

Preliminary Ecological Appraisal and

Preliminary Roost Assessment

Former Commercial Site, Great Bear Unit 1, off Weighbridge Rd, Deeside, CH5 2LL

Great Bear Distribution LTD

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.

 Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation, and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary, and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate. The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Great Bear Distribution Ltd to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Former Commercial Site, Great Bear Unit 1, off Weighbridge Rd, Deeside, Flintshire CH5 2LL (hereafter referred to as "the site"). The survey was required to inform a planning application for a new-build warehouse unit (Class B2/B8) up to 16,700sq.m gross, with 160 new car parking spaces, 7 motorcycle spaces, 16 bicycle spaces and 56 new HGV spaces; provision of a service yard and internal vehicular circulation; erection of covered cycle parking area; and perimeter fencing; associated drainage works, site levelling and landscaping (hereafter referred to as "the proposed development").

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 7 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	There are 2 statutory sites within 2km of the site, the closest being the Dee Estuary located 220m from the site. There are 2 non-statutory sites within 2km of the site, the closest being the Dee Estuary RSPB Reserve located ~500m from the site.	to the small scale and distance of the proposed	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and woodland should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).	None.
Habitats and flora	Due to the location of the site notable habitats could not be determined via Magic. However, only developed land will be affected by the proposed works. Cotoneaster was identified on the site, which is listed as an invasive, non-native species under Schedule 9 of the	only low value habitats so impact on biodiversity value of the site is low.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and woodland should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).	Species-specific enhancement opportunities are detailed later in this table.

¹ The Local Planning Authority has a duty to ask for enhancements under the Planning Policy Wales (2021).

	Wildlife and Countryside Act 1981.		Cotoneaster should be dug up, including roots, and disposed of in line with appropriate controlled waste measures.	
Amphibians	The pond located on site had a HSI score of below average suitability for great crested newts. Furthermore, there is a lack of connected ponds within a 500m radius of the site, and a lack of connectivity to further habitat for great crested newts. Habitat on site consists of hard standing and small sections of managed grassland which is sub optimal for amphibians.	removed during construction. This will result in	Environmental DNA (eDNA) surveys will be required of any ponds within 250m/500m of the site (where accessible) to determine the presence or absence of great crested newts. This will comprise collecting water samples and sending them off for laboratory analysis and such surveys must be undertaken between mid-April and June, in accordance with current survey guidelines (Biggs et al, 2014).	To be confirmed on completion of the survey.
	However, there is an anecdotal record obtained by the previous PEA report of a smooth newt on site, therefore there is a risk of other common amphibians on site due to the water courses present.			
Reptiles	The site of the proposed development has no foraging opportunities or protection from predators for reptiles, however the pockets of woodland do offer habitat for reptiles due to the scrub and bare ground present. Furthermore, a previous Preliminary Ecological Appraisal reported anecdotal records of a grass snake near to the northern boundary of the site. Therefore, there is a	Hardstanding will be removed during construction. The loss of such habitats is inconsequential to local reptile populations owing to the low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.	None.

	chance of commuting through the site.			
Roosting bats (B1, 2, 3, 4, 5)	B1, 2, 3, 4 and 5 have negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting within these buildings and as such, there are not anticipated to be any impacts on roosting bats as a result of the demolition of these buildings.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on retained mature trees. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice dwelling species such as Beaumaris Bat Box or a similar alternative brand.
Foraging and commuting bats	The woodland and the bodies of water could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats.	A low impact lighting strategy will be adopted for the site during and post-development.	None.
Badger	No badger setts or activity was identified on site. However the woodland offers habitat for badgers and there is potential for badgers to be using the site to commute through. There are records of badgers in the area and there us access onto site.	No impacts are anticipated on badgers as a result of the proposed development.	Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.	None.

