Preliminary Ecological Assessment
The Pavilions
Cambrian Park, Clydach Vale
Tonypandy CF40 2XX

Prepared for:

RHONDDA CYNON TAF

December 2023

lingard·farrow·styles
landscape architects • urban designers / environmental consultants

Lingard Farrow Styles
Landscape Architects, Urban Designers and Environmental Consultants

9 College Hill
Shrewsbury
Shropshire SY1 1LZ
&
The Studio
Farm Lodge
Welshpool
Powys SY21 8HJ

Telephone: 333 456 1132

Email info@lingardstyles.co.uk

www.lingardstyles.co.uk

Surveyed by:	Author:
Denbeigh Vaughan Bat Licence Number: S090780/1 Leander Wolstenholme Accredited Agent under the Bat Survey Licence of Denbeigh Vaughan	Leander Wolstenholme BSc (Hons) PhD Reviewed:

CONTENTS

1. Executive Summary

Details

- Rhondda Cynon Taf County Borough Council have commissioned Lingard Farrow Styles to undertake a preliminary ecological assessment at The Pavilions, Clydach Vale, Tonypandy, Rhondda Cynon Taf.
- The site was surveyed on the 13th and 19th of October 2023.
- Proposed plans are for the demolition of all the buildings on the site to make way for the building of a new school.

Site Survey

- Grid Ref: SS98122 92733. A former colliery site in the Nant Clydach stream valley. Woodland on a rising hill to the south and woodland to the west following the route of the Nant Clydach. A lake associated with the Nant Clydach to the north with urban housing to the north of the lake.
- The site itself is a collection of units built in the 1990s: 3 two-storey units (Pavilions B, D and E), 3 single-storey units (Pavilions A, C and F), a security lodge, a pair of garages & car parking.

Site Assessment

- The major habitats on site are bare ground (tarmac and paving), amenity grassland, introduced shrub and individual trees.
- A small stream flowing from west to east runs along the southern boundary of the site. This stream flows into the Nant Pwllyrhebog and subsequently into a lake 50m to the north and then the Rhondda Fawr River.
- The invasive non-native species Himalayan balsam is growing along the stream. Other invasive non-native species growing on the site are montbretia, cotoneaster and buddleja.
- Two bird nests were found in soffit vent holes (where the vent hole mesh was missing) in the security lodge and birds have the potential to nest in the introduced shrub and trees on the site.

Impact Assessment

- All the buildings on the site will be demolished and the amenity grassland, introduced shrub, individual trees and bare ground cleared. This will result in the loss of habitats of low ecological value i.e. amenity grassland, bare ground, introduced shrubs and trees.
- The stream and bankside vegetation along the southern boundary is potentially at risk from silt run-off and other forms of pollution during site works.
- There is a risk of spreading the invasive non-native species to other sites during the demolition and construction period.

Recommendations

- It is recommended that the invasive non-native planted species on site are eradicated and that a specialist invasive species contractor is employed to do this work.
- It is recommended that the stream and associated bankside vegetation to the north is protected during site works.
- It is recommended that a finger-tip search is conducted at the base of all introduced shrubs on the site to search of reptiles, amphibians and hedgehogs. Any found will be carefully removed to a safe location.
- It is recommended that a reptile/amphibian fence is installed along the stream and scrub/woodland areas to prevent small animals accessing the site during works.
- It is recommended that the stream, woodland and scrub areas are not lit by artificial lighting during works and post-works.
- It is recommended that demolition works on those buildings where nests have been found (or have to potential to support nesting birds) are undertaken outside of the bird nesting season (March through to August inclusive). If it is not possible to schedule the works within this timeframe a bird nesting check should be undertaken by a suitably qualified ecologist in the 24hr period before works commence. If an active nest is found an exclusion zone should be set up around the nest until the young have fledged.
- Suggestions are made of ways to enhance the site for biodiversity after the development is complete.

2. Introduction

2.1 Project Details	
Site Owner:	Rhondda Cynon Taf County Borough Council
Address:	The Pavilions, Cambrian Park, Clydach Vale, Tonypandy, Rhondda Cynon Taf (Grid Reference: SS 98122 92733)
Project:	There are six main buildings on the site (named as Pavilions A -F) and three smaller ancillary buildings: a security lodge and 2 garages (see Figure 1 for the layout of the buildings on the site.). All buildings on the site are due to be demolished and the site redeveloped as a school.
2.2 Survey aims & objectives:	1. Assess the target area for potential impacts on protected and priority species and habitats. 2. Assess the need for additional survey work. 3. Provide recommendations for the works activity, based on the interpretation and conclusions drawn from the site assessment.

