



Preliminary Ecological Assessment & Detailed Vegetation Survey

Proposed Residential Dwellings (2 No.)
On Land Adjacent to Camelot
Graig Road
Godre'r Graig
Neath Port Talbot

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Executive Summary

- DKEcology were commissioned to undertake a Preliminary Ecological Assessment (PEA) at land adjacent to 'Camelot', Graig Road, Godre'r Graig, Neath Port Talbot (Grid ref: SN74883 06710) in 2021. A further detailed vegetation survey was undertaken, also in 2021, to determine the precise losses that would be incurred by the proposed development. The site was re-visited by an ecologist in the summer of 2024 and the following report updated accordingly in line with 2024 observations.
- There are four statutory designated sites within 2km of the proposed development. These are Coed Cwm Du, Cilmaengwyn SSSI, Cilybebyll SSSI, Cefn Gwrhyd, Rhydyfro SSSI and Gwrhyd Meadows SSSI. The Swansea Canal Local Nature Reserve is located some 400m and the Neath Port Talbot Watercourses SINC some 600m to the south. The proposed development will have a negligible impact upon these sites but will result in the loss of 0.05ha of the Neath Port Talbot Woodlands SINC within which the site is situated.
- The site has been mapped as semi-natural broadleaved woodland with two small streams running through it. This woodland would qualify as "lowland broadleaved woodland", a priority habitat under section 7 of the Environment (Wales) Act 2016, although it is a poor example of this habitat.
- The development site is 0.12ha. In order to retain as much woodland as possible, an area of 404m² at the northern end of the land ownership will be retained as woodland.
- Two, 3m wide, wildlife corridors (along the west & east boundaries) will be retained as woodland to maintain an element of connectivity between woodlands to the north and south giving a total loss of approximately 0.05ha of semi-natural broadleaved woodland. Most of the woodland lost has been categorised as "low quality – optional for retention" in the accompanying Tree Report although it will include the loss of 13 mature trees.
- It is recommended that cherry laurel (and other non-native invasive species) are cleared from the retained woodland area/corridors and that cleared areas are planted up with native, locally-sourced tree species. This will allow for the planting of 44 new trees. These will result in compensatory planting of trees lost at a ratio of greater than 1:3 (in line with Planning Policy Wales 12 guidance).
- With the above measures implemented there will be a loss in the area of woodland but an improvement in the quality of the woodland which will result in a gain for biodiversity.
- To allow the movement of hedgehogs in and out of the site any new boundary treatments should not be flush to the floor. If this is not possible a series of suitably sized gaps (13cm x 13m) should be strategically place intermittently along any new boundary treatment.
- Any tree/shrub clearance; will need to take place outside of the bird breeding season i.e. March to August inclusive. If these timings are not possible a nesting bird check by a suitably qualified ecologist should be performed in the 24-hour period prior to the works.

- It is recommended that a precautionary approach to site clearance in relation to slow worm (and other reptiles) along the south and east margins of the site.
- It is recommended that the lighting of the site is considered, particularly in relation to bats.
- Additional nesting/roosting bird and bat habitat can be achieved by incorporating house sparrow terraces and bat boxes into the design of the dwellings.
- It is recommended that soft felling techniques are employed for the removal of large/mature trees that may contain cracks/holes and crevices suitable for roosting bats. If evidence of roosting bats is found a Natural Resources Wales mitigation licence will be required.
- It is recommended that the site is checked for the presence of badgers when on-site works are imminent. Whilst there are no signs of badger activity currently, badgers are highly mobile animals and will potentially use areas of the site in the future.
- Measures are to be taken to prevent harm to wildlife during construction.

1.0 INTRODUCTION

1.1 DKEcology undertook preliminary ecological assessments and a detailed vegetation survey at land adjacent to 'Camelot', Graig Road, Godre'r Graig, Neath Port Talbot SA9 2NZ.

1.2 **Timing-** preliminary ecological assessment (PEA): 31/03/2021

Detailed vegetation survey: 20/06/2021

Update PEA site visit: 07/05/2024

Surveyor – Leander Wolstenholme

1.3 **Reasons for survey** – to establish the ecology of the site and to identify the habitats and species associated with, and near, the site. This information will be used to highlight the ecological constraints and opportunities for development on site. A Preliminary Ecological Assessment identifies further detailed surveys that will be required to bring the information on the site up to the level required to obtain planning permission. This additional survey work may be required to finally fulfil the developer's obligations in respect of the ecological sensitivities on the land and may require application for licences associated with protected species e.g. bats and badgers.

1.4 Following the results of the initial PEA site survey and discussions with the planners at Neath Port Talbot Borough Council in early June 2021, a further detailed vegetation survey was commissioned to determine the precise losses that would be incurred by the proposed development.

Site Location and Brief

1.5 The site is located within the village of Godre'r Graig in the Swansea Valley (Cwm Tawe). The Swansea valley runs along the Afon Tawe from the Brecon Beacons in the northwest to the city of Swansea in the southeast. Godre'r Graig lies between the towns of Pontardawe to the south and Ystalyfera to the north. The site lies approximately 16km north of Swansea and 24km east of Llanelli. The site itself is a wooded area located between two dwellings; 'Camelot' to the northeast . and 'Oakdene' to the southwest' (Grid ref: SN74883-6710) (see Figures 1 & 2 below)

1.6 The site is situated within a linear strip of well-spaced housing. The Swansea Canal and the Afon Tawe lie to the south and beyond this a larger area of woodland (the Crynant Forest) on the western slopes of the hill, Mynydd Marchyell. To the north is another hill, Mynydd Allt-grug whose eastern facing slopes are primarily cloaked with gorse, bracken and bramble with plantation woodland on the western slopes. Hedgerow-lined pasture lies to the west of the site.



Figure 1: Site Location: 0

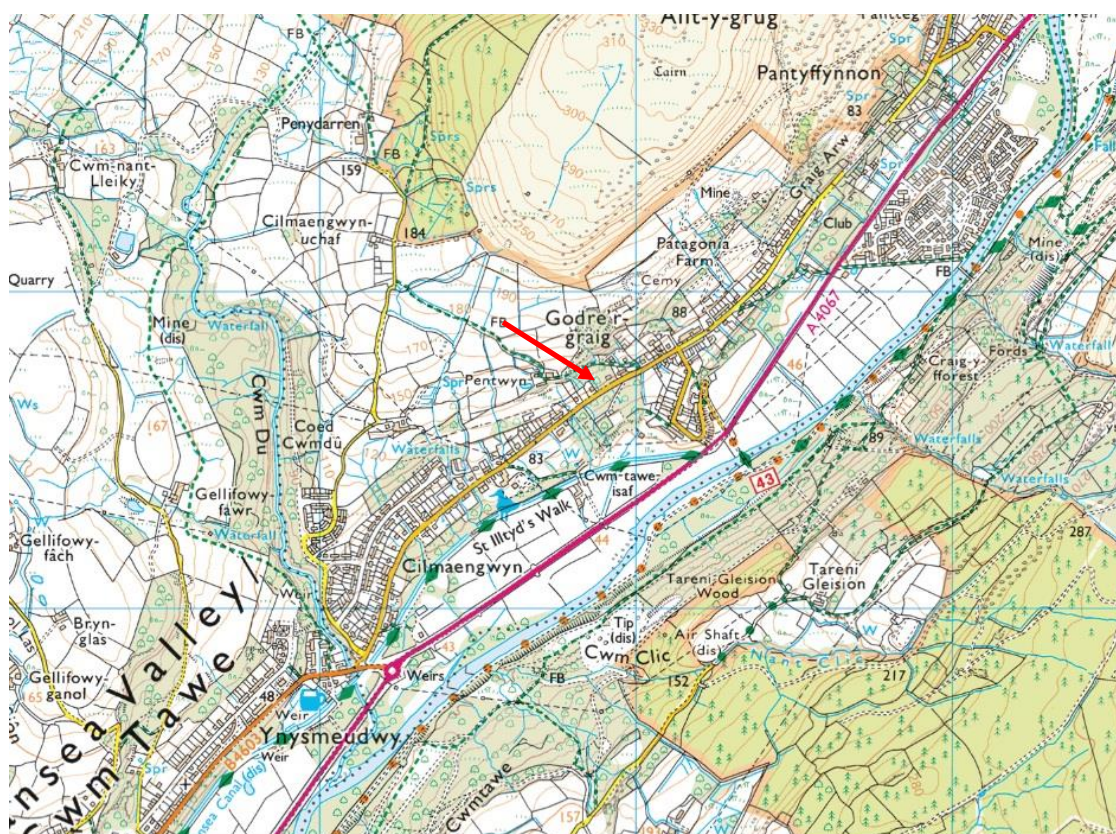


Figure 2: Site Location (red arrow)

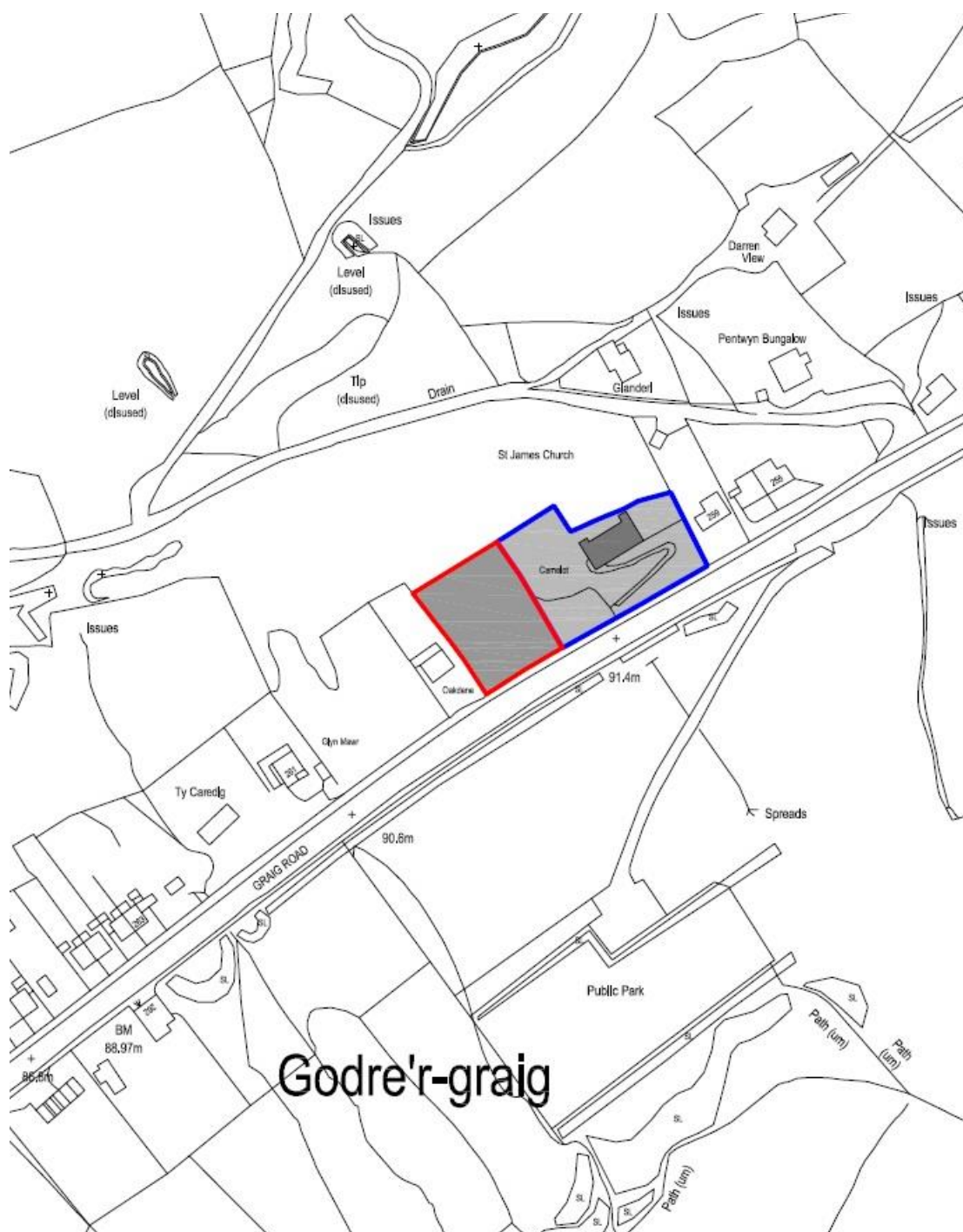


Figure 3: Survey Area (within the red line)

1.7 The survey area is approximately 0.12ha.

Background to the activity/development

1.8 The proposed development is to build two new dwellings.

1.9 As such DKEcology were commissioned to undertake a Preliminary Ecological Assessment of the site to identify any apparent or potential ecological constraints to, or opportunities

arising from development on the site and provide recommendations, as appropriate, to enable compliance with planning policy and wildlife legislation.