Hazel dormouse	There is poor connectivity from the site to suitable habitat for this species and there is a lack of habitat on site that would support hazel dormouse. No records were returned within 2km of the site and therefore this species is considered to be absent form site.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.
Hedgehog	The woodland present provides hibernation habitat and foraging opportunities for hedgehog. Furthermore, hedgehogs are known to utilise urban areas and there is access onto site, therefore there is a potential for hedgehogs to be using the site to commute.	construction. The loss of such habitats could result in a reduction in hedgehog habitat and could result in the fragmentation of the local landscape. Furthermore, construction activities could result in the death or injury of hedgehogs if present.	A precautionary working method will be implemented during construction.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Gaps in the fencing. • Hedgehog houses.
Otter	There are water bodies on site, but due to the urban environment and the limited connectivity to foraging habitat for otter, there is a suitably low risk of this species being on site.	No impacts are anticipated on otters as a result of the proposed development.	None.	None.
Water vole	The ditches on site have suitability for water vole due to the mixture of bare ground and vegetation present. However, a previous survey was conducted along the western ditch, and it concluded that there was no evidence of water vole. The area is urban and is very disconnected to habitat suitable for water vole, therefore there is a suitably	No works will be undertaken within 5m of the top of the banks of the watercourse. Therefore, no impacts are anticipated on water vole as a result of the proposed development.	Owing to the nature of the proposed development and the low potential for impacts to water voles, further water vole surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.	None.

	low risk for this species, but the suitable environment present on site cannot be ruled out.			
Birds	The trees present on site provide nesting habitat for birds, with inactive nests observed during the survey. There is no suitable habitat on site to support wintering waterfowl.	Trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/tree/vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The installation of two bird boxes at the site will provide additional nesting habitat for birds. The bird boxes will be installed on retained trees.
Invertebrates	The water bodies, the trees and vegetation on site will support populations of invertebrates, however, due to the common species present, these are unlikely to be notable species.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • Planting of native wildflowers.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Great Bear Distribution Ltd to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Former Commercial Site, Great Bear Unit 1, off Weighbridge Rd, Deeside, Flintshire CH5 2LL (hereafter referred to as "the site"). The survey was required to inform a planning application for a new-build warehouse unit (Class B2/B8) up to 16,700sq.m gross, with 160 new car parking spaces, 7 motorcycle spaces, 16 bicycle spaces and 56 new HGV spaces; provision of a service yard and internal vehicular circulation; erection of covered cycle parking area; and perimeter fencing; associated drainage works, site levelling and landscaping (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in Appendix 1.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development.

The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging, or commuting.

A Preliminary Ecological Appraisal was completed by The Ecology Practice on 02/02/2022 (The Ecology Practice, 2022). This report was completed for the neighbouring factory on site. The report concluded that the ditches on site had potential for water vole. Schedule 9 invasive plant species were discovered on site and within the ditches present. The buildings on site and the trees present were also concluded to have no potential for roosting bats.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SJ 3171 2485 and has an area of approximately 4.5ha comprising a working yard, with hardstanding, patches of grassland and scattered trees and scrub. Pockets of woodland and drainage ditches are present to the west and north of the site. It is surrounded by working yards and roads with RSPB Reserve to the ~1,540m to the north and the river Dee ~2,100m to the southwest. The wider landscape comprises pockets of residential dwellings, scattered agricultural fields and roads. A site location plan is provided in Appendix 2.

A site location plan is provided in Appendix 2.

1.3 Scope of the Report

The PEA element of this report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

The PRA element of this report provides a description of all features suitable for roosting, foraging, and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species, including roosting bats.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of the magic.gov.uk database for statutory designated sites. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Existing biological records including notable species, habitats, and non-statutory designated sites within a 2km radius were obtained from a previous Preliminary Ecological Appraisal report of the site from February 2022.

2.2 Field Survey

The survey was undertaken by Kayleigh Davies, Graduate Ecologist (Accredited Agent on Natural England Bat Licence Number: 2022-10404-CL18-BAT) on 30/11/2023.

Preliminary Ecological Appraisal

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure, and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

Ponds on and adjacent to the site were assessed for their suitability to support great crested newts using the Habitat Suitability Index (HSI) Assessment Methodology (Oldham et al, 2000).