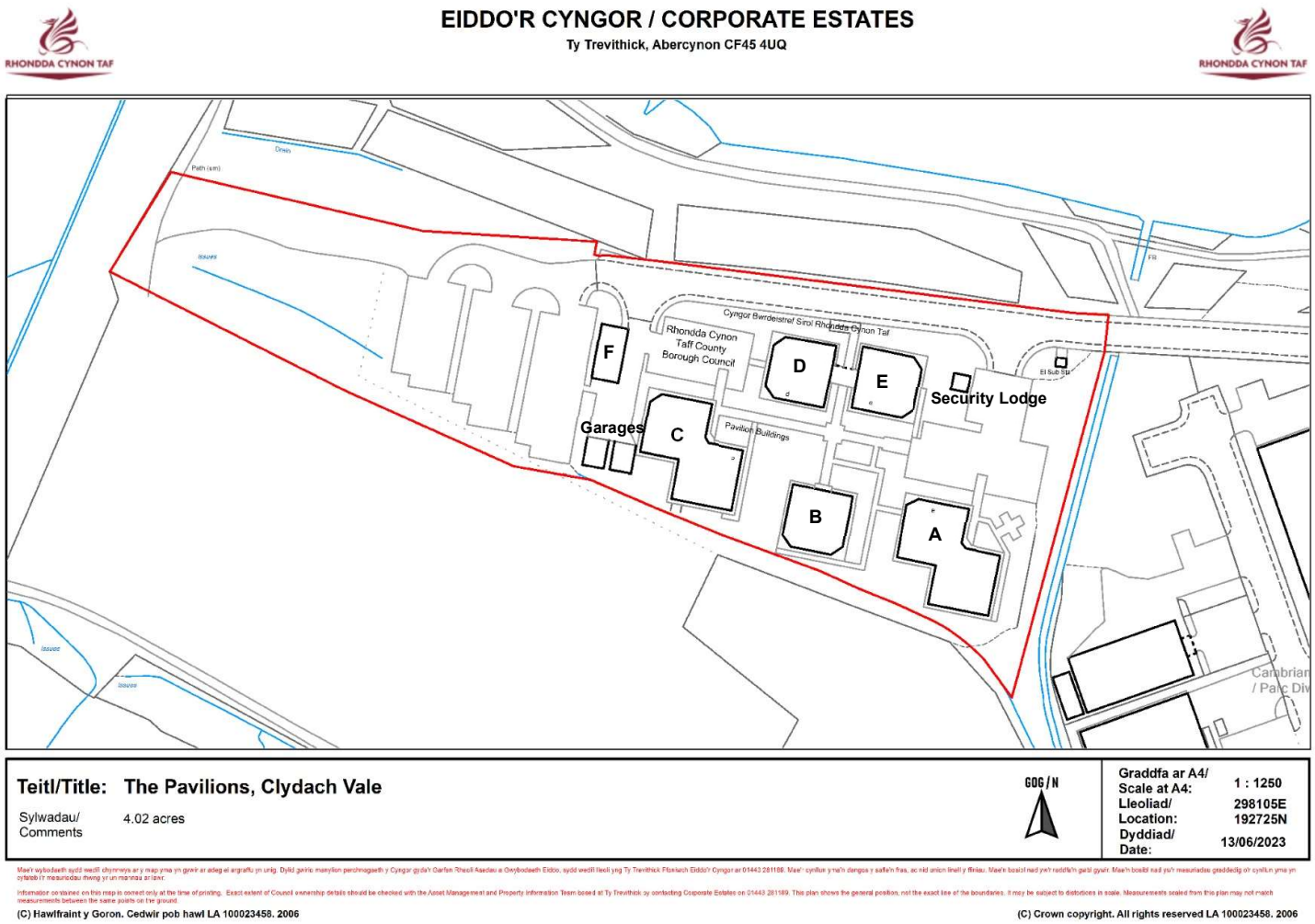

Figure 1: Layout of The Pavilions showing pavilions A - F plus the security lodge and garages

3. Survey methods and equipment

3.1 Desk study	
Previous site surveys:	• A bat PRA survey undertaken of the buildings on site in October 2023 by Lingard, Farrow Styles (see associated bat report).
Local Records Centre data search :	• A 2km SEWBReC biodiversity records centre search was undertaken.
Google Earth imagery / OS maps (figs 2 & 3 below)::	• Located in the Rhondda valley approximately 1km north-west of the town of Tonypandy. A large lake to the north, a steep sided, north-facing woodland to the south. Woodland to the east beyond the Pavilions Car Park and urban housing to the north beyond the lake.
3.2 Site assessment	1. All boundaries and internal areas of the site were walked; their condition relative to the proposed development and the dominant species present were recorded 2. Evidence of or potential for protected species was recorded.
3.3 Survey limitations	• In the context of the site assessment, information from the desk study and the limited impact of the development, there are no significant limitations to the interpretations, conclusions and recommendations of this report. • No further survey work is considered necessary.
Personnel: D. Vaughan BSc (hons) Lead Ecologist for Project	• Director, Landsker Ecology; a professional field ecologist with over 30 years' experience. • Specialist qualifications in bird, bat and dormouse surveys. A full time independent ecological consultant in SW Wales since 2010, with Landsker Ecology and Biodiversity Solutions. • Other contracts: RSPB, Edward Grey Institute (Oxford Univ.), Central Science Laboratory (DEFRA), Wildlife Trust SW Wales, British Trust for Ornithology, JNCC (Joint Nature Conservancy Council).
L. Wolstenholme BSc (hons), PhD Lead Surveyor on Site	• Project Ecologist for Landsker Ecology. • PhD (Botany & plant genetics). • Field ecologist of 25+ years' experience. • Ecological consultant with TEP, Warrington; Head of Botany, World Museum, Liverpool; Curator of Botany, Manchester Museum; freelance ecological services.

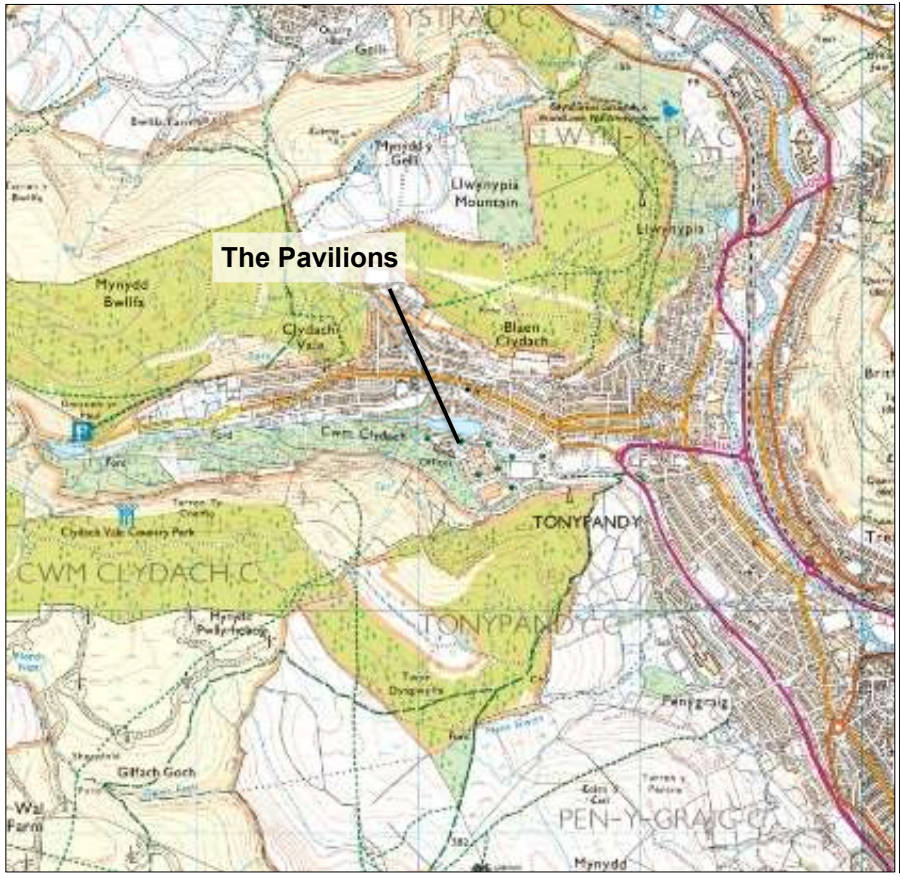

Fig.2. OS map (1:25,000 ©Ordnance Survey).

Fig.3. Local area habitats.

