

HAWKESWOOD ECOLOGY

Specialists in Ecological Survey and Assessment

17 Heol Henrhyd, Coelbren, Nr. Ystradgynlais, POWYS. SA10 9PG. Tel/Fax: 01639 701304
Mobile: 07957 154794 E-mail: hawkeswoodecology@btinternet.com
VAT Reg No 926 9271 93
(Proprietors: Niki and Eric Hawkeswood)



PRELIMINARY ECOLOGICAL APPRAISAL

PARC Y DDERWYN PHASE 6,

PONTARDAWE

ON BEHALF OF

MORGANSTONE LTD

April 2018

Ref: HE/99/2017

Copyright and Non-Disclosure Notice

The contents and layout of this report are subject to copyright owned by Hawkeswood Ecology (© Hawkeswood Ecology 2018) save to the extent that copyright has been legally assigned by us to another. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report.

The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of Hawkeswood Ecology. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Any third party who obtains access to this report by any means will, in any event, be subject to the Third Party Disclaimer set out below.

Third Party Disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Hawkeswood Ecology at the instruction of, and for use by, our client(s) named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. Hawkeswood Ecology excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

We confirm that in preparing this Report we have exercised reasonable skill and care, taking into account the project objectives, the agreed scope of the work, prevailing site conditions and the degree of manpower and resources allocated to the project.

All habitat and protected species surveys present a ‘snapshot’ of conditions existing and species present, or considered having potential to be present, at the time of survey. Many species are mobile and distributions can vary across time. Results and findings presented in this report should be considered with these factors in mind.

Protected species surveys are recognised as having a ‘shelf life’ of two years maximum. Surveys older than this are unlikely to be accepted by a Local Planning Authority or Natural Resources Wales as viable documentation.

CONTENTS

Summary

1. Introduction
2. Surveyor Experience
3. Methodology and Constraints
4. Desktop study Findings
5. Field Survey Findings
6. Discussion and Impact Assessment
7. Relevant Legislation and Policies
8. Recommendations
9. Conclusions
10. Bibliography

FIGURES

Figure 1 Phase 1 Habitat Survey

Figure 2 Typical Integral Bat Boxes

APPENDICES

- Appendix 1 DAFOR scale of cover abundance
- Appendix 2 Target Notes
- Appendix 3 Species list
- Appendix 4 Photographs

SUMMARY

Hawkeswood Ecology carried out a Preliminary Ecological Appraisal on land at the former Cwmtawe School Site in Pontardawe that will be Phase 6 in the development project at the site. The Site was previously largely occupied by the Site offices and storage compounds for the development of the rest of the site. Apart from this area, there is a bank on the south of the Site which is unmanaged. It is being colonised by ruderal vegetation and may have been seeded.

The compound is largely hard standing and disturbed ground with little vegetation. The bank is dominated by bare ground but a number of plant species were recorded across it. This area is outside the development boundary but may be affected by it.

There are some mature trees on the eastern boundary and these carry some importance as there is a bat derogation licence in force from the original school demolition. The trees lie on the line of a hedgerow that is being beaten up to provide a commuting route from the housing to a bat house constructed at the north of the wider site.

The development Site has little or no biodiversity value; its main importance relates to the trees on the eastern boundary. These should be maintained to continue as part of the bat commuting route, or replaced by a new hedgerow along the boundary if they are to be removed.

There are no apparent significant ecological reasons that will prevent the proposed development of the Site going ahead.

1 INTRODUCTION

- 1.1 Hawkeswood Ecology was instructed to carry out a Preliminary Ecological Appraisal on land at Parc Y Dderwen, Pontardawe, approximate central Grid Reference SN 72351 04659, on behalf of Morganstone Ltd. The Site forms Phase 6 of a development of a former school site. It is proposed to develop it for residential purposes.
- 1.2 The Site is dominated by hard standing and bare ground with some ruderal vegetation in gutters. A bank on the south of the Site has some ruderal vegetation and may have been seeded in a previous Phase of the works.
- 1.3 The objectives of the survey are:
 - To ascertain the habitats and species present within the Site;
 - To assess the ecological and nature conservation value of the Site;
 - To assess the potential ecological impacts of the proposed works and the likely impacts of the works already undertaken;
 - To provide recommendations to mitigate the proposed works.
- 1.4 The Preliminary Ecological Assessment was carried out on 19th April 2018.