Preliminary Roost Assessment

The PRA focussed on 5 built structures which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging, and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the buildings for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the buildings was also made, including the living areas and any accessible roof spaces, using a torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

Suitability Assessment

Built structures were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low, and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats.

Classification	Feature of building and its context
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and
	apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. Unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Moderate	A structure with one of more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. Maternity or classic cool/stable hibernation site.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

These limitations have been considered during the evaluation of the site and requirement for further surveys and mitigation.

The PEA survey was completed outside of the optimal survey period (April to October) limiting the identification of ground flora species.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory and non-statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 3 below.

Table 2: Statutory and non-statutory designated sites within 2km radius of the site

Designated site	Distance from	Reasons for notification from Natural Resources Wales and COFNOD and United Nations Educational, Scientific and Cultural Organisation
name	site	(UNESCO)
Dee Estuary (Site of Special Scientific Interest, Special Area of Conservation, Special Protection Area)	~220m to the northwest	The Dee Estuary/Aber Afon Dyfrdwy is of special interest for its total populations of internationally important wintering waterfowl; its populations of individual waterfowl and tern species whose numbers reach national and in some cases, internationally important levels; its intertidal mud and sandflats, saltmarsh and transitional habitats; the hard rocky sandstone cliffs of Hilbre Island and Middle Eye with their cliff vegetation and maritime heathland and grassland; its assemblage of nationally scarce plants; and its populations of sandhill rustic moth <i>Luperina nickerlii gueneei</i> , a Red Data Book species.
Inner Marsh Farm	~1000m to the north	Inner Marsh Farm is situated 3 km south of the town of Neston and straddles the England/Wales border at the head of the Dee Estuary. The site is notified for the ornithological interest it supports, particularly its wintering and summering bird populations. It lies on former estuarine flats which were reclaimed from the Dee Estuary in the late nineteenth century by the construction of the Bidston to Wrexham railway.
Shotton Steel Works (Wildlife Site)	~711m	Summer breeding site of Common terns.
Dee Estuary (RSPB Reserve)	~916m	Home to important wintering wildfowl.

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 4.

Table 3: Weather conditions during the survey

Date:	30/11/2023
Temperature	2°C
Humidity	63%
Cloud Cover	100%
Wind	2mph
Rain	None

Habitats and Flora

The following habitats are present within and adjacent to the site:

- Developed land, sealed surface, u1, 10, 32, 847, 804.
- Buildings u1b5
- Mixed / broadleaved woodland w1
- Standing open waters r1a, 50
- Modified grassland G4, 10, 108
- Dense scrub h3, 510, 517
- Line of trees w1,33

A description and photograph of each habitat is provided in Table 5.

Cotoneaster (a non-native invasive plant species) was recorded on the site.

Table 4: Description and photographs of habitats within and adjacent to the site

Habitat Type	Habitat description	Photograph
Developed land sealed surface	The majority of the site consists of a working yard, with car park, HGVs present and roads. There are scattered introduced shrubs (84) present, and patches of regularly mown grass. Cotoneaster is observed to be present and scattered around the site, abundantly near to the southern boundary of the survey site. There is also scattered trees around the site, with a small fenced off section of trees within the northern car park on the site.	Figure 1 - northern car park with fenced off section with trees visible.



Figure 2 - hard standing of the HGV parking area.



Figure 3 - Cotoneaster, a schedule 9 invasive species.

There are 5 buildings within the survey site boundary. See table 6 for a detailed preliminary roost assessment.



Figure 4 - the rear of B1 and B3.

On the northwest boundary of the site, there is a small pocket of woodland present, dominant with Birch (d), with sycamore (o) and Hazel (r). Other species present include nettle (d), thistle (d), bramble (d) and creeping buttercup (o).

Mixed / Broadleaved woodland

There is also a pocket of woodland located on either side of the ditch located at the northern boundary of the site. Species present here include young ash (a), sycamore (a) hazel (o).

A fenced off, small area of woodland is present within the northern carpark of the site.



Figure 5 - pocket of woodland to the west of the site near to ditch 1.



Figure 6 - fenced off section of woodland within the northern car park of the site.