4. Survey Results

4.1 Desk study		
Site location:	Grid ref: SS 98122 92733	Located in the Rhondda valley approximately 1km north-west of the town of Tonypandy.
Altitude:	104m	Positioned on level ground.
Exposure level:	Relatively sheltered	Sheltered to the south by a hill and woodland. Somewhat exposed to the west by an open car park but woodland to the west beyond that providing some shelter. Sheltered to the north and east by planted trees and shrubs.
Connectivity:	Good	Good connectivity to woodland to the south and west. Planted trees and shrubs provide connectivity to a lake to the north and housing (potential roost sites for bats) to the north of the lake.
Surrounding habitats:	• Deciduous woodland immediately to the south and west. • A ditch/stream immediately to the south of the site (marking the southern boundary of the site – and adjacent to the woodland to the south). • A stream (the Nant Clydach – flowing eastwards) and associated lake 200m to the north. • Urban habitat (Clydach Vale) to the north and east. • Cwm Clydach Country Park provided a range of habitats; two lakes, conifer and deciduous woodland, high ground and rough grazing • Large river (The Rhondda Fawr) flowing from north to south 1.3km to the east.	
Relevant Designated Sites	Craig Pont Rhondda SSSI 1.2km northeast designated for its coppiced sessile oak woodland. Potentially provides roosting and foraging habitat for bats – although bats are not a listed feature of this site.	
Protected Species Records within km	**Bats –** see accompanying bat report. **Other Mammals** Brown hare 1.4km south Water vole 1.3km northeast Hedgehog – several records within 2km with one record 140m north **Birds** See Figure 4 **Reptiles and Amphibians** See Figure 5. There is a record of great crested newt from 1995 1.8km south east of the Pavilions. **Plants** Pyramidal orchid 150m east Several records of invasive non-native species including monbretia, Himalayan balsam, Rhododendron, Buddleja.	