Survey Objectives

- 1.10 The objectives are:
- Identify designated nature conservation sites on or within proximity to the Project Site.
 - Identify known records of protected or notable species within proximity to the Project Site.
 - Identify and categorise the main habitats and features of ecological interest present within the Project Site.
 - Appraise the potential for protected or notable species of fauna and flora.
 - Provide advice on potential ecological constraints and opportunities on or within proximity to the Project Site.
 - Identify the requirement for further habitat and species surveys.
 - Make recommendations for requirements to avoid and mitigate ecological impacts as well as opportunities for biodiversity enhancements.
 - Provide a map showing the Phase 1 habitats on the Project Site and features of ecological interest.
- 1.11 The purpose of the report is to demonstrate which habitats and species are present on site and whether further detailed survey work is necessary in order to understand the full ecological impact on the protected species and the Project Site.

2.0 PLANNING POLICY AND LEGISLATION

- 2.1 The following local and national planning policy relating to nature conservation and biodiversity are considered of relevance to the current proposal.
- 2.2 Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species, including all bat species, are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2017.
- 2.3 There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Planning Policy Wales and Technical Advice Note 5

- 2.4 This document sets out the land use planning policies of the Welsh Assembly Government, with Chapter 5 dealing with Conserving and Improving Natural Heritage and the Coast. The advice contained within Planning Policy Wales (PPW) is supplemented for some subjects by Technical Advice Notes (TANs).
- 2.5 TAN 5 (Welsh Assembly 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.

2.6 Under Section 2.4 within the TAN 5, 'when deciding planning applications that may affect nature conservation local planning authorities should':

- Pay 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 taken into account 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;

Wildlife & Countryside Act 1981

2.7 The Wildlife & Countryside Act 1981 (as amended) 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.

2.8 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.

2.9 There are 'defences' provided by the legislation. These are cases where acts that would otherwise be prohibited by the legislation are permitted. Notably these allow things to happen that are reasonable, unpredictable and unavoidable, such as running over a badger on the road.

- 2.10 Section 13 identifies measures for the protection of wild plants. It prohibits the unauthorised intentional uprooting of any wild plant species and forbids any picking, uprooting or destruction of plants listed on Schedule 8. It also prohibits the sale, etc, or possession for the purpose of sale of any plants or parts or derivatives of Schedule 8 plants. It provides certain defences, e.g. provision to cover incidental actions that are an unavoidable result of an otherwise lawful activity.
- 2.11 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 protected animals can be allowed by obtaining a licence. Trade in the more widespread species is also permitted if licensed.

Conservation of Habitats and Species Regulations 2017

- 2.12 The Conservation of Habitats and Species Regulations 2017 (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.
- 2.13 These regulations provide for the designation and protection of domestic and European Sites (e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]) the protection of European Protected Species (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) and the adaptation of planning controls for the protection of such sites and species.
- 2.14 Under the regulations, public bodies (including the Local Planning Authority) have a duty in exercising their functions to have regard to the EC Habitats Directive.
- 2.15 Licensing: certain prohibited actions under the Regulations may be undertaken under licence by the proper authority. For example, where a European Protected Species (EPS) has been identified and the development risks intentionally, recklessly or deliberately affecting an EPS, then a 'development licence' may be required.

3.0 METHODOLOGY

3.1 A Preliminary Ecological Assessment involves a basic assessment of the ecological features present, or potentially present, within a site and its surrounding area. The survey normally comprises of a desk top study and a walkover survey.

3.2 All survey work was undertaken in accordance with current and appropriate guidelines for ecological surveys by an experienced ecologist with particular reference to the advice in CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Desktop study

3.3 A data search was undertaken for records of protected species, species of conservation concern, locally important species, within 1km of the site using the data held at the South East Wales Biodiversity Record Centre (SEWBReC).

3.4 DEFRA's MAGIC website (DEFRA, 2018) was used to locate designated wildlife sites within 2km of the plot. Any designated sites were noted along with the reasons for the designation.

3.5 Aerial/satellite photographs were also consulted to identify habitats on and adjacent to the plot.

Walkover survey

3.6 The initial walkover survey was carried out on the 31st March 2021 with a second walkover conducted on the 7th May 2024. Both walkovers were undertaken by Leander Wolstenholme of Glaswell Ecology, an experienced ecologist. The survey involved walking over all areas of the plot and adjacent land up to 20m, where possible, beyond the site boundary.

3.7 The survey involved:-

- Noting and mapping the habitat types present (Phase 1 habitat survey).
- An assessment of the possible presence of protected or priority species, and (where relevant) an assessment of the likely importance of habitat features present for such species.
- Noting and mapping of any stands of non-native invasive plant species.
- Recording of any incidental sightings of priority or protected species, or field signs of such species.

3.8 The species groups considered included:-

- Plants
- Fungi
- Terrestrial and aquatic invertebrates
- Fish (where relevant, based on an assessment of any watercourses and water bodies present);
- Amphibians (including both breeding and terrestrial habitat)

- Reptiles
- Breeding, wintering and migratory birds
- Bats (including potential roost sites, and foraging and commuting habitats/features)
- Other protected or priority mammal species, as relevant.

3.9 The weather was dry and still at the time of both surveys.

Survey limitations

3.10 A daytime Preliminary Ecological Assessment is primarily used to assess the habitats/species present or that may potentially be present on site. The site is also assessed in association with its location within the context of both its immediate environs and the wider landscape. This assessment is based subjectively on the surveyor's knowledge and experience. Although every effort is made to record the species and habitats currently using the site or that have the potential to use the site. Depending on the time of year that the survey is carried out some species may be missed as they have not yet emerged or are not currently using the site.

3.11 The initial walkover survey was carried out in late March. This is a sub-optimal time of year for this type of survey. However, the survey was undertaken by a skilled botanist with many years of experience who was able to identify the key species, even at that time of year. The update walkover survey was undertaken in May, an optimal time of year for this type of survey.

Detailed Vegetation Survey (undertaken on the 20th June 2021)

3.12 The tree report of the site (ArbTS) grouped the site into three areas:

- Tree Group G1 (at the south-east corner) – moderate quality (desirable for retention)
- Tree Group G2 (along the western boundary) – moderate quality (desirable for retention)
- Tree Group A1 (central section) – low quality (optional for retention)

3.13 The aim of the detailed vegetation survey was to quantify the number and position of the higher quality elements of G1 and G2 (i.e. the mature trees) that would be lost to the development as separate from the lower quality elements i.e. cherry laurel and slender regeneration of other species that also occurs in those areas.

3.14 The distance of each mature tree identified was measured from either the eastern or western boundary. Measurements were taken from the chain-link fence along the western boundary and from the marking tape along the eastern boundary. The diameter of each mature tree was measured at 1.5m from the ground.

3.15 The species composition of woody species growing within the site boundary was estimated by counting individual plants. Species, or signs of species, not noted during the preliminary ecological assessment were also noted.

4.0 RESULTS

Desktop Study Aerial Photographs

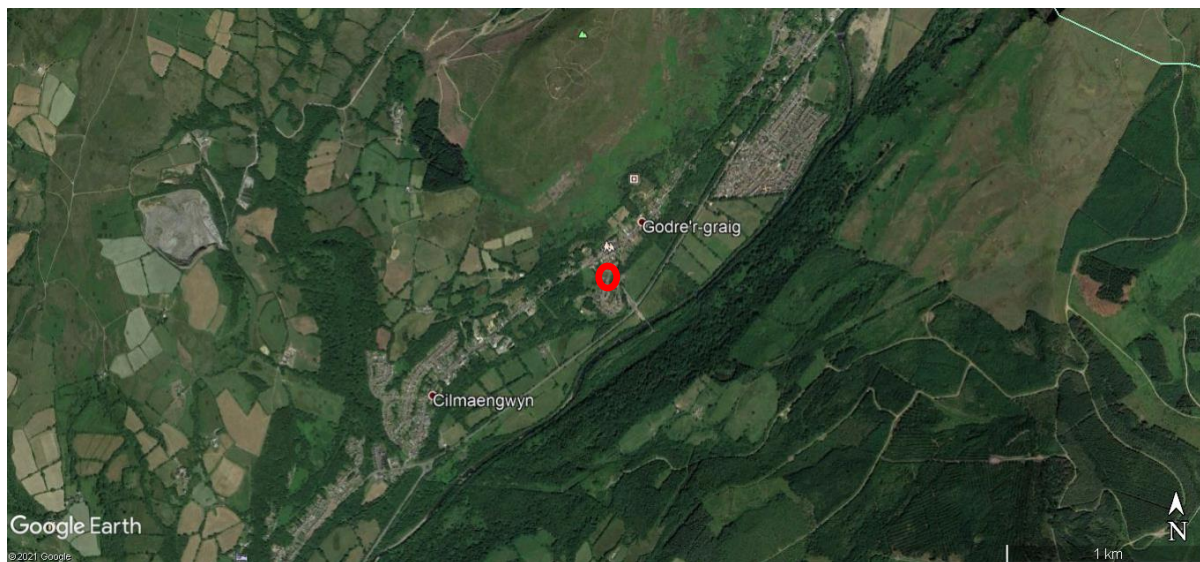


Figure 4: Aerial photograph showing surrounding habitats. Site: ○

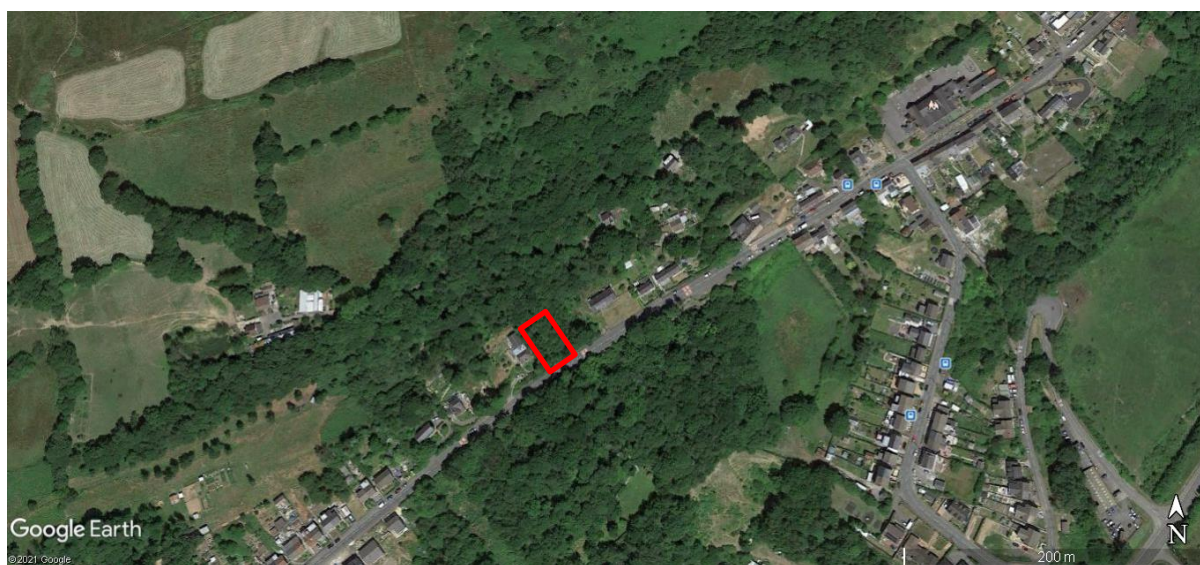


Figure 5: Close Up Aerial of the Site (within red rectangle)

