i>Rumex sp.</i>
Elder	<i>Sambucus nigra</i>
Goat willow	<i>Salix caprea</i>
Hazel	<i>Corylus avellana</i>
Holly	<i>Ilex aquifolium</i>
Japanese knotweed	<i>Fallopia japonica</i>
Male fern	<i>Dryopteris filix-mas</i>
Meadow buttercup	<i>Ranunculus acris</i>
Oak	<i>Quercus robur</i>
Perennial rye-grass	<i>Lolium perenne</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Self-heal	<i>Prunella vulgaris</i>
Silver birch	<i>Betula pendula</i>
Thistle species	<i>Cirsium sp.</i>
Velvet bent	<i>Agrostis canina</i>
White clover	<i>Trifolium Repens</i>
Willow species	<i>Salix sp.</i>
Yorkshire Fog	<i>Holcus lanatus</i>

Appendix 4: Desk Study Records (NBN Atlas Wales)

Species Common Name	Scientific Name	Legislation / Conservation Status
Birds		
Lesser Redpoll	<i>Acanthis cabaret</i>	WCA ⁵ / BoCC ⁶ Red / SPI ⁷
Skylark	<i>Alauda arvensis</i>	BoCC Red/ SPI
Tree Pipit	<i>Anthus trivialis</i>	BoCC Red/ SPI
Cuckoo	<i>Cuculus canorus</i>	BoCC Red/ SPI
Merlin	<i>Falco columbarius</i>	BoCC Red
Herring Gull	<i>Larus argentatus</i>	BoCC Red/ SPI
Kestrel	<i>Falco tinnunculus</i>	SPI in Wales
Linnet	<i>Linaria cannabina</i>	BoCC Red/ SPI
Grasshopper Warbler	<i>Locustella naevia</i>	BoCC Red
Grey Wagtail	<i>Motacilla cinerea</i>	BoCC Red
Spotted Flycatcher	<i>Muscicapa striata</i>	BoCC Red
Wood Warbler	<i>Phylloscopus sibilatrix</i>	BoCC Red
Marsh Tit	<i>Poecile palustris</i>	BoCC Red/ SPI
Redwing	<i>Turdus iliacus</i>	BoCC Red
Song Thrush	<i>Turdus philomelos</i>	BoCC Red/ SPI
Fieldfare	<i>Turdus pilaris</i>	BoCC Red
Mistle Thrush	<i>Turdus viscivorus</i>	BoCC Red
Lapwing	<i>Vanellus vanellus</i>	BoCC Red/ SPI
Pochard	<i>Aythya ferina</i>	BoCC Red
House Sparrow	<i>Passer domesticus</i>	BoCC Red/ SPI
Woodcock	<i>Scolopax rusticola</i>	BoCC Red
Starling	<i>Sturnus vulgaris</i>	BoCC Red/ SPI
Mammals		
West European Hedgehog	<i>Erinaceus europaeus</i>	WCA – partial protection / IUCN ⁸ VU in Wales / SPI
Eurasian Otter	<i>Lutra lutra</i>	WCA – strict protection / IUCN LC in Wales / SPI

⁵ All birds are afforded protection under the Wildlife and Countryside Act 1981 (as amended)

⁶ Birds of Conservation Concern are UK birds that have been placed on lists by leading conservation organisations. These organisations have worked together to review the status of birds in the UK, Channel Islands and Isle of Man, placing them on lists of increasing conservation concern from Green, Amber and Red

⁷ SPI – Species of Principal Importance under Environment Wales Act (2016)

⁸ IUCN - Under the IUCN Red List criteria, each species is allocated to one of the following categories, relating to imminent risk of extinction: Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD) and Not Assessed (NA)

Polecat	<i>Mustela putorius</i>	WCA - / IUCN LC in Wales / UK BAP (2007) / SPI
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	European Protected Species (EPS ⁹) WCA - / IUCN LC in Wales / SPI in Wales
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	EPS / WCA / IUCN LC in Wales / SPI

⁹ EPS – European Protected Species

Appendix 5: Planning Policy

The following local and national planning policy and both primary and European legislation relating to nature conservation and biodiversity status are considered of relevance to the current proposal.

Planning and biodiversity

Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following planning policies.

Planning Policy Wales (2018) and Technical Advice Note 5 (2009)

Planning Policy Wales (Edition 10, December 2018) sets out the land-use planning policies of the Welsh Government, integrating fully with the Environment (Wales) Act 2016. The advice contained within Planning Policy Wales (PPW) is supplemented for some subjects by Technical Advice Notes (TAN's).

TAN 5 (Welsh Government, 2009) specifically provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The TAN provides advice for Local Planning Authorities on the key principles of positive planning for nature conservation; nature conservation and Local Development Plans; nature conservation in development management procedures; development affecting protected internationally and nationally designated sites and habitats; and development affecting protected and priority habitats and species.