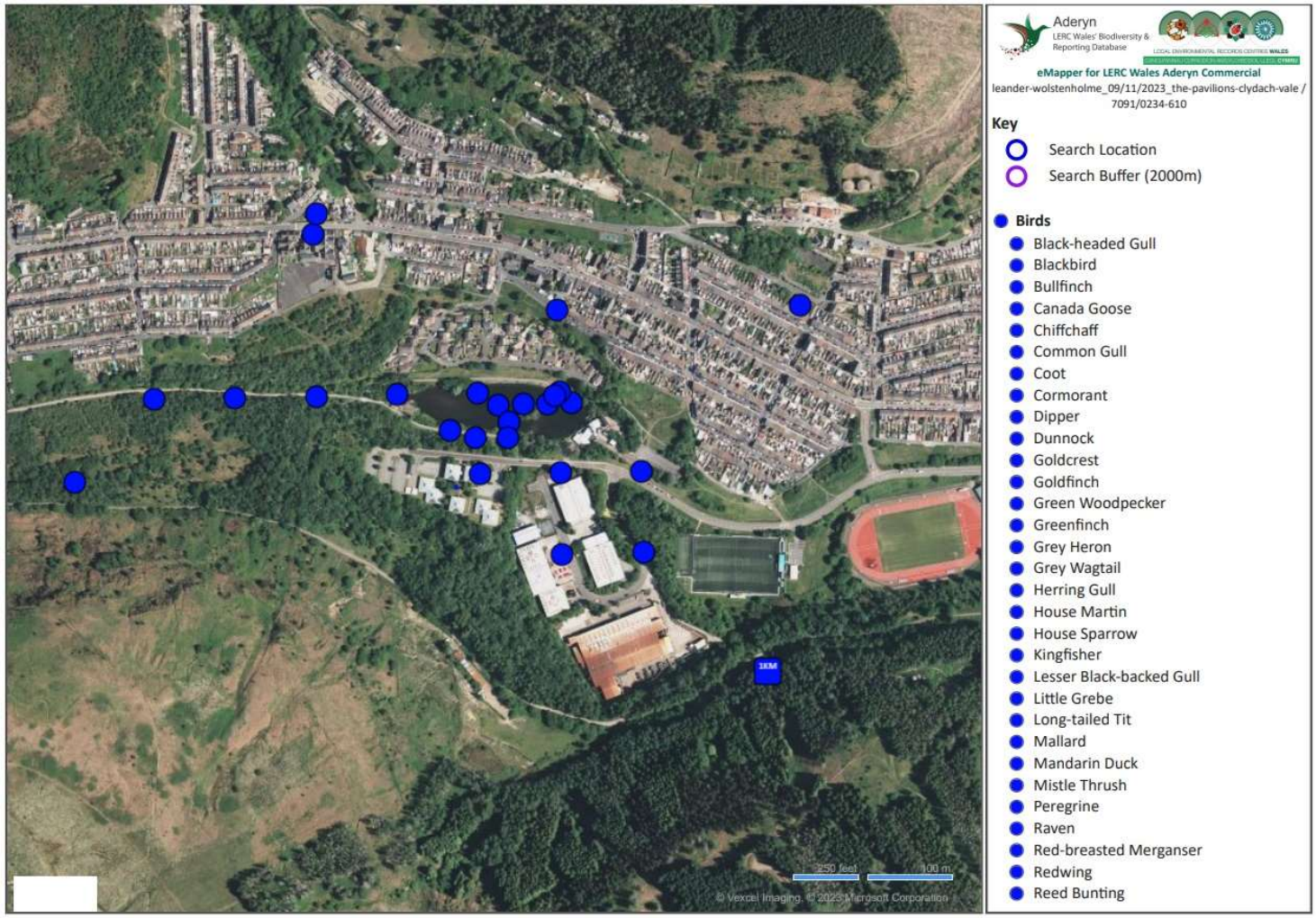

Figure 4: Records of Birds within 500m of The Pavilions

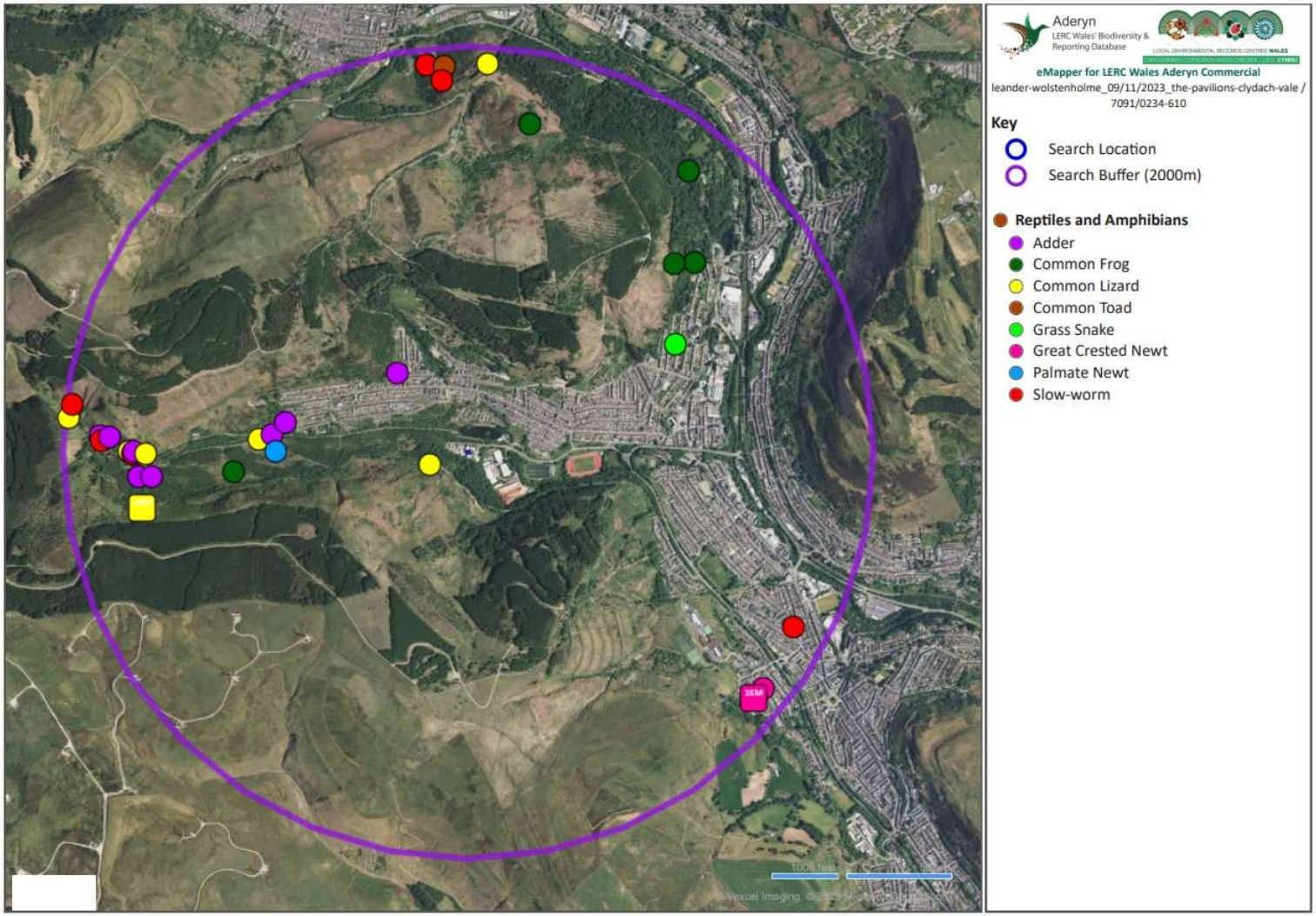

Figure 5: Reptile and Amphibian Records within 2kmm of The Pavilions

4.2 Site Photographs

Figure 6: Pavilion A (east and north elevations) and amenity grassland

Figure 7: Close up view of amenity grassland

Figure 8: Pavilion B showing planted introduced shrub plus small-leaved cotoneaster species (an invasive non-native species.

Figure 9: Pavilion C (north elevation) showing bare ground (tarmac carpark and paving), amenity grassland and introduced shrubs

Figure 10: Pavilion C (north elevation) showing close-up of introduced shrub (Box-leaved Honeysuckle - *Lonicera pileata*).

Figure 11: Car park at western end of the site showing bare ground (tarmac), amenity grassland and individual trees (limes).

Figure 12: Looking eastwards from the north side of the road at the west elevation of Pavilion D showing a belt of introduced shrub.

Figure 13: Looking westwards from the north side of the road at the east elevation of Pavilion E showing a belt of introduced shrub and amenity grassland. Large tree is a goat willow.

Figure 14: Introduced shrub and individual trees at the front (north side) of Pavilion E.

Figure 15: Facing southwest from north side of road (the roofs of Pavilions C and F visible.)

Figure 16: The stream running along the southern boundary of the site

Figure 17: The stream showing a mass of fool's watercress.

Figure 17: Himalayan balsam growing adjacent to the stream

Figure 18: Himalayan balsam – close-up

Figure 19: Monbretia

Figure 20: Area of continuous scrub to the east of the eastern car park

Figure 21: Tree cotoneaster

Figure 22: Area of continuous scrub to the east of the eastern car park.

Figure 23: Small-leaved cotoneaster near the entrance to Pavilion D

Figure 24: Small-leaved cotoneaster near the entrance to Pavilion B

Figure 25: Butterfly bush (Buddleia) at margins of area of continuous scrub to the east of the eastern car park.

Figure 26: Broad-leaved helleborine adjacent to stream.

Figure 27: Broad-leaved helleborine adjacent to electricity box at northern end of site

Figure 28: Phase 1Habitat Map

Key:

- A1.1.1 - Broadleaved woodland - semi-natural
- A2.1 - Scrub - dense/continuous
- G2.1 - Running water - eutrophic
- J1.2 - Amenity grassland
- J1.4 - Introduced shrub
- J3.6 - Buildings
- J4 - Bare ground
- Trees
- Site Boundary

Orchid

Epi Broad-leaved Helleborine

Invasive Non-native Species

Bud Butterfly Bush (Buddleia)
Cot Cotoneaster
Imp Himalayan Balsam
Mon Monbretia

Individual Tree Species

Ali Grey Alder
Ac Field Maple
Bet Birch
Fe Ash
Si Swedish Whitebeam
Sxcap Goat Willow
Sxcin Grey Willow
Til Lime

Phase 1 Habitat Map
The Pavilions
Cambrian Park
Clydach Vale
Tonypandy
CF40 2XX

Survey Dates: 13th & 19th of October 2023
Surveyor: L. J. Wolstenholme

lingard·farrow·styles
landscape architects · urban designers / environmental consultants