2 SURVEYOR EXPERIENCE

- 2.1 The surveyor and report author is Eric Hawkeswood. Eric has many years experience of broad habitat and detailed botanical and species surveying. He has been a professional in the nature conservation field for twenty nine years formerly working as Reserves Manager and Conservation Officer at Gwent Wildlife Trust and Woodland Manager for the Ruperra Conservation Trust. Eric has worked as an Ecological Consultant as joint proprietor of Hawkeswood Ecology since 2001.

3 METHODOLOGY AND CONSTRAINTS

Desktop Study

- 3.1 The wider former Cwmtawe school site has been surveyed in detail in recent years, previous surveys were assessed for relevant desk top and species data.

Field Survey

- 3.2 The Preliminary Ecological Assessment (PEA) consisted of a walk-over survey of the proposed Site taking into account features within and adjacent to it. Habitats were categorised according to the Phase 1 Habitat Survey guidelines (JNCC, 2010) and annotated onto a map (Figure 1). Plant assemblages were described using the DAFOR scale of cover abundance (Appendix 1) and each habitat was recorded using Target notes (Appendix 2); a species list of plants identified during survey is given in Appendix 3 and photographs are given in Appendix 4.

Constraints

- 3.3 The former compound area was still boarded and closed to access. However, clear views of it could be gained from the eastern and western ends allowing its condition to be satisfactorily assessed.

4 DESKTOP STUDY FINDINGS

- 4.1 Of most relevance to the Site is the eastern boundary which forms a commuting route for bats and is indicated in a licence granted as part of the school demolition. The route leads to a bat house at the north of the Phase 5 site on the edge of adjacent woodland.
- 4.2 Reptiles were recorded and translocated from the Phase 5 site, which sits adjacent to the current survey area, in 2015. Slow worm and common lizard were moved from the site.

5 FIELD SURVEY FINDINGS

- 5.1 The Site consists largely of the former phase 5 works compound and is composed of hard standing and disturbed ground. Photographs are given in Appendix 4.
- 5.2 The compound (Target Note 1) is dominated by bare ground, tarmac hard standing and disturbed, upon which site offices and facilities and storage were placed during the construction of Parc Y Dderwen Phase 5. There are limited amounts of ruderal vegetation in gutters where some soil has accumulated including hairy bittercress, dandelion and ragwort.
- 5.3 There is a steep bank on the south eastern boundary that is regenerating with ruderal vegetation and may have been seeded (Target Note 2). Again there are large areas of bare ground. Species present include cock's-foot, lesser celandine, hogweed, broad-leaved willowherb, field horsetail, ribwort plantain, white clover, hoary mustard and Yorkshire fog. All species are occurring sparsely across the bank but some are locally common.
- 5.4 There are a small number of trees and shrubs along the eastern boundary (Target Note 3). These consist of a mature sycamore and common oak with some multi stemmed sycamore, hawthorn and hazel which relate most probably to the former school boundary.
- 5.5 The mature oak lies just off the current Site and is retained from Phase 5. The mature sycamore is multi-stemmed from approximately 2 metres and appears in good condition. There is medium to dense ivy on one trunk however and this may hide cavities or crevices. The multi-stemmed sycamore and hawthorn and hazel show no potential to support protected species and are likely to be too open for most species of breeding bird.

Fauna

- 5.6 No fauna species were noted on Site during the survey although robin blackcap, willow warbler, nuthatch, wren and chaffinch were heard singing from adjacent areas. The Site offers no suitable habitat for other protected species although there is a limited opportunity for reptiles to re-occupy

the steep bank as the vegetation develops further. However, currently the habitat is still at a very early stage and there is limited variety in the mosaic present which will reduce its value for reptiles were they to be present.

Surrounding Area

- 5.7 The Site is adjacent to recent development on the former school site on three sides with a road and scrub woodland to the east.