A ditch is located near the western boundary of the site. There is also a second drainage ditch located just outside of the eastern survey site boundary. The ditches are drainage ditches and have sloped sides, some vegetation present and some bare ground.

Standing open waters

There is also a pond present near the northeast corner of the site boundary. The pond is surrounded by woodland with no visible submerged plants but has floating duckweed covering 80% of the surface. Table 7a includes the HSI and further description of the pond.



Figure 7 - ditch 2 located near the north of the site, outside of the survey site boundary.



Figure 8 - ditch 1 to the west of the site.



Dense Scrub

The bank near to the western ditch consists of recently cleared scrub, with the remains still present on the bank. There is some scrub regrowth present with species including nettle (a) and thistle (o) with creeping buttercup (r). There is a large number of rabbit holes present on the embankment and bare ground.



Figure 11 - cleared scrub on the embankment of the western ditch.



Figure 12 - example of the cleared scrub with regrowth of nettles and thistles.

Along the bank of the western ditch, there is a line of trees along the fence that separates the car park from the ditch. The dominant tree species is hawthorn.



Figure 13 - line of trees along the embankment.

Fauna

<u>Bats</u>

The results of the PRA are provided in Table 6. No evidence of roosting bats was identified during the survey.

Table 5: Assessment of the suitability of the site for bats

Feature	Description	Photographs
Historical	No records were returned within a 2km radius of the site for bat EPSLS.	
records	No records were returned within a 2km radius of the site for pat EPSLS.	

Bat foraging and commuting habitat

The pockets of woodland, the ditches on site and the scattered trees all provide high value habitat for commuting and foraging bats. The train track located to the west of the site also provides a green corridor for bats to use for foraging and commuting.



Figure 14 - western ditch with woodland and scrub.

B1 - overview

B1 is an industrial factory building which is regularly disturbed by workers and loud machinery. The western elevation consists of disused office blocks. The factory is of metal construction with large metal roller doors and gable ended roof with vaulted ceiling. The office block has a flat roof and is a mix of plastic and wood construction.



Figure 15- B1 consists of a working factory.

B1 – external

The exterior of B1 is in good overall condition. The factory is well sealed with no gaps or cracks present that could be used as a roosting feature (fig 15). There is no visible access to the interior of the property.

The office block had a lifted board near the top of the building, but this did not create a gap that would be used by bats to roost (fig 16).



Figure 16 - the office block section of B1.

The interior of the factory was in good condition with a metal vaulted ceiling with metal beams and skylights present (fig 17). The workshop has loud machinery present and high levels of sunlight is allowed into the space through the open roller door and the skylights. The space is open with no roosting features present.

B1 - interior

The roof in the office block is of metal construction with metal beams and electric wiring present (fig 18). The loft space is small and cluttered with insulation and wiring which does not allow space for bat flying activity. There is also evidence of damp within the roof space, with mould present on the ceiling tiles that would further deter ats from using the space.

Due to the lack of crevices and the high levels of sunlight and disturbance within B1 it is determined that B1 is negligible for void dwelling bats.



Figure 17 - interior of the factory section of B1.



Figure 18 - the office block of B1.

B1 – suitability assessment	Due to the metal construction and the lack of roosting features present, B1 has negligible habitat for roosting bats. Furthermore due to the high levels of noise disturbance and the high levels of sunlight within B1, the interior provides negligible value to void dwelling species.	
B2 – overview	B2 is an outbuilding with a flat, metal corrugated sheeting roof and brick walls. The southern elevation is open allowing internal access. There are wooden boards underneath the metal roof, which has evidence of damp. Some of the metal sheeting from the roof is missing allow rainwater into the space. The open nature of the building allows external elements into the space and provides no protection from wind or rain. B2 is too open and damp and therefore is negligible for roosting bats.	Figure 19 - B2 exterior.



Figure 20 - the interior of B2.

B3 – overview

B3 is another outbuilding to the south of B1 and to the east of B2. B3 is of brick construction with a metal corrugated sheeting roof, and metal bars on the windows and the doors. There is access to within B3 due to the damage on the roof. However, the roof is single sheeting and provides no crevices or gaps. Furthermore there is no protection from external elements due to the construction of the building. The interior of the building is damp and there is damp staining on the eastern elevation of the building.