Table 1: Designated Sites within 1KM

Designated Site Name	Distance from Project Site	Reason for Designation
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Coed Cwm Du, Cilmaengwyn SSSI	893m West	Sessile oak woodland with ash, elm, birch and alder. Damp base-rich flushes Poorly drained wet meadows Royal Fern (<i>Osmunda regalis</i>)
Cilybebyll SSSI	1.2km S	Species-rich grasslands and west pastures that host several uncommon plant species.
Cefn Gwrhyd, Rhydyfro SSSI	1.8km NW	Upland moorland
Gwrhyd Meadows SSSI	1.8km NW	Extensive set of meadows and wet pasture
Swansea Canal Local Nature Reserve	243m S	Aquatic habitat and associated banks.
Neath Port Talbot Watercourses SINC	271m S (Swansea Canal) 633m S (Afon Tawe)	Rivers and associated species
Neath Port Talbot Woodland SINC	The site itself forms a part of this SINC	Includes all woodlands within NPT listed on the NRW Ancient Woodlands Inventory

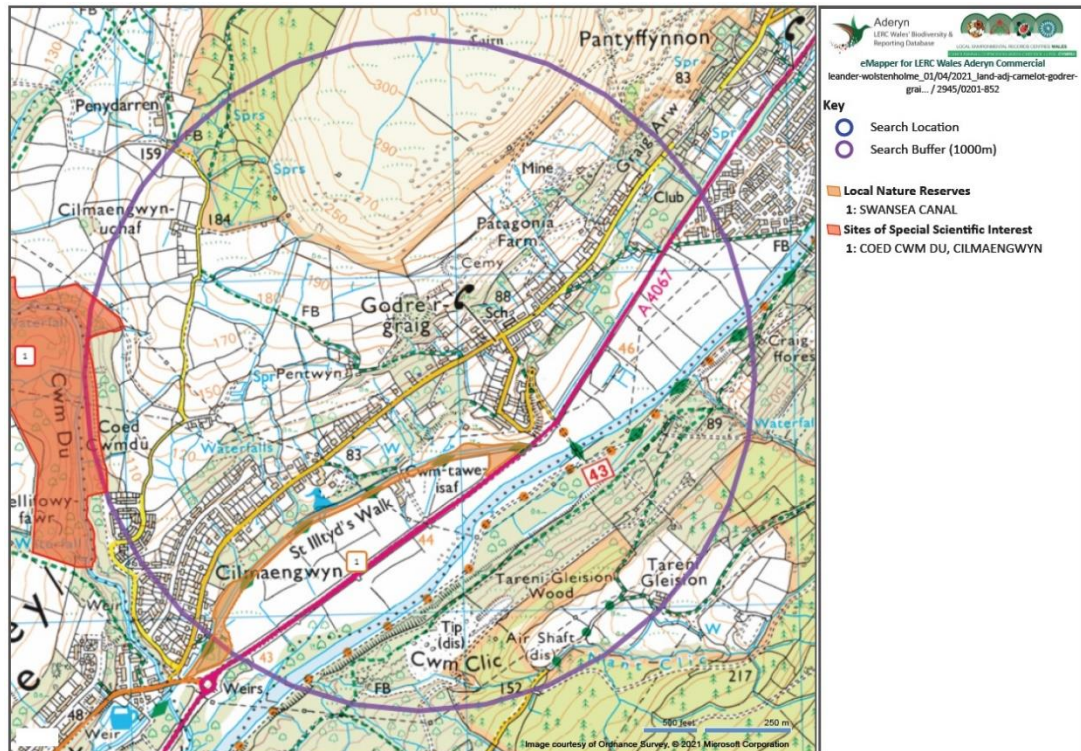


Figure 6: Designated Sites in the Vicinity of the Proposed Development



Figure 6a: NPT Woodlands SINC (approximate site boundary shown in blue)

Species records

Bats

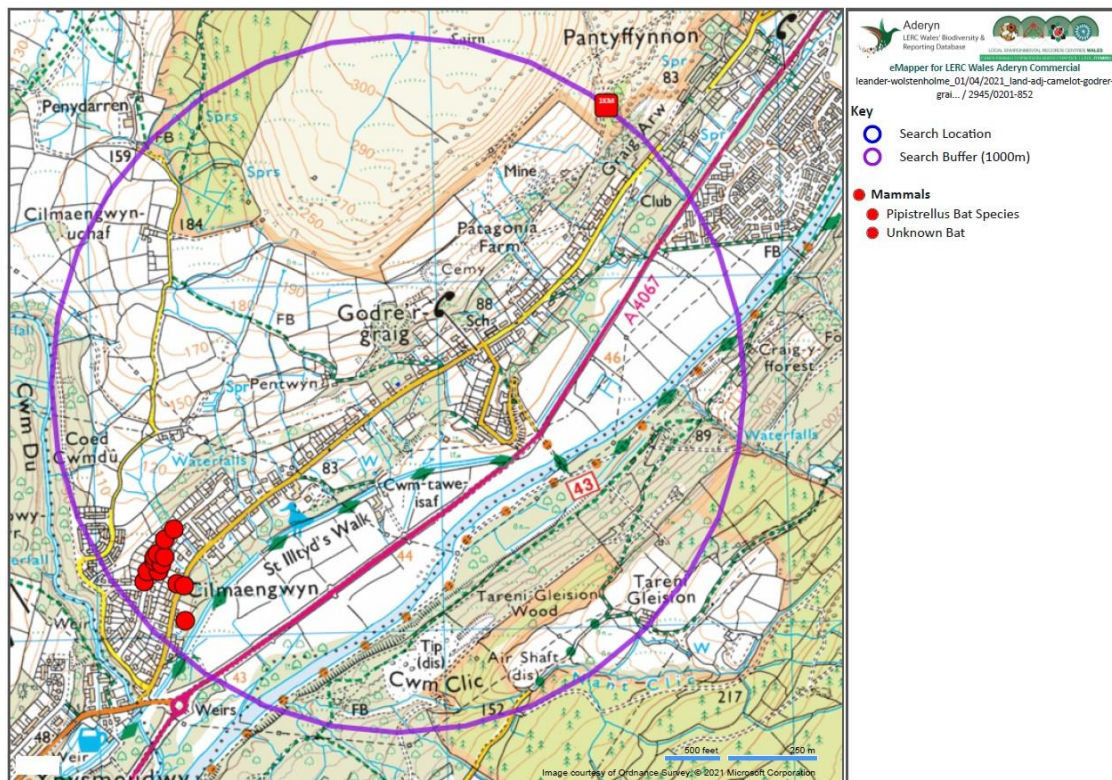


Figure 7: Bat records within 1km of the project site

- 4.1 A record of bats for the site was provided by the people living next door.
- 4.2 The former Godre'r Graig primary school 300m to the northeast of the site was subject to bat surveys in 2023 and *Myotis*, brown long-eared, soprano pipistrelle and common pipistrelle bats were found to be roosting in the school building. A greater horseshoe bat call was also recorded.

Other Mammals

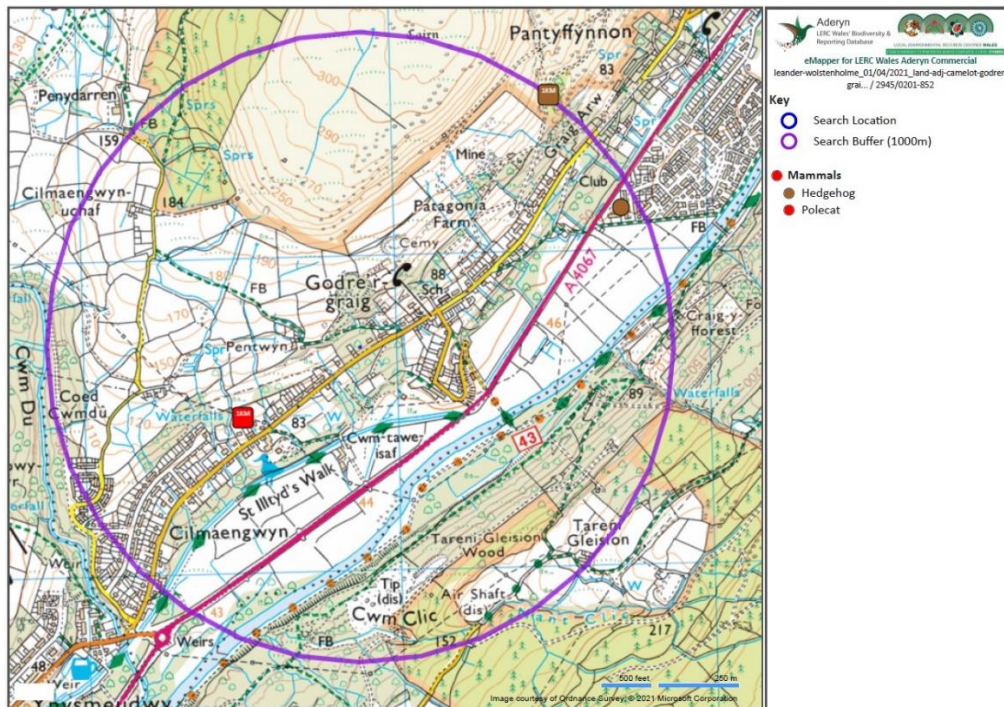


Figure 8: Hedgehog and Polecat records within 1km of the project site

Reptiles and Amphibians

- 4.3 The data search returned 2 reptile records within 1km of the site; both grass snake, one record 1km east and another 1km southeast of the site. A common frog was also recorded 1km to the southeast of the Site. A record of slow worm for the site was provided by the people living next door.

Badgers and Otters

- 4.4 There are no badger records within 1km of the project site.
- 4.5 There are a number of otter records associated with the Afon Tawe, some 600m to the south

Birds

- 4.6 The following records of category 1 (i.e. European and/or UK legally protected species, species listed in section 7 of the Environment (Wales) act or UK BAP priority species) bird species were recorded from within 500m of the site:

Kingfisher
Red Kite

Spotted Flycatcher
Red Kite
Wood Warbler
Dunnock

- 4.7 A record of wood warbler for the site was provided by the people living next door.

Other Species

- 4.8 In terms of other category 1 species recorded within 500m there are records of bluebell (*Hyacinthoides non-scripta*) and large flowered hemp nettle (*Galeopsis speciosa*) as well as the fish, Atlantic salmon and brown/sea trout (recorded from the Afon Tawe).