6. DISCUSSION AND IMPACT ASSESSMENT

- 6.1 The Site has been heavily modified in the development of the former school Site. The main platform is the former Site compound of a recent phase of the development and the bank at the south of the Site is of recent origin with poor vegetation cover. The trees and shrubs along the eastern boundary are the most important feature of the Site as they relate to previous compensation works for bats.
- 6.2 There are no species of note and the Site is largely dominated by bare ground. The two mature trees hold limited potential for supporting breeding birds. The common oak on the bank is a retained tree which was surveyed in 2015 and formed part of a group of oak which were considered to be of low potential for supporting roosting bats. The tree is now isolated and shows no features that would be significant for bats. The sycamore appears to be in good condition but one of the main trunks does have a medium to dense ivy cover. The trees should be retained.
- 6.3 The multi stem sycamore and hazel and hawthorn shrubs are of little value for protected species, but do form part of a corridor along the eastern boundary of the Site for commuting bats.
- 6.4 Due to the relatively small scale so the Site and the absence of significant potential for protected species or established vegetation locally it is considered that its loss would be of **no significance** in a local or regional context. However, the trees and eastern boundary shrubs will need to be retained.
- 6.5 With a scheme to beat up the hedgerow, in conjunction with works to the hedgerow immediately above (as part of the Phase 5 works), it is considered that the ongoing and proposed development will be a **neutral impact** in a local and wider context.

Summary

- 6.6 The Site consists largely of bare hard standing or disturbed ground with little vegetation. The bank at the south of the Site has a ruderal but largely currently poorly established vegetation and offers little potential for protected species currently. The Sites main value lies in the trees and shrubs along the eastern boundary as they form a part of a commuting route for bats.

7 RELEVANT LEGISLATION AND POLICIES

Birds

- 7.1 Part I of the Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions and in the absence of a licence) intentionally to kill, injure or take any wild bird, or intentionally to damage, take or destroy its nest whilst being built or in use, or to take or destroy its eggs. Consequently, even common birds such as blackbirds or robins, and their nests and eggs are protected in this way. Any works involving removal or other management of trees or shrubs must be undertaken outside the breeding bird season (March- August).
- 7.2 Further, section 1(5) of Part 1 of the W&C Act states any person intentionally disturbing any wild bird included in Schedule 1 whilst it is building a nest or is in or near a nest containing eggs or young or disturbs the young of such a bird is committing an offence and liable to a special penalty.
- 7.3 The Conservation of Habitats and Species Regulations 2017 has strengthened the protection of wild birds and their habitats. The amendment is “To help preserve, maintain and re-establish habitats for wild birds.”
- 7.4 Under the amended Regulations, Local Planning Authorities (as well as national statutory conservation bodies such as Natural Resources Wales) are required to protect and create bird habitat.

Bats

- 7.5 British bats are protected under the Wildlife and Countryside Act 1981 (as amended). Schedule 5 of this act made it illegal to intentionally kill, injure or take any British bat. It is also an offence to intentionally damage or destroy their place of rest (the roost).
- 7.6 Further all bat species are protected under Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (The Habitats Directive) as amended which requires the United Kingdom government to provide bats with strict protection.
- 7.7 The Habitats Directive is transcribed into England and Wales Law by The Conservation of Habitats and Species Regulations 2017, this legislation consolidates amendments made to the earlier 2010 act. This legislation states in Part 3, Protection of Species, paragraph 43(1) that a person who:
- (a) deliberately captures, injures or kills any wild animal of a European protected species,
 - (b) deliberately disturbs wild animals of any such species,
 - (c) deliberately takes or destroys the eggs of such an animal, or
 - (d) damages or destroys a breeding site or resting place of such an animal,
- is committing an offence.
- 7.8 Further, with regard to disturbance of EPS, Paragraph 43(2) that disturbance is an act which is likely to:
- (a) to impair their ability—
 - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

(b) to affect significantly the local distribution or abundance of the species to which they belong.