Due to the lack of roosting features and the lack of protection from external elements, B3 is **negligible** for roosting bats,



Figure 21 - exterior of B3.



Figure 22 - exterior of B3.

B4 - overview

B4 is a single storey building with a flat roof and brick walls. The exterior of the building is in good condition with no cracks or gaps visible. The interior of the building has chipboard on the ceiling which shows some evidence of damp. The interior of the building is in good condition with no gaps or crevices that allow access from the outside.

B4 is negligible for roosting bats due to the flat roof and construction of the building and the lack of roosting features.



Figure 23 - exterior of B4.



Figure 24 - interior of B4.

Other Species

An assessment of the suitability of the site for protected or notable species is provided in Table 7.

Table 6: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability	Biological records data	
	Great crested newts exist in metapopulations and are known to utilise ponds and	No EPSLs or records were returned for Great Crested Newts within a 2km radius.	
	their connecting terrestrial habitat during their life cycle; great crested newts are		
	typically found within terrestrial habitats up to 500m from breeding ponds		
	(Langton et al. 2001). There is a pond located on site, near to the northeast site		
Amphibians	survey boundary. A review of aerial imagery indicates the presence of a further		
	pond within 500m of the site, located 300m north. This pond is separated from		
	the site by urban infrastructure including tarmac roads, extensive managed		
	grassland, which is either grazed or regularly mown resulting in a short sward		
	length. These landscape features are suboptimal for great crested newts due to a		

lack of refuge from predation. As a result and given the distance of this pond from the site, these landscape features are likely to represent a significant barrier to dispersal eliminating connectivity to the site for great crested newts. Furthermore, this pond is likely to be highly managed due to it being located on a water recreational site where there is regular water sport activity. An HSI was completed of the pond (table 7a) which returned a result indicating below average suitability for great crested newt. A further HSI was conducted of the ditch (table 7b) present to the west of the site, which returned a result of poor suitability for great crested newt. Great crested newts could be present and commuting through the site, but due to the suboptimal habitat present, they would not utilise the site for long periods for foraging or protection from predators. Furthermore, the site is very disconnected form high value amphibian habitat due to the location of main roads and surrounding urban environment. The site is also regularly disturbed with HGVS being transported on and off site.

Table 7a: HSI calculation of ponds.

SI Description	SI Value P1
Geographic location	0.5
Pond Area	1
Pond Permanence	0.9
Water Quality	0.33
Shade	0.8
Waterfowl Effect	0.67
Fish Presence	1
Pond Density	0.2
Terrestrial Habitat	0.33
Macrophyte Cover	0.8
HSI Score	0.58
HSI Category	Below Average

	Table 7b: HSI calculation of dita	Table 7b: HSI calculation of ditch.		
	SI Description	SI Value		
		P1		
	Geographic location	0.5	_	
	Pond Area	0.8	_	
	Pond Permanence	0.9	_	
	Water Quality	0.67		
	Shade	1		
	Waterfowl Effect	0.01		
	Fish Presence	1		
	Pond Density	0.6		
	Terrestrial Habitat	0.33		
	Macrophyte Cover	0.8		
	HSI Score	0.46		
	HSI Category	Poor		
Reptiles	The site is regularly disturbed with HGVs frequently entering and leaving the site. The majority of the site consists of hard standing and has very limited protection from predators with only scattered introduced shrubs. The woodland to the west and north of the site does offer habitat for reptiles with bare ground and scrub that allow basking and protection for reptile species. However, due to the urban location of the site, there is limited connectivity to further high value habitat for reptiles.		and has very limited protection rubs. The woodland to the west es with bare ground and scrub ies. However, due to the urban	There are records for common lizard within 2km radius of the site.
Badgers	No setts were observed within the survey site boundary. The pockets of woodland on the northern and western boundary of the site provide habitat for badgers. The western woodland offers a sloped bank with mammal holes present. These were small and had rabbit droppings present near the holes and therefore were determined to not be badger due to the small size and lack of badger tracks and hair. Mammal holes were observed scattered over the site, but these were also determined to be small mammals such as rabbit or fox. There was a mammal push through noted under the fence to the west of the site, which leads to ditch 1. This is likely to be rabbit due to the droppings found and lack of badger evidence, e.g. hair or pawprints. The train track also present to the west of the site also provides a green corridor that will be utilised by badgers for commuting. The majority of the site is hard standing and regularly disturbed with little foraging opportunities		provide habitat for badgers. The small holes present. These were the holes and therefore were and lack of badger tracks and er the site, but these were also fox. There was a mammal push site, which leads to ditch 1. This and lack of badger evidence, e.g. he west of the site also provides for commuting. The majority of	There are badger records within 2km radius of the site.