5. Site assessment

Habitats / protected species	**Description / notes** see Appendix 1 for species lists by habitat	**Designation Classification**
Amenity Grassland	• Neatly mown amenity grassland occupies large areas of the site and is the second most abundant habitat after bare ground. • The tight sward contains grass species such as common bent, perennial ryegrass, Yorkshire fog and red fescue. • Field woodrush is abundant in places. • A number of broad-leaved species are present including self-heal, daisy, cuckoo flower, and germander speedwell. • Springy turf moss is abundant in places	N/A
Introduced Shrub	• Plantings of ornamental shrubs are a conspicuous component of the site. • Species growing include dogwood, box-leaved honeysuckle, bridewort, cotoneasters and escallonia. • As well as ornamental shrubs, a number of ornamental trees have been planted as part of landscaping works. These trees are all small and show no potential bat roost features. Species present include field maple, grey alder, ash and lime.	N/A
Ditch/stream	• There is a small stream that runs along the southern boundary of the site, flowing from west to east. This stream feeds into a larger stream, the Nantpwllyrhebog, the flows from south to north beyond the eastern boundary of the site. This stream feeds into the Nant Clydach Lake approximately 50m to the north of the site and the Nant Clydach flows from west to east eventually feeding into the Rhondda Fawr River 1.2km to the east. • The southern boundary stream is quite shallow. Species growing within the stream itself include fool's watercress, hemlock water dropwort and Himalayan balsam. Ferns growing on the banks side include broad buckler-fern, scaly male-fern and polypody. • Himalayan balsam is also growing on the banks of the stream alongside other species such as bramble, remote sedge, marsh woundwort, water figwort. Several plant of the orchid *Epipactis helleborine* are scattered along the stream bank.	Section7 listed priority habitat in Environment (Wales) Act 2016
Continuous Scrub	• An area of continuous scrub has been mapped at the eastern end of the site, east of the eastern car parking area. • Woody species growing in this area include grey alder, grey willow, dogwood, elder and hawthorn. • Herbaceous species present in this area include soft rush, great willowherb, water figwort, tutsan, tufted hairgrass and opposite-leaved golden-saxifrage.	N/A

Broad-leaved Woodland	• A large area of woodland is situated to the south of the stream and mostly outside of the site boundary. Woody species in this woodland are grey and goat willow and hazel,	Section7 listed priority habitat in Environment (Wales) Act 2016
Bare Ground	• Bare ground forms the most extensive habitat on the site. This is mostly in the form or tarmac roads and car parking but there are some paved areas and some areas of gravel. • Species growing in the cracks of the paved areas include self-heal, smooth sow-thistle, procumbent pearlwort, and lesser trefoil.	N/A
Badgers	• No evidence of regular badger presence was observed on or near the site during the site visit (for instance, setts, latrines, foraging marks, main trails, hairs). • There are records of badgers within 2km of the site.	Protected Species, Wildlife & Countryside Act 1981 (as amended)
Bats	• Bats are dealt with in detail in the accompanying bat report. • None of the small trees within the site boundary showed any potential bat roost features.	Conservation of Habitats and Species Regulations 2017
Otter	• Otters have been absent from the rivers in Rhondda Cynon Taf in recent history but are now making a comeback. The data search did not reveal any records of otter within 2km of the site and no signs of the presence of otters were noted during the current survey.	Conservation of Habitats and Species Regulations 2017
Dormouse	• While there are no records of dormouse within 5km of the site, the woodland habitat to the south is suitable for this under recorded and under surveyed protected species.	Conservation of Habitats and Species Regulations 2017
Breeding birds	• A number of bird species were noted during the survey including chaffinch, blue tit, great tit, robin • Of these, chaffinch is amber listed in Birds of Conservation Concern Wales 4, • Other red and amber bird species that have been recorded within 1km of the site that could potentially use the site on a regular basis include Bullfinch, Crossbill, Dunnock, House Sparrow, Redwing, Song Thrush, Starling, and Wood Warbler.	All species of nesting birds and their nest sites. Wildlife & Countryside Act (1981) BoCC Wales 4 species lists
Invasive species:	• Several invasive non-native species were noted across the site. These were: monbretia, Himalayan balsam, cotoneaster species, including a tree cotoneaster. • Butterfly bush (Buddleia) was also noted growing on the site. This invasive species is not listed under Schedule 9 of the Wildlife and Countryside Act. • The locations of all these species are shown on the phase 1 habitat (see Figure 28)	Wildlife and Countryside Act (1981) Schedule 9.
Other species	• Hedgehogs have been recorded in the local area and will potentially use the habitat on site, particularly the scrub area to the east. They could also feed on the amentity grassland and find refuge in the areas of ornamental shrub.	Wildlife & Countryside Act (1981)

	• Several species of reptiles have been recorded in the local area, with the closest record being common lizard 200m to the south. The site offers limited habitat for reptiles having no south facing banks where reptiles could bask and the very tidy nature of the site offers very little in terms of piles brash, rubble or logs that reptiles could use as refugia. • Several species of amphibians have been recorded within 2km of the site. The site is damp, and some areas of the site do have the potential to be used by amphibians e.g. the eastern area of scrub and habitat associated with the stream that runs along the southern margin of the site. However, for the most part, the neat and tidy nature of the site offers little habitat for terrestrial phase amphibians. • There is a record of great crested newt 1.8km to the south-east. This record is distant enough for a survey not to be required on the site also there is a lack of suitable breeding ponds in the surrounding area, the lake to the north having fish present. Therefore, a great crested newt survey is not warranted.	

6.Impact assessment

Habitats/species	**Impact**	**Level of impact on habitat**	**Nature of impact on habitat+ve/-ve**	Impact on Biodiversity
Amenity Grassland	It is likely that all areas of amenity grassland will be lost to the development during construction works and beyond. This will have a major impact on this habitat this habitat is of low ecological value.	Major	Negative	Negligible
Introduced Shrub	It is likely that all areas of introduced will be lost to the development during construction works and beyond. The species of shrub planted are of low ecological value but do provide habitat for birds and small animals (see section on birds, hedgehogs and reptiles/amphibians	Major	Negative	Negligible (But see sections on birds, hedgehog and reptile/amphibians
Ditch/stream	The stream is a high-quality ecological feature on the site. It is important that this feature is retained and protected from contamination during site works	Negligible	Neutral	Negligible (if retained and protected)
Continuous Scrub	The scrub will provide nesting and foraging habitat for birds, foraging and commuting habitat for bats, foraging and refugia habitat for amphibians and hedgehogs. The area of scrub will remain intact and the impact of the development on the scrub will be negligible	Negligible	Neutral	Negligible