- 7.9 In the case of a development involving the loss or modification of a building which may affect bats the above legislation must be considered and it may be necessary to apply to Natural Resources Wales for a European Protected Species Licence (EPSL).
- 7.10 The introduction of the Conservation of Habitats and Species Regulations 2017 has removed the defence of killing or injuring a protected species during a lawful operation, thus even in an instance where planning permission is granted, the presence of bats must be considered and mitigated for prior to commencement of works. Under the above regulations, a WAG licence can only be given if three tests are satisfied:
- The action proposed is in the interest of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance to the environment;
 - That there is not a satisfactory alternative;
 - That the action proposed will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 7.11 Failure to satisfy the regulations and obtain an EPSL where required is likely to result in prosecution and can lead to severe fines of up to £5000 per bat and possible imprisonment.
- 7.12 Eight species of bat are listed under section 7 of the Environment Wales Act (2106). Section 7 of the Act provides a list of living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This is a list of species considered at threat within Wales and in need of conservation management to maintain and enhance population numbers.
- 7.13 A duty is placed on the Local Authority by the Welsh Assembly Government to maintain and enhance populations of species listed in Section 7.

TAN 5

- 7.14 Planning Policy Wales Technical Advice Note (TAN) 5, Nature Conservation and Planning, provides advice on how the planning system should contribute to biodiversity protection and enhancement. TAN 5 recognises the importance of biodiversity and the enjoyment of it. TAN 5 requires Local Planning Authorities (LPA's) to protect and enhance biodiversity during the planning process and to encourage sustainable developments. It also requires LPA's to ensure that protected Sites are properly accounted for within the planning system

8 RECOMMENDATIONS

- 8.1 The trees and shrubs on the eastern boundary should be retained and gaps filled with native hedgerow plants reflecting those present and those on the eastern boundary of Phase 5 immediately above the Site. If works are planned to the mature sycamore, the ivy must be carefully removed by hand and the tree inspected for potential bat roosting sites by a licensed bat ecologist.

- 8.2 The bank should be retained as far as possible with the vegetation protected from the works. If the bank profile is to be modified, the new bank surface should be seeded with suitable species for the resultant slope gradient.
- 8.3 Integral bat boxes should be fitted to the new housing. Boxes such as Habibat bat boxes should be fitted into the house walls, see Figure 2 for examples of boxes available.
- Artificial Lighting*
- 8.4 Nocturnal species (including bats) are affected by artificial light and this can have an impact upon their foraging success. Consideration will therefore be given to the level of external lighting around the Site. Lighting will be located with consideration for bats and other nocturnal species and will avoid the eastern boundary and habitats to the east of the Site.
- 8.5 The use of directional light sources are required, and these may include the use of LED lighting, the brightness of which can be turned down to avoid glare and light spill.

9 CONCLUSIONS

- 9.1 The Site consists primarily of a former compound and is dominated by hard standing or disturbed ground with virtually no vegetation. A steep bank at the south of the Site supports ruderal vegetation and may have been seeded at some point. None of the habitats present are of particular biodiversity value.
- 9.2 A small number of trees and shrubs are present on the eastern boundary, these should be retained and beaten up as part of a bat commuting route resulting from previous site mitigation.

10 BIBLIOGRAPHY

Nature Conservancy Council, 1990, (2010 revision), *The Handbook for Phase 1 Habitat Survey – a technique for environmental audit*, JNCC

The Conservation of Habitats and Species Regulations, 2017, HMG.

Former Cwmtawe School Site, Bat Survey, 2009, Rob Colley Associates

Former Cwmtawe School, Protected Species Survey, 2010, Arborum Ltd

Development Licence Application and Method Statement, 2011, Rob Colley Associates

Extended Phase 1 Habitat Survey, Cwmtawe Phase 5 Development, Pontardawe, 2014
Hawkeswood Ecology

Bat Tree Roost assessment, Cwmtawe Phase 5 Development, Pontardawe. 2015 Hawkeswood Ecology

Preliminary Ecological Appraisal Parc Y Dderwen Phase 6, Pontardawe.
Hawkeswood Ecology – April 2018

Mitigation Strategy and Management Plan, Cwmtawe Phase 5 Development, Pontardawe. 2016
Hawkeswood Ecology

**FIGURE 1:
PHASE 1 HABITAT MAP**

Preliminary Ecological Appraisal Parc Y Dderwen Phase 6, Pontardawe.
Hawkeswood Ecology – April 2018