Habitats

Habitats Map

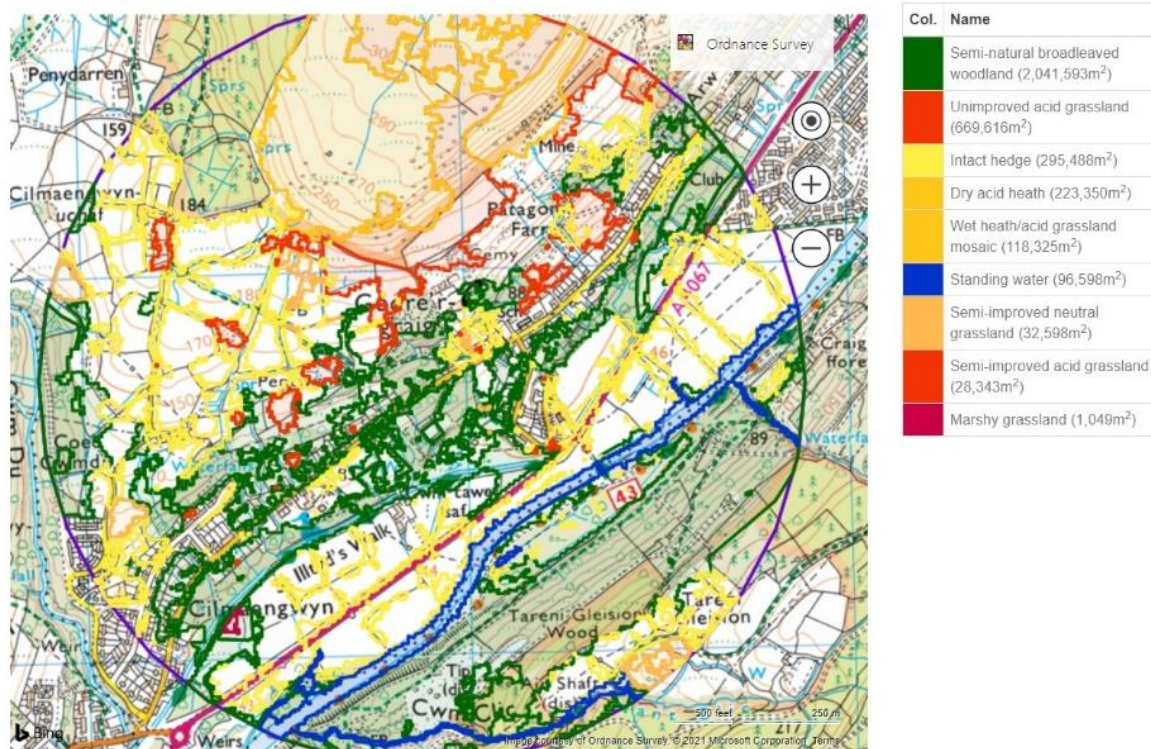


Figure 9: Phase 1 Habitat Map of the Local Area (source: local records centre - SEWBReC)

Habitats Map

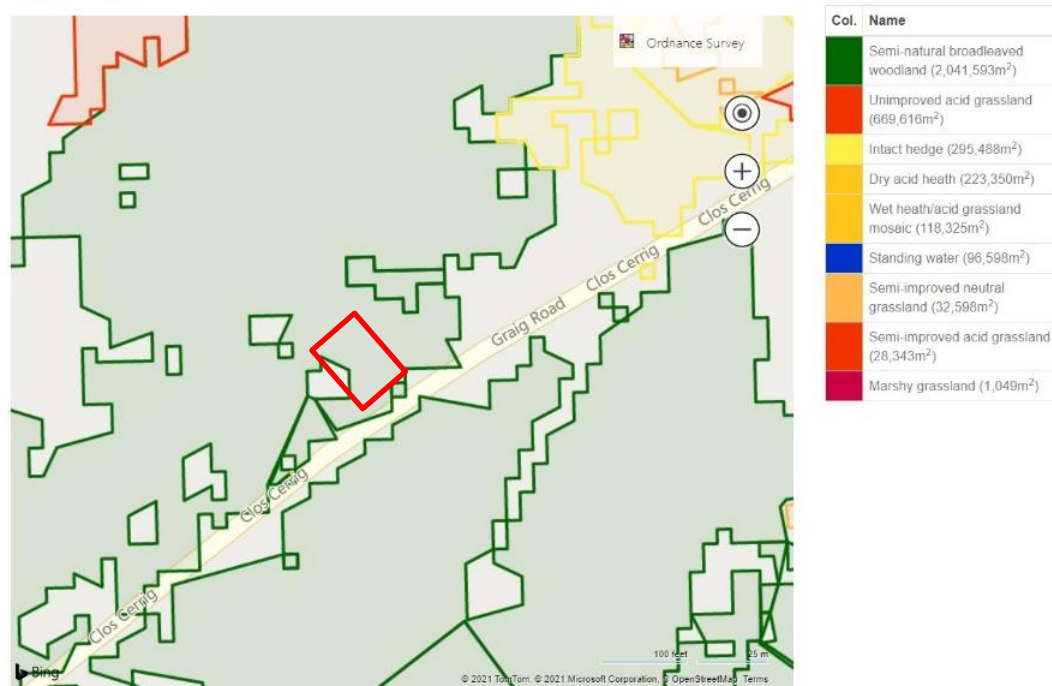


Figure 10: Close up of records of phase 1 habitats on the project site (red line shows approximate site boundary). Red rectangle shows approximate location of site.

- 4.9 The SEWBReC data showed that one priority phase 1 habitat has been mapped onto to the project site namely, semi-natural broadleaved woodland.

Ancient Woodland

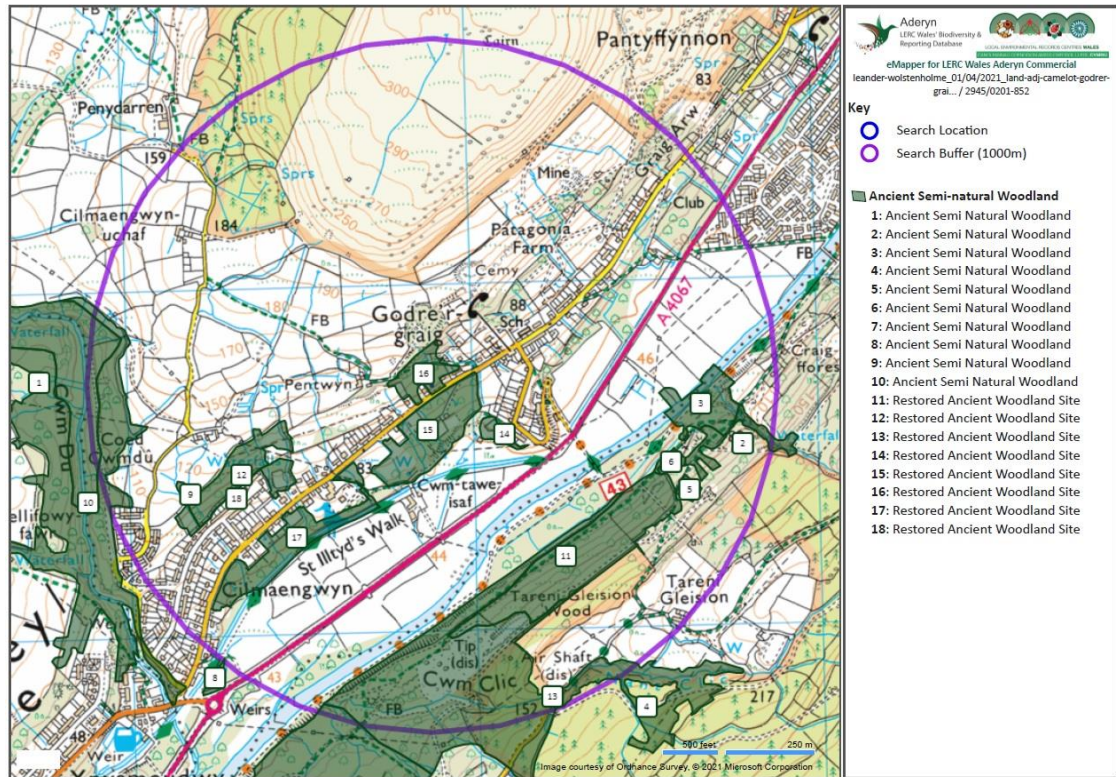


Figure 11: Ancient woodland sites within 1km. The proposed development site forms part of a Restored Ancient Woodland (numbered 16 in the figure above)

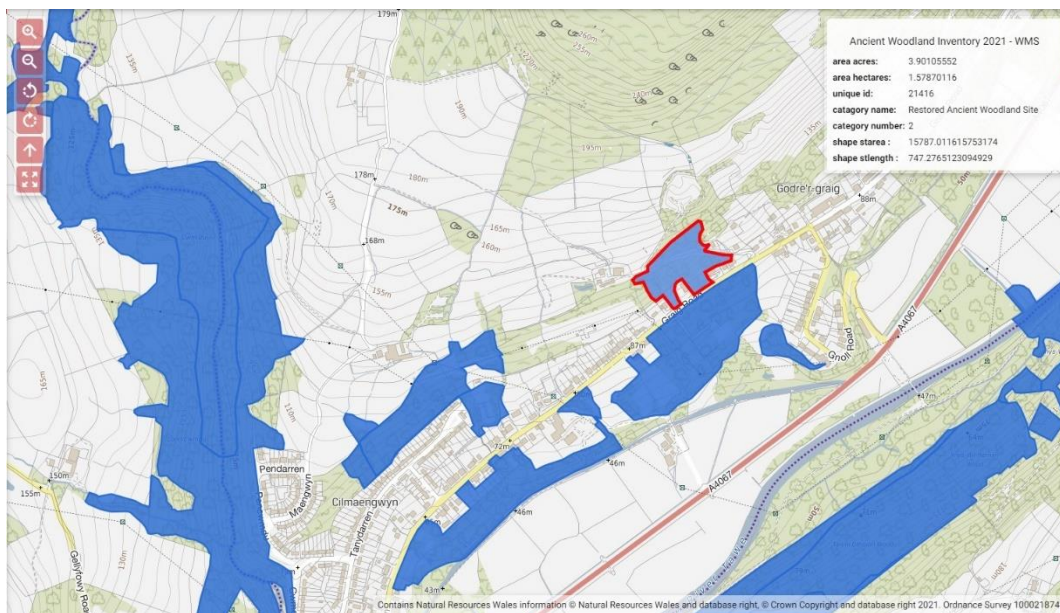


Figure 12: Image taken from the NRW Ancient Woodland Inventory showing the extent of the Restored Ancient Woodland of which the proposed development site comprises a section.

Ponds and watercourses

- 4.10 There are a number of tributary streams running southwards off the south facing slopes of Mynydd Allt y-grug with the closest being located some 20m to the south, another 56m southwest and another 100m, directly west.
- 4.11 The closest area of standing water is the Swansea Canal some 200m to the south and the largest body of flowing water is the Afon Tawe the closest point of which is some 390m to the southeast of the site.

Change over time



Figure 13: Site in 2006



Site in 2018

- 4.12 An examination of Google Earth aerial photographs appears to show that in the 2006 the central area of the proposed development site was less wooded than the western and south margins.

Walkover survey

- 4.13 The Habitat Survey map is given in Figure 23 and detailed plant species lists for each habitat are given in Appendix B. The Project Site is defined by the red line boundary given in Figure 3. The habitat survey has been conducted within this red line boundary.