Under Section 2.4 within the TAN 5, 'when deciding planning applications that may affect nature conservation Local Planning Authorities should:

- Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long-term perspective.
- Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment.
- Promote the conservation and enhancement of statutorily designated areas and undeveloped coast.
- Ensure that appropriate weight is attached to designated sites of international, national, and local importance.
- Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans.
- Ensure that all material considerations are considered, and decisions are informed by adequate information about the potential effects of development on nature conservation.
- Ensure that the range and population of protected species is sustained.
- Adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects Local Planning Authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered.

Legislation and biodiversity

Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species in the Conservation of Habitats and Species Regulations 2017 (as amended). These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

Other relevant legislation and policy documents that have been consulted include – The Environment (Wales) Act 2016; The Countryside and Rights of Way Act 2000; Biodiversity Action Plans, both UK-wide (UKBAP) and Local plans (LBAPs), and The National Planning Policy Framework (NPPF).

Environment (Wales) Act 2016

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'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

Section 7 replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Welsh Ministers must also 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.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna, and the countryside. Part I within the Act deals with the protection of wildlife.

Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (see below), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. Signal Crayfish and American Mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and *Rhododendron ponticum*) or otherwise deliberately causing them to grow in the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.

There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.

Licensing: certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) (which are the principal means by which the EC Habitats Directive is transposed in England and Wales) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994.

These regulations provide for the:

- protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts, and otters.
- designation and protection of domestic and European Sites - e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]; and
- adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application.

There is no defence that an action was the incidental and unavoidable result of a lawful activity.

Licensing: it is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Local planning policy

Cascading down from national policy, the Neath Port Talbot Unitary Development Plan (and the upcoming Local Development Plan) has policies that refer to a presumption against adverse effects to statutorily-designated sites of nature conservation interest and states that proposals may be refused where they would lead to unacceptable damage or destruction to significant local habitats and species. In addition, policies also detail the expectation that all new development should attend to biodiversity interests and avoid unacceptable impacts through: the retention and conservation of important features and habitats; taking full account of the importance of the site in relation to adjacent biodiversity interests; avoiding loss to Local Biodiversity Action Plan priority species and habitats or where this is unavoidable, providing replacements; and taking full account of opportunities to restore and enhance habitats and ecosystems.

Species protection

The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Amphibians

The common frog, common toad, common newt, and palmate newt receive limited protection under the Wildlife and Countryside Act 1981 (as amended), making it illegal to sell or trade them.

The Great Crested Newt and Natterjack Toad are fully protected under the Conservation of Habitats and Species Regulations 2017 as European Protected Species. It is illegal to:

- Deliberately capture, injure, kill, or disturb either species,
- Intentionally or recklessly obstruct access to any structure/place used for shelter or protection, or
- Damage or destroy a breeding site or resting place.

Reptiles

Adders, slow worms, grass snakes and common lizards are protected against killing and injuring under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile. As a result, reptiles must be removed from areas of development and relocated onto suitable release sites before any site works can commence.

Smooth snakes and sand lizards are European Protected Species under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. This makes it illegal to carry out the following activities:

- Deliberately or recklessly disturb, capture or kill these animals;
- Deliberately or recklessly take or destroy eggs of these animals;
- Damage or destroy a breeding site or resting place of such a wild animal; or
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from such a wild animal.

Bats

All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:

- Deliberately kill, injure, or capture a bat.
- Deliberately disturb bats.
- Damage or destroy a breeding site or resting place of a bat.

In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- Obstruct access to any structure or place which any bat uses for shelter or protection; or
- Disturb any bat while occupying a structure or place which it uses for that purpose.

If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural Resources Wales, which would be subject to appropriate measures to safeguard bats.

Birds

In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). All wild birds, their nests and eggs are protected it an offence to:

- • kill, injure, or take any wild bird.
- • take, damage, or destroy the nest of any such bird whilst it is in use or being built; or
- • take or destroying an egg of any such wild bird.

The law covers all species of wild birds including common, pest or opportunistic species.

Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

Badger Act 1992

It is an offence to wilfully take, kill, injure, possess or ill-treat a badger. Under the Act their setts are protected against intentional or reckless interference. Sett interference includes damaging or destroying a sett, obstructing access to any part of the sett, or disturbance of a badger whilst it is occupying a sett. The Act defines a badger sett as 'any structure or place, which displays signs indicating the current use by a badger' and Natural England (NE) takes this definition to include seasonally used setts that are not occupied but that show sign of recent use by badgers (Natural England, 2009).

If impacts to badgers or their setts are unavoidable then authorised sett disturbance requires a licence.