Bare Ground	It is likely that all areas of introduced will be lost to the development during construction works and beyond	Major	Negative	Negligible
Broad-leaved Woodland	The broad-leaved woodland to the south of the development area will remain intact and there is no predicted negative impact on this habitat as a result of the development.	Negligible	Neutral	Negligible
Badgers	The SEWBReC local record centre data search returned no records of badgers, and no signs of badger activity or setts were noted during the survey. Therefore, there is no predicted negative impact on badgers predicted as a result of the proposed development	Negligible	Neutral	Negligible
Bats	See accompanying bat report			
Otter	Given the lack of records of otters in the local area and the still, thin distribution of otters within Rhondda Cynon Taf it is considered highly unlikely that otters will be negatively impacted by the proposed works. However, it should be noted that if present in the local area, otters will use all watercourses and areas of water including the very small stream that runs along the southern boundary of the site.	Negligible	Neutral	Negligible
Dormouse	Given the lack of dormouse records in the local area it is considered highly likely that dormice will be present on or near the site.	Negligible	Neutral	Negligible
Breeding birds	Bird nests have been noted in the security lodge and are likely to nest in any trees and shrubs on the site.	Minor (temporary) if undertaken outside of the breeding bird season)	-ve	-ve
Invasive species:	The eradication of invasive non-native species from the site will result in positive impact on biodiversity in the local area	Moderate	+ve	+ve
Other species	Reptiles, amphibians and hedgehogs have been recorded within 2km of the site. The site itself offers limited opportunity to support these species as it is generally very tidy without the brash/stone/ log piles that these species could use as refugia or hibernacula. However, the surrounding areas of woodland	Minor (temporary)	-ve	Minor -ve

	and scrub do offer habitat for these species and animals could commute into the site for foraging and there is therefore potentially a negative impact on these species during site works.			

7.Recommendations

	Method	Rationale
1. Invasive Species	• It needs to be ensured that there is no risk of spreading the invasive non-native plant species on site to areas adjacent to the site or other sites. • It is recommended that a specialist invasive species contractor is employed to eradicate these species from the site.	To prevent the spread of invasive non-native species. Himalayan balsam, monbretia and some cotoneaster species 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. Therefore, it is not an offence to have these species growing on a site. However, there is a risk, that during the demolition and site clearance works, due to the action of machinery and the movement of machinery from one site to another, these species could be spread from its current location to new sites. This introduction of the species to a new site would constitute an offence. Butterfly bush (Buddleia) is not listed under schedule 9 but is considered as an invasive non-native species by many local authorities and it would be good practice to eliminate this species from the site ahead of works.
2. Protect and retain the stream corridor	• The stream running along the southern boundary of the site should be protected and during site works should be protected from silt run-off and other forms of pollution. • Likewise, the stream running along the eastern boundary of the site should also be protected from silt run-off and other forms of pollution during site works. • The banks of the stream at that runs along the southern margin of the site should also be protected from damage .	• To protect the streams as they are important ecological feature of the site. • To protect bankside vegetation (that include broad-leaved helleborine orchids).
3. Timing of demolition, shrub	• Demolition and Shrub/tree clearance works, should, wherever possible, be undertaken outside the bird breeding season (March to August inclusive).	• To protect breeding birds.

and tree clearance works	• If demolition and 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 exclusion zone, until the nesting is complete, and the young have fledged.	• All species of bird are protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to intentionally: • Kill, injure or take any wild bird • Take, damage, or destroy the nest of any wild bird while the nest is in use or being built. • Take or destroy an egg of any wild bird.
5.Potential presence of reptiles, amphibians and hedgehogs	• The areas most likely to support amphibians, reptiles and hedgehogs are the stream corridor along the southern boundary of the site and the woodland to the south and the area of scrub to the east of the car park. • In order to prevent reptiles, amphibians and hedgehogs moving from these areas onto the site during construction works it is recommended that reptile/amphibian fencing is installed (see Figure 29 for suggested layout of fencing). • Within the site itself the most likely areas where reptiles/amphibians/hedgehogs could be found is underneath the bushes of introduced shrub. It is recommended that these areas (and any other areas that have the potential to support reptiles/amphibians e.g. piles of brash, stones etc.) are subject to a finger-tip search by a suitably qualified ecologist prior to the onset of works. Any reptiles/amphibians/hedgehogs found should be carefully removed to the woodland to the south – beyond the reptile fencing.	• To protect reptiles and amphibians
5. Lighting	• No direct or incidental lighting of the woodland areas to the south and east of the site (including the stream) with artificial light along boundaries of site; the use of low-level access route downlighters on motion sensitive triggers is recommended. •	• To allow undisturbed feeding and commuting habitat for nocturnal species such as bats. • To reduce general site light pollution.