Figure 14: The site viewed from the road looking northwest in 2021 (left) and 2024 (right)

Semi-natural Broad-leaved Woodland (Phase 1 Habitat Code: A1.1)

- 4.14 Semi-natural Broad-leaved woodland makes up the entirety of the site. The site can then be sub-divided into an area where mature trees are evident along the western boundary, a central strip where the thin-trunked species may more accurately be described as saplings (see Figure 15) and the southeast corner of the site that contains mature trees.
- 4.15 The mature trees on the site are all pedunculate oak (*Quercus robur*) and the younger trees a mixture of hazel (*Corylus avellana*), birch (*Betula pubescens*) and grey willow (*Salix cinerea* subsp. *oleifolia*). Young alder (*Alnus glutinosa*) is also present in damper areas.
- 4.16 The understorey of the woodland is characterised by abundant cherry laurel (*Prunus laurocerasus*), a non-native species. Holly (*Ilex aquifolium*) is a frequent component of the understorey.
- 4.17 The ground flora is somewhat sparse with frequent bramble (*Rubus fruticosus*). A scattering of typical woodland species are also present including locally frequent honeysuckle (*Lonicera periclymenum*), false brome (*Brachypodium sylvaticum*), remote sedge (*Carex remota*) and yellow pimpernel (*Lysimachia nemorum*). A thin scattering of bluebell (*Hyacinthoides non-scripta*) plants was noted near the eastern edge of the site.
- 4.18 The edge of the woodland, alongside the road is slightly different in character as a number of ornamental garden species such as Wilson's honeysuckle, bridewort (*Spiraea* sp.) and guelder rose (*Viburnum opulus*) are also present. This area is also more open and receives more sunlight, being south facing, and contains a greater diversity of herbaceous species such as barren strawberry (*Potentilla sterilis*), slender st john's-wort (*Hypericum pulchrum*) and bush vetch (*Lathyrus linifolius*).



Figure 15: The central section of the woodland showing young, thin trees and cherry laurel in 2021 (top two images) and 2024 (lower two images)

- 4.19 In the 2021 survey badger pathways were noted running in a north/south direction along the eastern side of the site. A number of snuffle holes and latrines were associated with these pathways. All these features were absent in the 2024 survey



Figure 16: Badger latrine (2021)



Figure 17: Badger pathway (2021)

Running Water (Phase 1 Habitat Code: G2)

- 4.20 There are two shallow streams that run through the woodland; one running southwards along the western boundary and one running diagonally from northeast to southwest. These streams show no submerged or emergent vegetation but damp favouring species such as soft rush (*Juncus effusus*) and remote sedge (*Carex remota*) do grow in the vicinity of these streams.



Figure 20: Stream running southwards through the woodland in 2021 (left) and 2024 (right)

Invasive Non-native Species

- 4.21 A small patch of rhododendron (*Rhododendron ponticum*) was noted growing on the southern boundary of the site. Himalayan cotoneaster (*Cotoneaster simonsii*) was noted growing on the southern boundary. Monbretia (*Crocosmia x crocosmiiflora*) was noted growing within woodland towards the western side of the site.



Figure 21: Rhododendron

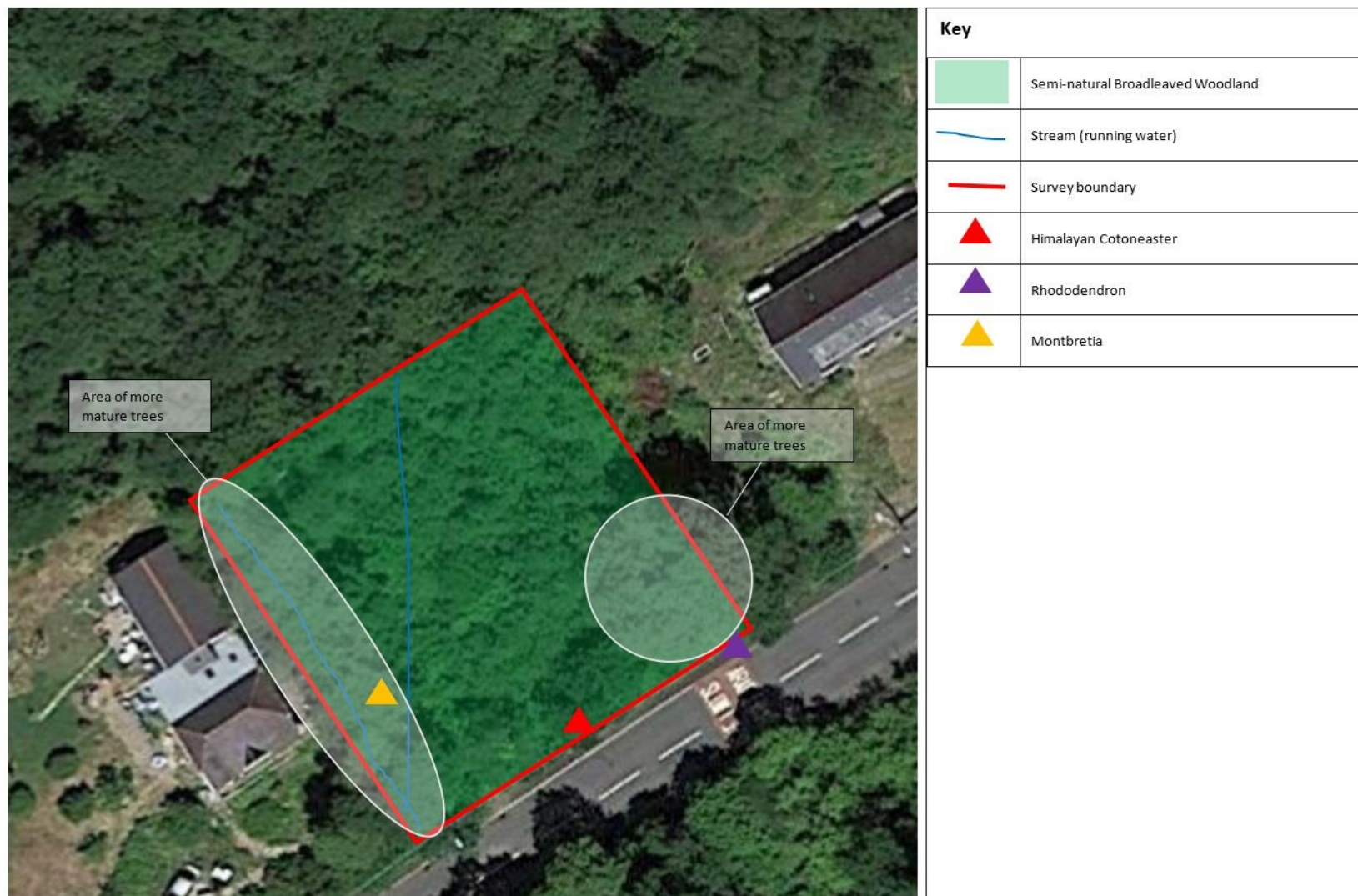


Figure 22: Monbretia

Birds Noted During Walkover Survey:

- 4.22 The following birds were noted using the site or noted in the surrounding area: blackbird, great spotted woodpecker, dunnock, coal tit, blue tit, great tit, song thrush, robin, chaffinch, wren, blackcap, wood pigeon, nuthatch, chiff chaff.

Figure 23: Phase 1 Habitat Map



Detailed Vegetation Survey

- 4.23 The position of the mature trees has been mapped onto the proposed site plan so it can be seen clearly which trees are to be lost (see Figure 24 below). Brief descriptions of the trees are given in Table 2 on the next page and photographs of the trees to be lost can be seen in Appendix C.

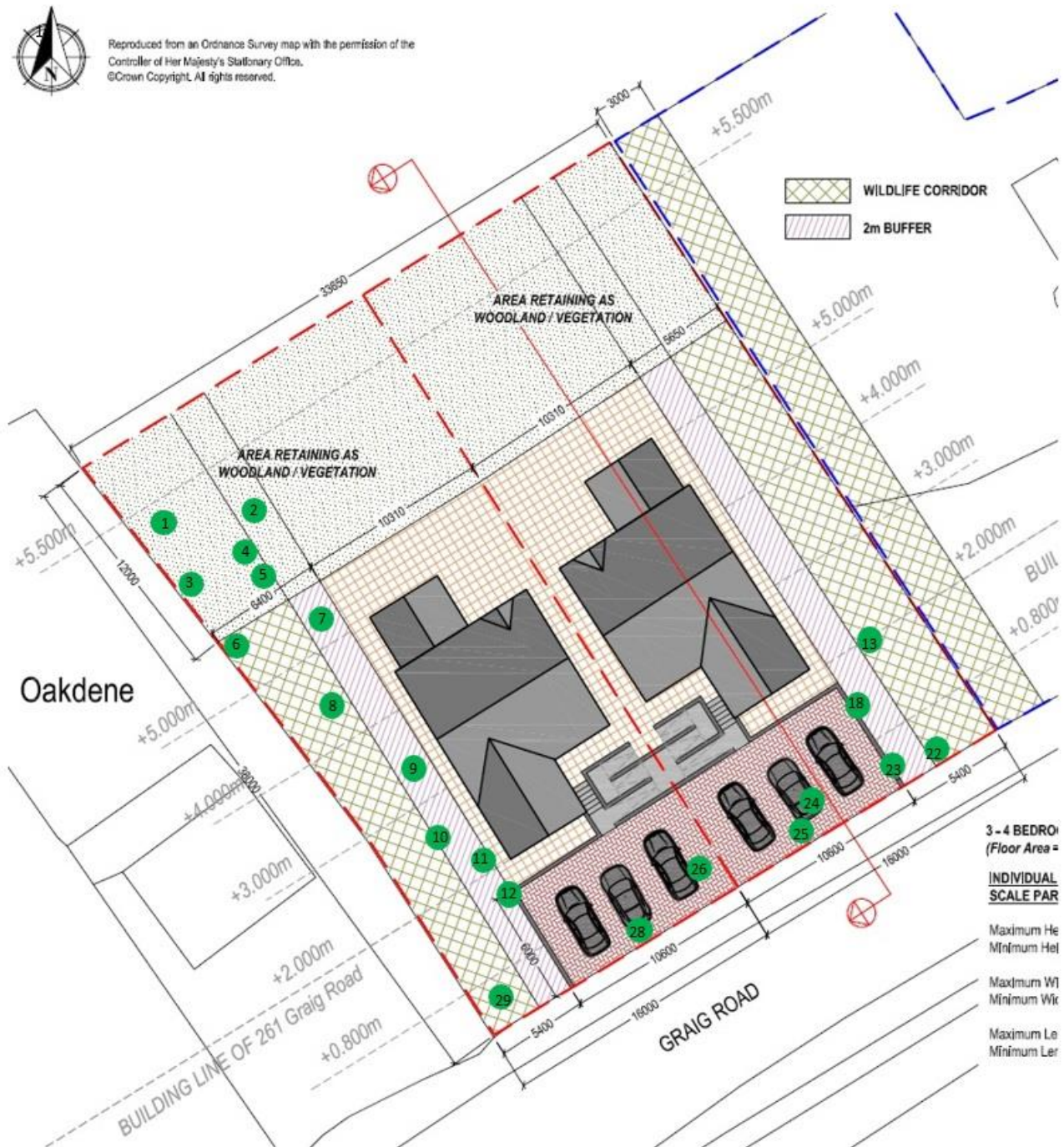


Figure 24: Mature Tree Plan

Table 2: Mature Tree Details

Tree Number	Species	Distance From Boundary	Diameter of Trunk at 1.5m
1	Hazel	Within woodland retention zone	Multi-stemmed - circa 30 thin poles
2	Birch	Within woodland retention zone	0.98m
3	Alder	Within woodland retention zone	0.27m
4	Oak	Within woodland retention zone	-
5	Oak	Within woodland retention zone	-
6	Grey Willow	On the boundary	0.45m
7	Oak	3.75m in from western boundary	Two way forked trunk 1.22m & 0.72m
8	Grey Willow	2.5m in from western boundary	Hole in trunk – potential bat roost feature
9	Oak	5.3m in from western boundary	1.59m
10	Birch	3.7m in from western boundary	0.91m
11	Oak	4.5m in from western boundary	1.38m
12	Hazel	4.5m in from western boundary	Multi-stemmed – circa 15 thin poles
13	Birch (dead)	4.4m in from eastern boundary	1.13m
18	Oak	6m in from eastern boundary	Three way forked trunk 0.89m, 1m & 1.2m
22	Hazel	2.1m in from eastern boundary	Multi-stemmed – circa 20 poles
23	Hazel	4m in from eastern boundary	Multi-stemmed
24	Oak	13.4m in from eastern boundary (car parking area)	1.37m
25	Hazel	14m in from eastern boundary (car parking area)	Multi-stemmed
26	Ash	16m in from eastern boundary (car parking area)	0.76m (tree in poor condition)
28	Hazel	13m in from western boundary (car parking area)	Multi-stemmed – circa 20 stems
29	Oak	1m in from western boundary	0.74m