	within the working yard. It is likely that badgers will be commuting on site to get to the surrounding natural areas but are not likely to be on site.	Figure 25 - mammal push through under the fence on the western boundary.
Hazel Dormouse	The site consists majorly of hard standing and lacks in habitat suitable for hazel dormice with limited tree cover and has little to no connectivity to high value habitat. Therefore it is considered this species is not present on site.	There are no records of this species within 2km of the site.
Hedgehog	The pockets of woodland present near to the site boundaries offer high value habitat for hedgehogs. The hard standing of the working yard does not offer habitat for hedgehogs, however, there is access to the yard and hedgehogs could use the site for commuting.	No hedgehog records within 2km of the site.
Otter	There is a ditch present on the western boundary of the site and a second just outside of the eastern boundary of the site. The ditches are not suitable for otters due to the lack of connectivity to further habitat and due to the low water quality of the water on site. There is also very limited foraging opportunities on and adjacent to site for this species.	No records within 2km of the site.
Water Vole	Ditch 1 to the west of the site had a water vole survey conducted last year by another consultancy which concluded a suitably low risk of water vole present and no evidence of water vole present. The updated 2023 survey of the ditch noted n evidence of water vole and the habitat is still sub optimal for this species.	No records within 2km of the site.

	The ditch outside of the survey site boundary has sloped sides, with a mixture of earth and vegetation present. There is limited connectivity from this ditch to high value habitat for this species due to the urban nature of the site.	
		Species recorded within 2km of site: Bullfinch Dunnock Herring gull Kestrel Lapwing Linnet Song thrush Starling
Birds	The woodland and scattered trees present on site offer nesting habitat for birds, with inactive nests observed during the survey. The site is located near to the Dee estuary which is known for wintering wildfowl. However, there is a lack of habitat that would support wintering waterfowl on site.	Figure 26 - bird nest observed within the western pocket of woodland.
Invertebrates	The water sources present, and the woodland will support invertebrate species, however due to the common species present, these are not likely to be notable species.	No records within 2km of the site.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in Appendix 4.

Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e. The area covered by the desk study and field survey), and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

4.2 Evaluation

Taking the desk study and field survey results into account, Table 8 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise summarise a new-build warehouse unit (Class B2/B8) up to 16,700sq.m gross, with 160 new car parking spaces, 7 motorcycle spaces, 16 bicycle spaces and 56 new HGV spaces; provision of a service yard and internal vehicular circulation; erection of covered cycle parking area; and perimeter fencing; associated drainage works, site levelling and landscaping.

Table 7: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ²
Designated sites	There are 2 statutory sites within 2km of the site, the closest being the Dee Estuary located 220m from the site.	to the small scale and distance of the proposed	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and woodland should be protected in line with the measures outlined in the British Standard	None.
	There are 2 non-statutory sites within 2km of the site, the closest being the Dee Estuary RSPB Reserve located ~500m from the site.		"Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).	

² The Local Planning Authority has a duty to ask for enhancements under the Planning Policy Wales (2021).