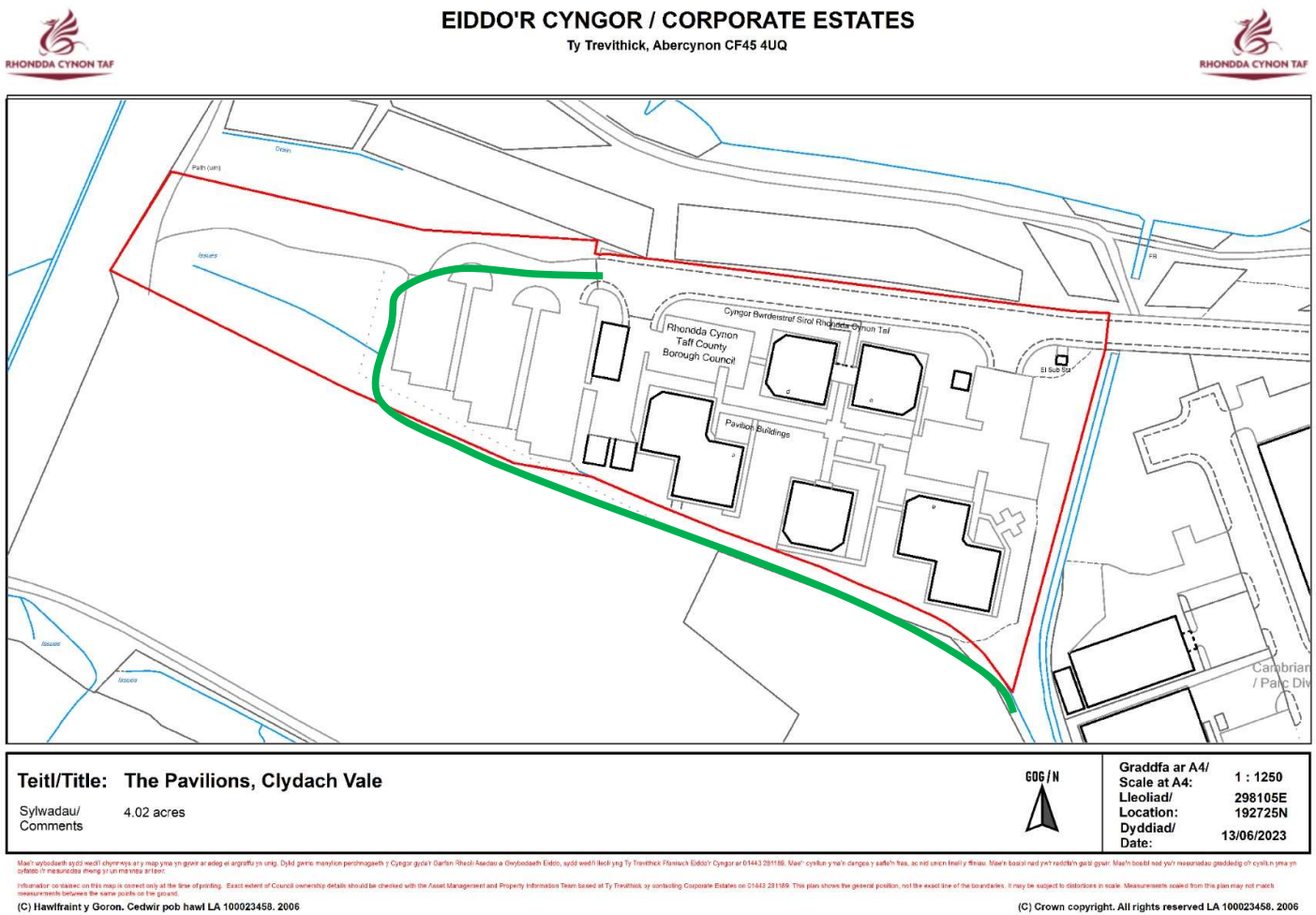

Figure 29: Green line shows suggested position for installing reptile/amphibian fencing in order to prevent animals accessing the site during demolition and building works

7b. Enhancement Features

All planning developments in Wales should result in a net gain for biodiversity. There is much scope on this site, with the development of the new school for the creation of features that would benefit biodiversity and it is recommended that as many as possible are incorporated into the new design for the site. The following are recommended:

- Integrated bird boxes into the new building(s) for a range of species (in particular including swift boxes)
- Integrated bat boxes into the new building(s) to provide roosting opportunities for bats.
- New plantings of trees and shrubs etc. to rely heavily on native locally sourced species with particular emphasis on species that provide fruits and berries for birds to feed on over the winter months.
- Areas of grassland to be sown with a species-rich mix of native, locally sourced wildflower species and some areas of the site to be given over establishing a wildflower meadow area that will be allowed to grow long over the summer before mowing. or planting a native woodland area or the landscaping scheme for the site should aim to creating wildlife corridors/linear features to improve connectivity (e.g. corridor of trees and shrubs) that will provide connections from the woodland in the south to the lake in the north.
- A buffer zone should be created along the watercourse.
- If possible, within the context of the school development and health and safety concerns, the creation of a pond would provide an excellent biodiversity feature.
- The creation of refugia for reptiles, amphibians and hedgehogs. These could be log and brash piles etc. Hedgehog houses could also be provided.
- The eradication of the invasive non-native species on the site would quality as a biodiversity enhancement.

Appendix 1 – The Pavilions, Clydach Vale - Species Lists per Habitat
The DAFOR scale is used to show the relative abundance of each species within each particular habitat such that: D = Dominant, A =Abundant, F = Frequent, O = Occasional, R= Rare. The qualifier "L" is sometimes used to mean locally so that e.g. LA means locally abundant. Abundance is relative to within each habitat area.

Amenity Grassland (Phase 1 Habitat Code J1.2)
Common Bent (*Agrostis capillaris*) A
Perennial Ryegrass (*Lolium perenne*) F
Yorkshire Fog (*Holcus lanatus*) F
Creeping Bent (*Agrostis stolonifera*) LF
Cuckoo Flower (*Cardamine pratensis*) O
Springy Turf-moss (*Rhytidiadelphus squarrosus*) LA
Thyme-leaved Speedwell (*Veronica serpyllifolia*) O
Wall Speedwell (*Veronica arvensis*) O
Meadow Buttercup (*Ranunculus acris*) O
Daisy (*Bellis perennis*) O
Creeping buttercup (*Ranunculus repens*) O
Self-heal (*Prunella vulgaris*) O
Common mouse-ear (*Cerastium fontanum*) O
Dog Violet (*Viola riviniana*) O
Field Wood-rush (*Luzula campestris*) LA
Lesser Trefoil (*Trifolium dubium*) O
Germander speedwell (*Veronica chamaedrys*) O

Plants in paving cracks and bare areas
Creeping Bent (*Agrostis stolonifera*) O
Short-fruited Willowherb (*Epilobium obscurum*) O
Self-heal (*Prunella vulgaris*) O
Smooth Sow-thistle (*Sonchus oleraceus*) O
Red Fescue (*Festuca rubra*) O
Daisy (*Bellis perennis*) O
Procumbent Pearlwort (*Sagina procumbens*) O
Greater Plantain (*Plantago major*) O
Lesser Trefoil (*Trifolium dubium*) O

Continuous Scrub (Phase 1 Habitat Code A2.1)

Canopy
Grey Alder (*Alnus incana*) F
Grey Willow (*Salix cinerea* subsp. *oleifolia*) F
Elder (*Sambucus nigra*) O
Hawthorn (*Crataegus monogyna*)
Red Osier-dogwood (*Cornus sericea*) O

Ground Flora
Greater Willowherb (*Epilobium hirsutum*) O
Soft Rush (*Juncus effusus*) O
Lady Fern (*Athyrium filix-femina*) O
Creeping Buttercup (*Ranunculus repens*) O
Tufted Hairgrass (*Deschampsia cespitosa*) O
Broad Buckler-fern (*Dryopteris dilatata*) O
Broad-leaved Dock (*Rumex obtusifolius*) O
Wild Angelica (*Angelica sylvestris*) O

Bramble (*Rubus fruticosus*) LA
Meadow Buttercup (*Ranunculus acris*) O
Pendulous Sedge (*Carex pendula*) O
Field Horsetail (*Equisetum arvense*)
Short-fruited Willowherb (*Epilobium obscurum*) O
Wood Dock (*Rumex sanguineus*) O
Marsh Bedstraw (*Galium palustre*) O
Tutsan (*Hypericum androsaemum*) O
Marsh Thistle (*Cirsium palustre*)O
Water Figwort (*Scrophularia auriculata*) O
Common Ragwort (*Senecio jacobaea*) O
Remote Sedge (*Carex remota*) O
Self-heal (*Prunella vulgaris*) R
Perforate St John's-wort (*Hypericum perforatum*) R

Stream (Phase 1 Habitat Code: G2)