Yellow highlight = trees that will be lost

Photographs of the trees to be lost are given in Appendix C

4.24 The percentage cover of the low-quality species (cherry laurel and saplings) was as follows:

Species Name	Percentage Cover
Cherry Laurel	36%
Holly	22%
Hazel	15%
Alder	8%
Ash	7%
Grey Willow	4%
Birch	3%
Guelder Rose	2%
Other species (Butterfly Bush, Goat Willow, Hawthorn, Oak, Spotted Laurel, Wilson's Honeysuckle)	3%



Figure 25: Low quality woodland showing cherry laurel and holly (2021)



Figure 26: Low quality woodland showing cherry laurel, spotted laurel and holly (2021)



Figure 27: Low quality woodland showing cherry laurel and hazel (2021)



Figure 28: Low quality woodland showing cherry laurel, hazel, holly and ivy ground cover (2021)

5.0 INTERPRETATION AND ASSESSMENT

Designated sites

- 5.1 There are four statutory designated sites within 2km of the proposed development. These are Coed Cwm Du, Cilmaengwyn SSSI, Cilybebyll SSSI, Cefn Gwrhyd, Rhydyfro SSSI and Gwrhyd Meadows SSSI. The site itself forms part of the NPT Woodlands SINC. The Swansea Canal Local Nature Reserve is 240m to the south and the NPT Watercourses SINC is located 271m (Swansea Canal) and 633m (Afon Tawe) to the south.
- 5.2 Because of the nature of the development, and the distance from these sites, it is considered that the proposals will not have a significant impact on the statutory designated sites, the Swansea Canal Local Nature or the NPT Watercourses SINC. It should be noted, however, that the two streams running through the site will ultimately feed into the Afon Tawe (part of the NPT watercourses SINC) and therefore care should be taken to prevent silt run-off or any other form of pollution into the streams.
- 5.3 In relation to the NPT Woodlands SINC, Policy EN6 of the Neath Port Talbot Local Development Plan states that:

“Important Biodiversity and Geodiversity Sites

Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Importance for Nature Conservation (SINC), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where:

- 1. They conserve and where possible enhance the natural heritage importance of the site; or*
- 2. 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.”

- 5.4 Measures to mitigate and compensate for the loss of SINC habitat are set out in the following paragraphs.

Habitats:

Woodland

- 5.5 The proposed development site is entirely composed of semi-natural broad-leaved woodland. The majority of the woodland is made up of young trees although some more mature trees are present, particularly along the western margin of the site and in the south-east corner (see Figure 23: Phase 1 Habitat Map). The woodland is also notable for the presence of abundant cherry laurel (*Prunus laurocerasus*), a non-native species. Other invasive non-native species present include monbretia (*Crocosmia x crocosmiiflora*), rhododendron (*Rhododendron*

ponticum) and Himalayan cotoneaster (*Cotoneaster simonsii*). The ground flora is poorly developed being composed of frequent bramble and ivy with a very thin scattering of typical woodland ground flora species such as yellow pimpernel, dog violet and wood avens. There is also a thin scattering of bluebells along the eastern edge of the site. Because of the young trees across the majority of the site, the presence of alien species and poorly developed ground flora it is considered to be a low-quality example of lowland broad-leaved woodland. However, it can only be mapped as semi-natural broadleaved woodland for the current survey and local record centre data phase 1 map also maps the site as this habitat. In addition, the site is listed in the Ancient Woodland Inventory as part of a Restored Ancient Woodland.

- 5.6 **Restored Ancient Woodland Sites (RAWS)** are defined as woodlands which are predominately broadleaves now and are believed to have been continually wooded for over 400 years. These woodlands will have gone through a phase when canopy cover was more than 50% non-native conifer tree species and now have a canopy cover of more than 50 percent broadleaf.
- 5.7 It is worth noting that information sources used to classify Restored Ancient Woodland Sites do not identify whether broadleaf trees are native to a specific site, therefore an assumption is made that they are native. The phrase 'restored ancient woodland' describes woodland which appears, with the use of remote sensing techniques, to have returned to a more natural condition. The inventory designation does not mean that the woodland is fully restored or that it is in good ecological condition. Active restoration work may well be essential to consolidate improvements in the condition of a Restored Ancient Woodland site.
- 5.8 Lowland Broad-leaved Woodlands are listed as priority habitats under section 7 of the Environment (Wales) Act 2016. Section 7 lists the living organisms and types of habitat in Wales that are considered to be of key significance to sustain and improve biodiversity in relation to Wales. The Act states that all reasonable steps should be taken 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. As such the loss of any woodland or sections of woodland resulting from the proposed development will need to be mitigated or compensated for.
- 5.9 Policy EN7 of the Neath Port Talbot Local Development Plan states that:

"Important Natural Features

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:

1. *Full account have 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*
2. *The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed."*

- 5.10 As such this policy requires the woodland to be appropriately considered and incorporated into the design of the development. If this is not possible, appropriate mitigation or compensation is required.
- 5.11 The recently published Planning Policy Wales 12 (PPW12) (published February 2024) states that ancient woodlands are an irreplaceable natural resource and are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits.
- 5.12 The development area (the area within the redline boundary shown in Figure 3) is 0.12ha. In order to retain woodland as much woodland as possible, whilst allowing the development to go ahead, there is to be an area of some approximately 400m² retained as woodland to the north of the proposed development. In addition two wildlife corridors to the west and to the east are to be retained as woodland. These corridors are 3m wide and some 26m in length retaining an additional 290m² of woodland. In addition there will be rough grass buffer strips running alongside the wildlife corridors. The wildlife corridors will serve to retain the connectivity that currently exists between woodland to the north and to the south (across Graig Road). As such the area to be developed for the houses, patios, paths and parking etc. amounts to 545m². As such, the development will result in the loss of approximately 0.055 hectares of woodland.
- 5.13 For the most part the area of woodland to be lost is composed of young thin-trunked trees with the species present being hazel, grey willow, ash, alder, holly and birch. It's estimated that these trees make up approximately 54% of the cover with cherry laurel making up 36% of the cover. The tree report (ArbTS, 2021) has identified the bulk of the woodland to be lost as "low quality-optional for retention" but also includes some mature trees.
- 5.14 PPW12 sets out is that any mature native trees that are removed need to be replaced on a 3:1 basis and that the replacement trees should be of a similar type and compensatory size. Therefore 39 new trees will need to be planted to compensate for the loss of the trees. These also need to be of a similar type and compensatory size.
- 5.15 Figure 24, Table 2 and the photographs in Appendix C show the trees that will be lost to the development. This includes trees that are currently growing in locations where the buffer strips will be. Multi-stemmed coppiced hazels have also been included as mature trees.
- 5.16 In total 13 trees will be lost comprising of:
- 5 oak
 - 2 birch (including one dead)
 - 1 ash
 - 5 hazel
- 5.17 Cherry laurel is a non-native species and, on the site, forms a dense understorey canopy producing a heavy shade that prevents many native ground flora woodland species from

growing. As such cherry laurel reduces the ecological quality of the woodland. It is therefore recommended that the cherry laurel is cleared from the woodland. As cherry laurel takes up 36% of the woodland it is recommended that the space left by the clearance is filled with planting of locally-sourced native trees. This will allow for the replacement of the mature trees lost to the development at more than a ratio of 1:3 as follows:

Area Retained as Woodland

- 5.18 Area = 404 m² of which 36% to be cleared of cherry laurel giving 145 m² of cleared area. Planting at 3m spacings will allow for the planting of at least 20 trees

Western Wildlife Corridor

- 5.19 Area = 150 m² of which 36% to be cleared of cherry laurel giving 54m² of cleared area. Planting at 2m spacings will allow for the planting of at least 12 trees

Eastern Wildlife Corridor

- 5.20 Area = 144m² of which 36% to be cleared of cherry laurel giving 52m² of cleared area. Planting at 2m spacings will allow of the planting of at least 12 trees.

- 5.21 The total number of trees to be planted is 44 to replace those lost giving a ratio of greater than 1:3. The mix of species to be planted (with trees sourced as locally and as large as possible) is to be as follows:

17 oak
7 birch,
16 hazel
4 ash

- 5.22 In addition, it is recommended that the ecological quality of the woodland is further improved by the removal of other non-native species currently growing in the woodland including montbretia, rhododendron, Himalayan cotoneaster, spotted laurel (*Aucuba japonica*), bridewort and Wilson's honeysuckle.

- 5.23 It is recommended that a woodland management plan is written, and adhered to, that includes measures to eradicate these non-native species from the woodland, to plant up gaps in the woodland with native, locally-sourced woody species and to provide nesting and roosting habitat for birds and bats in the form of bird and bat boxes. This will ensure that, whilst the quantity of woodland will be reduced by the proposed development the quality of the woodland will be increased.

Species:

Bats

- 5.24 Bats can be expected to be using the site for foraging and commuting and bats have been recorded from the vicinity of the site by the people living next door.

- 5.25 None of the trees or shrubs that will be removed as a result of the development showed any bat potential roost features that were visible from the ground. However, it wasn't possible to view each entire mature tree as the view was often obscured by branches.
- 5.26 Therefore it is recommended that, for the removal of mature trees, soft-felling techniques are used when lopping/felling these trees. This can be achieved by removing the top branches of a tree first and working down the tree removing it in sections. Any sections of the tree identified as having bat roost potential should be checked for the presence of bats using an endoscope.
- 5.27 If there is evidence of bats using the holes as roosts then the tree cannot be felled before a European Protected Species Mitigation (EPSM) licence has been procured from Natural Resources Wales following the drafting of a suitable mitigation strategy.
- 5.28 This work should take place in September/October. This is the time of year when maternity roosts are over and hibernation roosts have not yet been established or March/April when hibernation roosts have finished and maternity roosts have not yet been established.
- 5.29 The clearance of the woodland will result in the loss of bat foraging and commuting habitat. This loss will need to be compensated for. Also, the existing woodland provides connectivity between the woodlands north and south of Graig Road. The 3m wide wildlife corridors will retain a level of connectivity. (see Figure 30 in Appendix A for locations of these corridors).
- 5.30 Artificial lighting is known to cause disturbance to bats and can discourage them from using a previously utilized site. With this in mind, it is recommended that any additional lighting forming part of the development be kept to a minimum and that any external lighting is directed away from hedgerows and trees. Furthermore, down lighting should be the preferred choice of any external lights to minimise glare or additional light pollution.
- 5.31 More information in relation to bats and lighting is noted in the Bat Conservation Trust's 'Guidance Note 8: Bats and Artificial Lighting' in conjunction with The Institute of Lighting Professionals, available to download at <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>.