Figure 1: Phase 1 Habitat Survey map

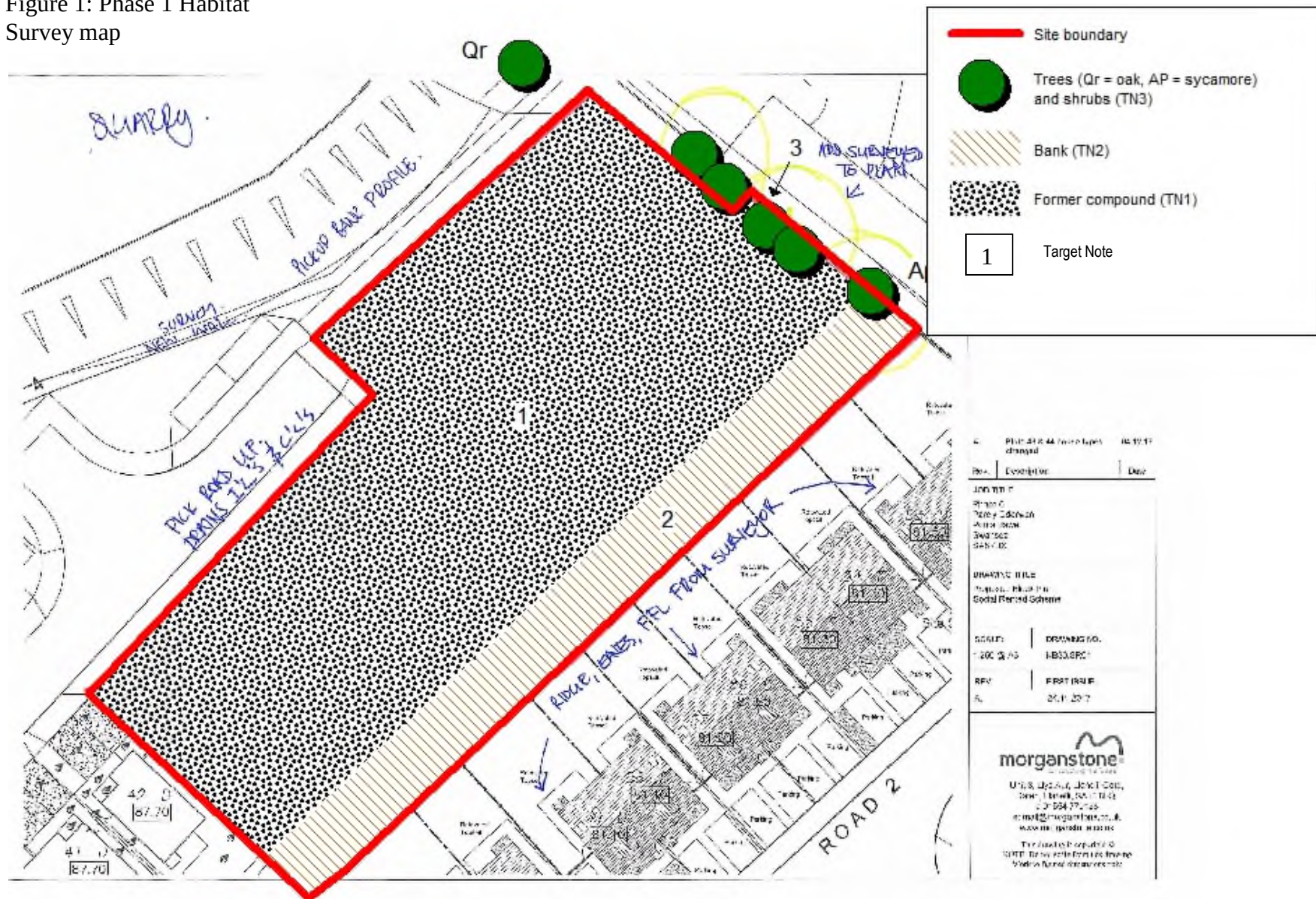


FIGURE 2
TYPICAL INTEGRAL BAT BOXES



Habibat 3S Bat Box



**Habibat 001 Bat Box -
Unfaced (For Render)**



**Habibat 001 Bat Box -
Standard Smooth Red**



**Habibat 001 Bat Box -
Standard Smooth Blue**



**Habibat 001 - Bespoke
Facing**



Habibat 003 Bat Box

APPENDIX 1
DAFOR SCALE OF COVER ABUNDANCE

The DAFOR scale is used as a simple measure of cover abundance for individual plant species within a habitat. The scale is as follows:

- D Dominant
- A Abundant
- F Frequent
- O Occasional
- R Rare
- (L Locally – sometimes used as a prefix to the above)

APPENDIX 2

PHASE 1 HABITAT SURVEY TARGET NOTES

1. Former works compound dominated by hard standing and disturbed ground. Some materials still stored here. Limited vegetation mainly confined to the soils in gutters. Species present were rarely occurring Yorkshire fog, dandelion, hairy bittercress, common dock and ragwort. Vegetation accounts for approximately 1-2% of the ground cover only.
2. Steep bank, largely bare ground (approximately 30-40%) with ruderal species colonising, the presence of frequent white clover suggests the bank may have been seeded. Species present are:

Species	Frequency
Bare	A
Bird's-foot trefoil	LF
Broad-leaved willowherb	O
Buddleia	O
Cock's-foot	O
Common dock	O
Field horsetail	LF
Great willowherb	O
Hoary mustard	O
Lesser celandine	LF
<i>Poa</i> sp	O
Ragwort	O
Red fescue	LF
Ribwort plantain	F
Spear thistle	O
White clover	LF
Yorkshire fog	LA

3. Mature sycamore and oak trees on eastern boundary with some multi-stemmed unmanaged sycamore, hazel and hawthorn. The shrubs appear to be part of the former school boundary. The oak is to the north of the Site and appears in good condition with no obvious features suitable for roosting bats. The sycamore is multi-stemmed from around two metres and looks to be in good condition, one stem has medium to dense ivy cover.

APPENDIX 3
LIST OF SPECIES RECORDED IN THE SURVEY

<i>Species</i>	<i>Scientific Name</i>
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Broad-leaved willowherb	<i>Epilobium montanum</i>
Buddleia	<i>Buddleja davidii</i>
Cock's-foot	<i>Dactylis glomerata</i>
Common dock	<i>Rumex obtusifolius</i>
Common oak	<i>Quercus robur</i>
Dandelion	<i>Taraxacum officinale</i> agg
Field horsetail	<i>Equisetum arvense</i>
Grass	<i>Poa</i> sp
Great willowherb	<i>Epilobium hirsutum</i>
Hairy bittercress	<i>Cardamine hirsuta</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Hoary mustard	<i>Hirschfeldia incana</i>
Lesser celandine	<i>Ranunculus ficaria</i>
Ragwort	<i>Scenecio jacobaea</i>
Red fescue	<i>Festuca rubra</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Spear thistle	<i>Cirsium vulgare</i>
Sycamore	<i>Acer psuedoplatanus</i>
White clover	<i>Trifolium repens</i>
Yorkshire fog	<i>Holcus lanata</i>

APPENDIX 4
PHOTOGRAPHS

Preliminary Ecological Appraisal Parc Y Dderwen Phase 6, Pontardawe.
Hawkeswood Ecology – April 2018



The former compound (note the Site boundary lies at the bottom of the vegetated slope)

Preliminary Ecological Appraisal Parc Y Dderwen Phase 6, Pontardawe.
Hawkeswood Ecology – April 2018



The south facing bank (TN2)



The mature sycamore

The mature common oak





The remaining shrubs

HAWKESWOOD ECOLOGY

Specialists in Ecological Survey and Assessment

17 Heol Henrhyd, Coelbren, Nr. Ystradgynlais, POWYS. SA10 9PG. Tel/Fax: 01639 701304
Mobile: 07957 154794 E-mail: hawkeswoodecology@btinternet.com
(Proprietors: Niki and Eric Hawkeswood)

**A partnership of professionals delivering
answers since 2001**

*Hawkeswood Ecology is an Ecological Consultancy
working in Wales offering a wide range of expertise in
ecological assessment for a broad range of clients.*