Within Water
Himalayan Balsam (*Impatiens glandulifera*) O
Fool's Watercress (*Apium nodiflorum*) LF
Hemlock Water-dropwort (*Oenanthe crocata*) O

Bankside Vegetation
Himalayan Balsam (*Impatiens glandulifera*) O
Lady Fern (*Athyrium filix-femina*) O
Bramble (*Rubus fruticosus*) LA
Red Osier-dogwood (*Cornus sericea*) O
Grey Willow (*Salix cinerea* subsp. *oleifolia*) O
Ash (sapling) (*Fraxinus excelsior*) R
Broad Buckler-fern (*Dryopteris dilatata*) O
Guelder Rose (*Viburnum opulus*) R
Rowan (*Sorbus aucuparia*) R
Dog Rose (*Rosa canina*) O
Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*) LF
Soft Rush (*Juncus effusus*) LF
Box-leaved Honeysuckle (*Lonicera pileata*) R
Common Nettle (*Urtica dioica*) O
Remote Sedge (*Carex remota*) O
Red Fescue (*Festuca rubra*) O
Broad-leaved Helleborine (*Epipactis helleborine*) O
Water Figwort (*Scrophularia auriculata*) O
Marsh Woundwort (*Stachys palustris*) O
Polypody (*Polypody* sp.) R
Scaly Male-fern (*Dryopteris affinis*) R
Hart's Tongue-fern (*Phyllitis scolopendrium*) R

Broad-leaved Woodland (Phase 1 Habitat Code: A1.1.1)

Canopy
Grey Willow (*Salix cinerea* subsp. *oleifolia*) F
Goat Willow (*Salix caprea*) F
Hazel (*Corylus avellana*) F
Red Osier-dogwood (*Cornus sericea*) O

Ground Flora

Bramble (*Rubus fruticosus*) F-A
Ivy (*Hedera helix*) F
Himalayan Balsam (*Impatiens glandulifera*) O
Colt's-foot (*Tussilago farfara*) O
Scaly Male-fern (*Dryopteris affinis*) O

Broad-leaved Plantation Woodland (east of site) (Phase 1 Habitat Code: A1.1.2)
Grey Willow (*Salix cinerea* subsp. *oleifolia*) F
Red Osier-dogwood (*Cornus sericea*) O
Sessile Oak (*Quercus petraea*) O
Hawthorn (*Crataegus monogyna*) O
Rowan (*Sorbus aucuparia*) O
White Poplar (*Populus alba*) O
Swedish Whitebeam (*Sorbus intermedia*) O
Grey Alder (*Alnus incana*) O
Ash (*Fraxinus excelsior*) O

Introduced Shrub (Phase 1 Habitat Code: J1.4)
Box-leaved Honeysuckle (*Lonicera pileata*) LA
Bridewort (*Spiraea sp.*) O
Evergreen Spindle (*Euonymus japonicus*) O
Hypericum
Berberis
Holly (*Ilex aquifolium*) O
Firethorn (*Pyracantha coccinea*) O
Small-leaved Cotoneasters (*Cotoneaster sp.*) LF
Rose (*Rosa sp.*) O
Hazel (*Corylus avellana*) O
Cherry Laural "Otto Luyken" (*Prunus laurocerasus*)
Escallonia (*Escallonia rubra*) O

Appendix 2. Planning Policy

A range of planning policies are in place which ensure that developers and public bodies consider the potential impacts of any development upon wildlife and are designed to ensure that there is no net loss in biodiversity as a result of the implementation of such proposals. Key points of such policies are outlined below.

Planning Policy Wales 10

- Chapter 3 - Strategic & Spatial Choices; Sustainable Management of Natural Resources, paragraph 3.32: "…halting and reversing the loss of biodiversity;"
- Chapter 6 - Distinctive & Natural Places; Biodiversity & Ecological Networks, section 6.4, paragraph 3: " The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement…"

Technical Advisory Note (TAN) 5: Nature Conservation and Planning (2009) provides supplementary advice about how the planning system should contribute to protecting *and enhancing biodiversity* and geological conservation. Local planning authorities must take into account the principles detailed within the document when assessing development applications. The document is designed to ensure the protection of both species and habitats of conservation importance and outlines the Welsh Government's objectives for the conservation *and improvement* of the natural heritage, as follows:

- Promote the conservation of landscape and biodiversity, in particular the conservation of native wildlife and habitats.
- Ensure that action in Wales contributes to meeting international responsibilities and obligations for the natural environment.
- Ensure that statutorily designated sites are properly protected and managed.
- Safeguard protected species; and to
- Promote the functions and benefits of soils, and in particular their function as a Carbon store.

Natural Environment and Rural Communities (NERC) Act (2006). In addition to the above, public authorities have a duty to conserve biodiversity under the Natural Environment and Rural Communities (NERC) Act, which came into force in 2006. This states that "any public body or statutory undertaker in England and Wales must have regard to the purpose of conservation of biological diversity in the exercise of their functions….and that decisions of public bodies work with the grain of nature and not against it" (Part 3, Paragraph 60). The Act also includes a range of measures to *strengthen the protection of wildlife* and habitats.

New Biodiversity duty (Section 6 Duty) - Environment Wales Act, 2016 which enshrines the UN convention on Biological Diversity: 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.

Rhondda Cynon Taf Borough Council Local Development Plan Biodiversity Duty

Local authorities also have a duty under regulation 9 (parts 1 and 5) of the **Habitat Regulations** to have regard for the requirements of the Habitat Directive which includes the requirement to maintain the populations of European Protected Species (including all bats) in a "favourable conservation status".

UK and Local Biodiversity Action Plans

The UK Biodiversity Action Plan (UK BAP) was the UK Government's response to the Convention on Biological Diversity (CBD), signed up to in 1992. UK BAP describes the biological resources of the UK and provides detailed plans for conservation of these resources; action plans for the most threatened species and habitats are set out to aid recovery and show how the UK BAP is contributing to the UK's progress towards the significant reduction of biodiversity loss called for by the CBD.

Local BAPs are produced by local authorities with biodiversity aims and objectives specific to those areas; they are guided by the UK BAP and supported through the Wales Biodiversity Partnership.

Appendix 4 - Additional information sources

Preliminary Bat Roost Assessment Report for The Pavilions, Clydach Vale, Tonypandy, Lingard Farrow Styles, November 2023

b.) Reference material

https://www.legislation.gov.uk/ukpga/1981/69/contents (Wildlife & Countryside Act 1981)

http://jncc.defra.gov.uk/page-4341 (schedules)

https://www.bto.org/sites/default/files/shared_documents/publications/birds-conservation-concern/birds-of-conservation-concern-4-leaflet.pdf