Badger (*Meles meles*)

- 5.32 The local records search returned no badger records within 1km of the site.
- 5.33 In 2021 badger pathways, snuffle holes and latrines were noted on and near the site and it was clear that badgers were commuting and foraging in a north/south direction along the western edge of the site. However, none of these signs were present when the site was re-assessed in 2024 indicating that badger activity had ceased across the site and the current impact of the development on badgers is considered to be negligible. However, badgers are highly mobile animals and their presence on or near the site should be checked prior to the imminent onset of development.

Otter (*Lutra lutra*)

- 5.34 There are local records of otter from the Afon Tawe some 600m to the south of the project

site. Because of the distance of the site from this river, and the nature of the development, the impact of the development on otters is considered to be negligible.

Dormouse (*Muscardinus avellanarius*)

- 5.35 The local record centre search returned no record of dormouse with a 1km buffer. The National Biodiversity Network Atlas gives a single 1km square record from 2002 for dormouse near Pontardawe, some 3km south west of the project site. Beyond this there is a cluster of records west of Ammanford some 16km west of the site.
- 5.36 Gnawed hazelnuts were checked during the current survey but none showed the characteristic gnawing pattern of dormice.
- 5.37 It is therefore considered that it is highly unlikely that dormice are present on or near the site and the impact of the development on dormice is considered to be negligible.

Reptiles and Amphibians

- 5.38 No reptiles or amphibians, or their signs, were noted during the survey. The data search returned 2 reptile records within 1km of the site; both grass snake, one record 1km East and another 1km South East of the site. A common frog was also recorded 1km to the Southeast of the Site. In addition, slow worm has been recorded in the woodland in the vicinity of the site by the people living next door.
- 5.39 The central portion of the site itself is rather too shady (particularly due to the presence of cherry laurel, a species that casts a lot of shade) to provide good habitat for slow worm and other reptiles as they require open sunny areas for basking. Slow worm prefer woodland edges and rides where there is cover but also the opportunity to bask in the sun. They also favour mature gardens, particularly compost heaps.
- 5.40 As such, the most likely place to find slow worm on the site would be the southern edge, adjacent to the road and the eastern boundary, adjacent to Camelot.
- 5.41 Because of this, a precautionary approach to the clearance of the edge habitats on site is recommended as follows:
- To avoid impacts on hibernating reptiles and amphibians any clearance works should be undertaken between March and September.
 - The scrub/young trees and brambles must be cleared using hand machinery so that the process of clearance is slow. This will allow any animals to disperse to adjacent habitats.
 - Habitat should be cleared from south to north and from central position outwards-this will encourage any faunal species to move northwards into the woodland to the north or to the wildlife corridors avoiding the road.
 - Initially the clearance of young trees and bramble scrub should cut it down to a height of approximately 300mm. Arisings should be immediately removed from site. The

remaining vegetation should then be left for at least 48 hours and before being cut down to near ground level and left for another 48 hours prior to works commencing. This should make the areas unattractive to reptiles and amphibians prior to development and thus encourage them to leave the area.

Hedgehog

- 5.42 Desk-top records show that hedgehogs have been recorded in the local area. Hedgehogs are protected under Schedule 6 of the Wildlife and Countryside Act (WCA) 1981, which prohibits killing and trapping by certain methods and they are listed as a priority species under the Environment (Wales) Act 2016. The species is therefore considered one of the Wales' target species to avoid further population decline.

- 5.43 In order to retain habitat connectivity for Species of Principal importance, such as hedgehogs, any new boundary treatments shall not be flush to the ground, or suitably sized gaps 13 x 13 cm shall be left at strategic points. For more information see <https://www.hedgehogstreet.org/hedgehog-friendly-fencing/>

Birds

- 5.44 The tree and shrubs on the site provide nesting opportunities for birds.

Wood warbler has been recorded from the woodland in the vicinity of the site by the people living next door although no wood warbler were noted singing when the site during surveys in May and June. Wood warblers nest on the ground, or close to the ground.

- 5.45 All wild British birds (while nesting, building nests and sitting on eggs), their nests and eggs (with certain limited exceptions) are protected by law under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Included in this protection are all nests (at whatever stage of construction or use) and all dependent young until such time as the nest is abandoned and the young have fledged and become independent.
- 5.46 Therefore, any tree, shrub and ground clearance should, wherever possible, be undertaken from September to February outside the bird breeding season (March to August inclusive). However, if clearance works are unavoidably undertaken within the bird breeding season a check for nesting birds must be undertaken by a suitably qualified ecologist in the 24 hour period prior to clearance works. If any active nests are found these will be protected, along with an appropriate buffer zone, until nesting is complete and the young have fledged.

Bluebells

- 5.47 Bluebell is protected against sale by its inclusion on schedule 8 of the Wildlife and Countryside Act 1981 (as amended) and there is a thin scattering of bluebells present along the eastern boundary of the site. It is recommended that Bluebell propagules be translocated into suitably wooded area if any are to be lost to the development.

Enhancements

- 5.48 The biodiversity and resilience of ecosystems duty Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty

(the S6 duty) for public authorities in the exercise of functions in relation to Wales and sets out that a public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.

- 5.49 Planning Policy Wales (PPW) 12 sets out that “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 (not including non native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity”. As such the planning authority will look for biodiversity enhancements in a planning application.
- 5.50 The site could be further enhanced in terms of biodiversity by the incorporation of a house sparrow terrace into the design of the new builds alongside the incorporation of bat boxes into the design of the new builds. This would provide nesting and roosting habitat for a section 7 listed species.

Invasive Species

- 5.51 Rhododendron, montbretia and Himalayan cotoneaster are listed under Schedule 9 Part 2 of the Wildlife and Countryside Act (1981) as amended. Section 14 of the above act states that it is illegal to plant or otherwise cause to grow in the wild a plant listed in Schedule 9.
- 5.52 Therefore, whilst it is not an offence to have these species growing on a site, there is a risk that, during the construction phase of the development, due to the action of machinery and the movement of machinery from one site to another (e.g. mud sticking to tyres etc.), these species could be spread from their current location to new sites. This introduction of these species to a new site would constitute an offence. Therefore, it is strongly recommended that this species is eradicated from the Project Site prior to the onset of works.
- 5.53 As such it is recommended that a specialist invasive species contractor is employed for the removal of this species.
- 5.54 Any contractors involved in the scheme should be made aware of the presence of these species and all stands should be clearly marked and fenced off to prevent further spread on site.
- 5.55 In addition, the non-native species cherry laurel (*Prunus laurocerasus*) was noted growing throughout the woodland. Whilst not listed under section 9 of the Wildlife and Countryside Act, it is considered as an invasive species in some areas of Wales and it is recommended that this species is also eradicated from the site prior to the onset of works.

During Site Works

- 5.56 All artificial lighting will be directed away from the boundaries of the site. Any external lighting used during construction should be switched off at night time to prevent disturbance to nocturnal animals.

- 5.57 Any excavations associated with development should be either closed at night or fitted with ramps to help animals such as hedgehogs and small mammals to escape.
- 5.58 Any temporary exposed open pipe system will be capped to prevent mammals gaining access when contractors are off site.
- 5.59 Any exposed pipes and trenches shall be checked for trapped wildlife each morning before starting construction activities.

6.0 CONCLUSIONS AND RECOMMENDATIONS

- 6.1 The development site is 0.12ha. In order to retain as much woodland as possible, whilst allowing the development to proceed, an area of 404m² at the northern end of the land ownership will be retained as woodland.
- 6.2 In addition, to both retain as much woodland as possible and, to provide connectivity to the woodlands to the north and south, two 3m strips (one along the western boundary and one along the eastern boundary) acting as wildlife corridors will be retained as woodland. This means that there will be a total loss of approximately 0.05ha of semi-natural broadleaved woodland. This loss is made up of an area of woodland defined as "low quality – optional for retention" in the Tree Report that accompanies the planning application. This area is composed of a dense mixture of cherry laurel, thin trunked hazel and holly alongside other young, thin-trunked species present including grey willow, ash, and alder. In addition, 13 mature trees will be lost to the development (5 oak, 2 birch, 1 ash and 5 coppiced hazel). To replace these trees at a ratio of 1 lost to 3 gained it is recommended that the woodland in the retained area and in the wildlife corridors are cleared of cherry laurel (which takes up approximately 36% of the woodland area) and other non-native species. It is recommended that the cleared area is planted with native, locally-sourced tree species. It is recommended that planting at 2m spacings is undertaken along the western and eastern wildlife corridors. This would allow for 12 trees per corridor and that the northern section of retained woodland is planted at 3m spacings allowing for the planting of 20 trees giving 44 new trees in total (more than the require 1:3 ratio). To ensure that the above recommendations are carried a woodland management will need to be written and implemented.
- 6.3 It is recommended that, for the removal of large/mature trees, soft felling techniques are used when lopping/felling these trees and any holes checked for the presence of bats.
- 6.4 To further enhance the ecological quality of the woodland it is recommended that the invasive non-native species that currently grow on the site are eradicated. This includes montbretia, rhododendron and Himalayan cotoneaster. Other non-native species such as spotted laurel, Wilson's honeysuckle should be also be removed from the retained section of woodland and the wildlife corridors
- 6.5 It is also recommended that, to allow the movement of hedgehogs in and out of the site any new boundary treatments should not be flush to the floor. If this is not possible a series of suitably sized gaps (13cm x 13m) should be strategically place intermittently along the new boundary treatment.
- 6.6 Any tree/shrub and ground clearance; will need to take place outside of the bird breeding season i.e. March to August inclusive. If it is not possible to time the works in accordance with the main bird breeding season a nesting bird check should be performed in the 24-hour period prior to the works. The nesting bird check should be undertaken by a suitably qualified and experienced ecologist.

- 6.7 Slow worm has been recorded from the woodland in the vicinity of the site. The most suitable areas for slow worm are the southern and eastern margins of the site. It is recommended that a precautionary approach to site clearance is taken for these areas.
- 6.8 It is also recommended that lighting of the site is considered, particularly in relation to bats.
- 6.9 Additional nesting bird habitat and bat roosting habitat can be achieved by incorporating house sparrow terraces and bat boxes into the design of the dwellings.
- 6.10 It is recommended that any bluebells that are potentially lost to the development are translocated to a suitably wooded receptor site.
- 6.11 The site should be checked for the presence of badgers when sites works are imminent. Although there are no signs of badger activity currently on the site, badgers are highly mobile animals and may use the site in the future.
- 6.12 Appropriate measures are to be taken during constructions works to prevent harm to wildlife.

7.0 REFERENCES

ArbTS (2021) Arboricultural Report Including: Tree Survey Data & Tree Constraints Plan (TCP), Camelot, Graig Road, ArbTS_1072.1

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

JNCC. (2010). Handbook for Phase 1 habitat survey: A technique for environmental audit.

Neath Port Talbot County Borough Council (2018) Biodiversity and Geodiversity Supplementary Planning Guidance – Local Development Plan 2011-2026

www.magic.defra.gov.uk/magicMap.aspx, accessed April 2021

APPENDICES

APPENDIX A: Plans

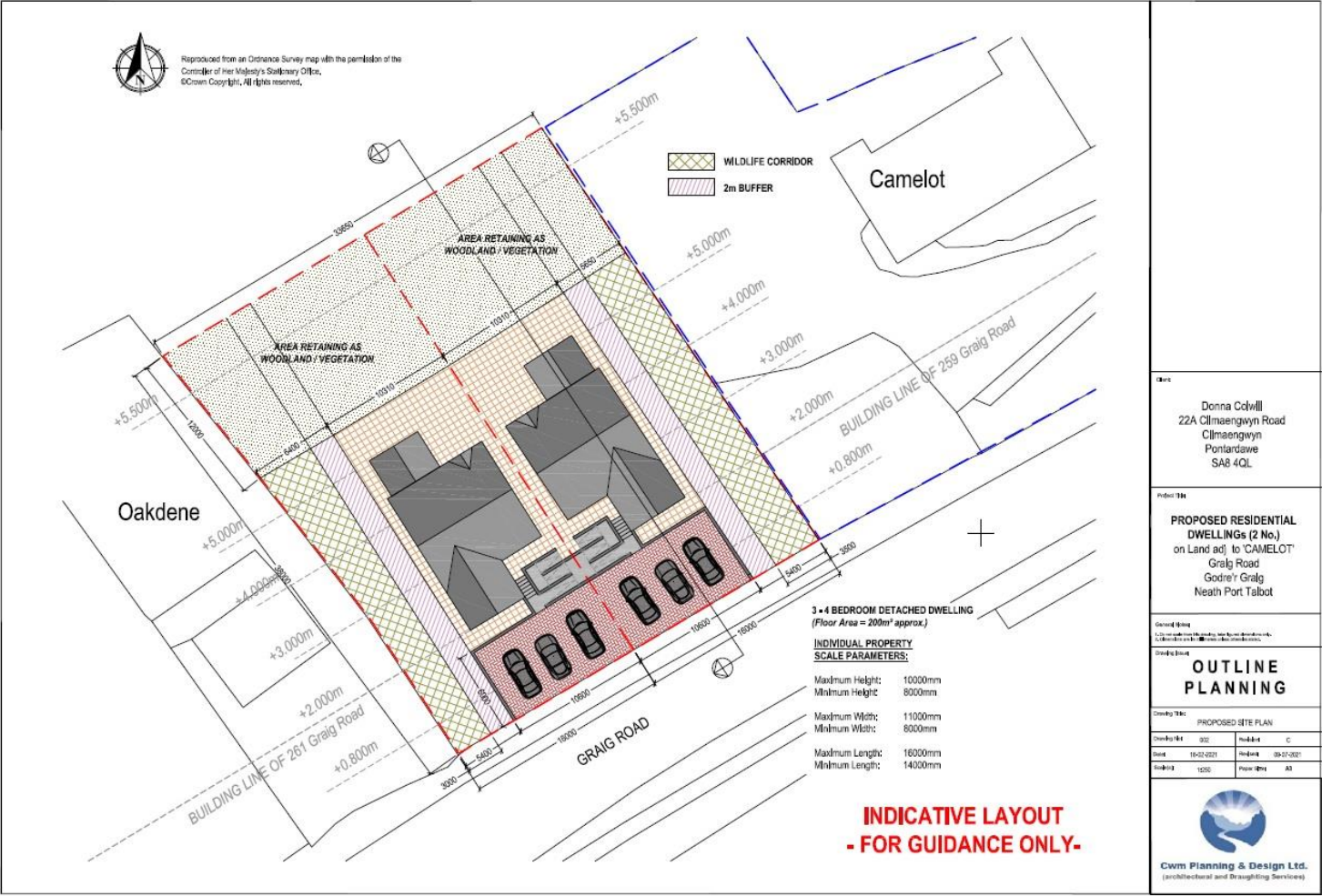


Figure 30: Indicative Layout of Proposed Development

APPENDIX B: Plant Species List for the Site

The letters D A F O R refer to the abundance of each species within the habitat that it is found in as follows: D = Dominant, A=Abundant, F= Frequent, O= Occasional, R= Rare. The qualifier L is sometimes used to indicate Locally. So, for example, LA would stand for locally abundant. This would mean that the plant species was not abundant throughout the habitat but in select patches it was abundant.

Woodland (Phase 1 Habitat Codes: A1.1)

Canopy

Hazel	<i>Corylus avellana</i>	LA
Ash	<i>Fraxinus excelsior</i>	LF
Downy Birch	<i>Betula pubescens</i>	LF
Pedunculate Oak	<i>Quercus robur</i>	LO
Grey Willow	<i>Salix cinerea</i> subsp. <i>oleifolia</i>	LO
Alder	<i>Alnus glutinosa</i>	LO

Understorey

Cherry Laurel	<i>Prunus laurocerasus</i>	LA
Holly	<i>Ilex aquifolium</i>	F
Guelder Rose	<i>Viburnum opulus</i>	R
Butterfly Bush	<i>Buddleia davidii</i>	R
Himalayan Honeysuckle	<i>Leycesteria formosa</i>	R

Ground Flora

Honeysuckle	<i>Lonicera periclymenum</i>	LF
Ivy	<i>Hedera helix</i>	A
Bramble	<i>Rubus fruticosus</i>	F
Broad Buckler-fern	<i>Dryopteris dilatata</i>	O
Dog Violet	<i>Viola riviniana</i>	LO
False Brome	<i>Brachypodium sylvaticum</i>	LO
Hard Fern	<i>Blechnum spicant</i>	LO
Yorkshire Fog	<i>Holcus lanatus</i>	LO
Male Fern	<i>Dryopteris filix-mas</i>	O
Soft Rush	<i>Juncus effusus</i>	LO
Remote Sedge	<i>Carex remota</i>	LO
Rose	<i>Rosa</i> sp.	O
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	R
Yellow Pimpernel	<i>Lysimachia nemorum</i>	O
Wood Avens	<i>Geum urbanum</i>	R
Broad-leaved Willowherb	<i>Epilobium montanum</i>	R
Bluebell	<i>Hyacinthoides non-scripta</i>	LO

Roadside Species

Wilson's Honeysuckle	<i>Lonicera nitida</i>	LA
Guelder Rose	<i>Viburnum opulus</i>	R
Yorkshire Fog	<i>Holcus lanatus</i>	LA
Barren Strawberry	<i>Potentilla sterilis</i>	LO

Tall Oat-grass	<i>Arrhenatherum elatius</i>	O
False Brome	<i>Brachypodium sylvaticum</i>	O
Herb Robert	<i>Geranium robertianum</i>	O
Creeping Soft-grass	<i>Holcus mollis</i>	LF
Wood Sage	<i>Teucrium scorodonia</i>	R
Privet	<i>Ligustrum ovalifolium</i>	LO
Bridewort	<i>Spiraea</i> sp.	R
Willowherb	<i>Epilobium</i> sp.	R
Slender St. John's-wort	<i>Hypericum pulchrum</i>	R
Hart's-tongue Fern	<i>Phyllitis scolopendrium</i>	R
Ash (saplings)	<i>Fraxinus excelsior</i>	O
Bitter Vetch	<i>Lathyrus linifolius</i>	R
Hawthorn	<i>Crataegus monogyna</i>	R
Soft Rush	<i>Juncus effusus</i>	LO
Dog Violet	<i>Viola riviniana</i>	LO
Ivy	<i>Hedera helix</i>	O
Cleavers	<i>Galium aparine</i>	O
Honeysuckle	<i>Lonicera periclymenum</i>	R

APPENDIX C: Photographs of Trees to be Lost



Tree 7 – Oak



Tree 9 – Oak



Tree 10 – Birch



Tree 11 – Oak



Tree 13 – Birch



Tree 18 - Oak



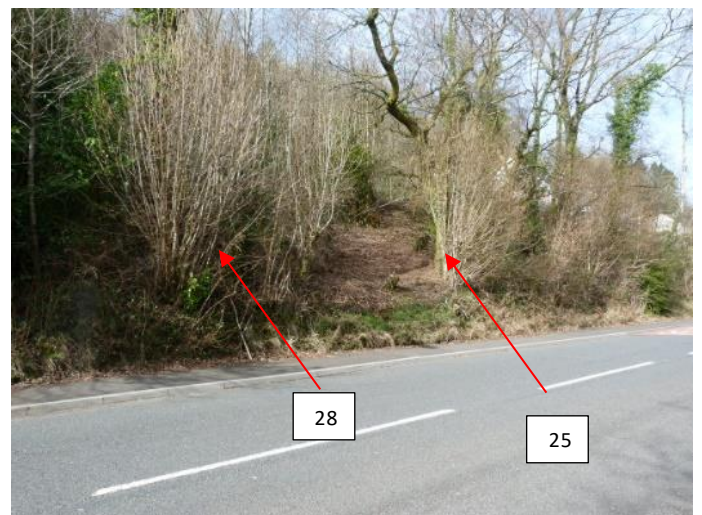
Tree 23 – Hazel



Trees 24 & 25 - Oak & Hazel



Tree 26 – Ash (in poor condition)



Trees 28 and 25 – Hazels

APPENDIX D: Biodiversity Enhancement Ideas

Suggestions for Bird Boxes

House Sparrows

House Sparrows are red listed as a bird of high conservation concern and artificial nest box colonies are well received by sparrows and this sort of design is popular. A house sparrow terrace installed on the side of the house will add to the enhancement of the site.

This selection of bricks were found on the internet at the time of writing the report:

Integrated British Bird houses:



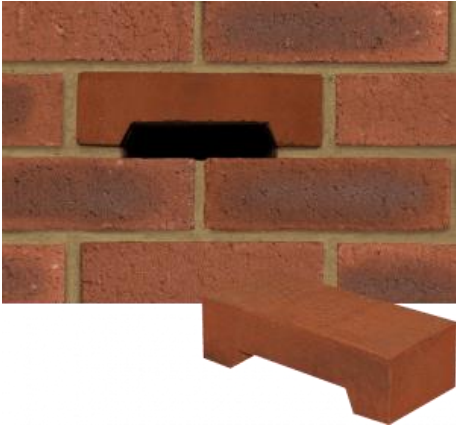
Garden Bird house from Wayfair Ltd:



Or a Woodcrete single or double chamber brick



Suggestions for Bat Boxes:



Ibstock Bat Brick



Bat Tube integrated into design of house



Ibstock Bat Box



Woodcrete bat access block (allowing bats access to cavity walls and other species etc.

APPENDIX E: Disclaimer

Copyright and Intellectual Property

- The copyright of ecology reports provided remain the property of the ecologist pending payment of the account in full.
- We provide species data sets to the local Biodiversity Information Centre on an annual basis which will include any records from your survey (species and general location.)

Accuracy of information

- Our ecologists are experienced and professional in their approach and work to published Professional Codes of Conduct (British Standard 42020:2013 “Biodiversity. Code of practice for planning and development” and CIEEM Guidelines for Ecological Report writing (2016) where appropriate. Ecologists are however working in the natural world which may be subject to rapid changes not under their control. The information they collect will be as accurate as possible based on the time of the year and the natural conditions they face but we, and they, cannot be held responsible for any changes which occur subsequently.
- The company warrants that the reports supplied will be based on information collected using reasonable care and skill. In some cases, data sets may be large, and, in such circumstances, ecologists will make professional judgements on their analysis and presentation of data.
- Most reports are valid for a maximum period of two years provided no significant changes have been made to the property or land use nearby.
- It is possible that further survey work is recommended which would be the subject of additional fees. In this event the company and the ecologists cannot accept any liability if the client proceeds without acting on this advice.
- Ecological reports provide information on the site as a whole and the company and the ecologists cannot be held responsible for the effects that the findings might have on any planning or developments proposed.

Confidentiality

- The reports provided will be for the client’s sole use and for the purposes declared in the initial contact and confirmed in our quotation.
- No other party may use, copy or rely on the report or any of its contents or conclusions without written confirmation from the author.
- The company will maintain a copy of the reports, on behalf of the ecologist, in an electronic format. It will not be provided to any other person without the client’s consent.
- The survey data will be submitted to the South East Wales Biodiversity Record Centre automatically unless otherwise requested

Limitation of Liability

- The company and its ecologist contractors shall not be held responsible for any claim arising out of any defect found in the service provided as a result of information provided which is subsequently found to be defective.

Contacts between the company, its ecologists and the client shall be governed by the laws of England and Wales.