Habitats and flora	Due to the location of the site notable habitats could not be determined via Magic. However, only developed land will be affected by the proposed works. Cotoneaster was identified on the site, which is listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981.	Hard standing, and some small areas of vegetation will be removed by the proposed works. This is only low value habitats so impact on biodiversity value of the site is low. Construction could result in the spread of Cotoneaster.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and woodland should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Cotoneaster should be dug up, including roots, and disposed of in line with appropriate controlled waste measures.	Species-specific enhancement opportunities are detailed later in this table.
Amphibians	The pond located on site had a HSI score of below average suitability for great crested newts. Furthermore, there is a lack of connected ponds within a 500m radius of the site, and a lack of connectivity to further habitat for great crested newts. Habitat on site consists of hard standing and small sections of managed grassland which is sub optimal for amphibians.	The pond and surrounding vegetation will be removed during construction. This will result in the harm or death of amphibians if present.	Environmental DNA (eDNA) surveys will be required of any ponds within 250m/500m of the site (where accessible) to determine the presence or absence of great crested newts. This will comprise collecting water samples and sending them off for laboratory analysis and such surveys must be undertaken between mid-April and June, in accordance with current survey guidelines (Biggs et al, 2014).	To be confirmed on completion of the survey.
	However, there is an anecdotal record obtained by the previous PEA report of a smooth newt on site, therefore there is a risk of other common amphibians on site due to the water courses present.			
Reptiles	The site of the proposed development has no foraging opportunities or protection from predators for reptiles,	Hardstanding will be removed during construction. The loss of such habitats is inconsequential to local reptile populations owing to the low value and the presence of more	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A	None.

	however the pockets of woodland do offer habitat for reptiles due to the scrub and bare ground present. Furthermore, a previous Preliminary Ecological Appraisal reported anecdotal records of a grass snake near to the northern boundary of the site. Therefore, there is a chance of commuting through the site.	extensive habitat locally. However, site clearance could result in the death or injury of reptiles if present.	 precautionary working method will be implemented during construction, including the following measures: A toolbox talk will be given to contractors regarding the possible presence of reptiles at the site. A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area. Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas. Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. Any chemicals or pollutants used or created 	
Roosting bats (B1, 2, 3, 4, 5)	B1, 2, 3, 4 and 5 have negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting within these buildings and as such, there are not anticipated to be any impacts on roosting bats as a result of the demolition of these buildings.	by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist. In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on retained mature trees. Bat boxes should be positioned 3-5m above ground level facing in a
				south or south-westerly direction with a clear flight path to and from the

				entrance, away from artificial light. The bat boxes will be a specification suitable for crevice dwelling species such as Beaumaris Bat Box or a similar alternative brand.
Foraging and commuting bats	The woodland and the bodies of water could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats.	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to water bodies and tree lines should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultraviolet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.	None.

Badger	No badger setts or activity was identified on site. However the woodland offers habitat for badgers and there is potential for badgers to be using the site to commute through. There are records of badgers in the area and there us access onto site.	No impacts are anticipated on badgers as a result of the proposed development.	Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available. Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of badgers at the site. • A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.	None.
Hazel dormouse	There is poor connectivity from the site to suitable habitat for this species and there is a lack of habitat on	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.

Hedgehog	site that would support hazel dormouse. No records were returned within 2km of the site and therefore this species is considered to be absent form site. The woodland present provides hibernation habitat and foraging opportunities for hedgehog. Furthermore, hedgehogs are known to utilise urban areas and there is access onto site, therefore	Hardstanding will be removed during construction. The loss of such habitats could result in a reduction in hedgehog habitat and could result in the fragmentation of the local landscape. Furthermore, construction activities could result in the death or injury of hedgehogs if present.	A precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of hedgehogs at the site. • A pre-commencement inspection of the site will be undertaken for hedgehogs.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:
	there is a potential for hedgehogs to be using the site to commute.		 A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 30cm and left overnight to allow any hedgehogs to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter hedgehogs from the working area. Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. 	 Gaps in the fencing. Hedgehog houses.
Otter	There are water bodies on site, but due to the urban	No impacts are anticipated on otters as a result of the proposed development.	None.	None.
	environment and the limited			

	connectivity to foraging habitat for otter, there is a suitably low risk of this species being on site.			
Water vole	The ditches on site have suitability for water vole due to the mixture of bare ground and vegetation present. However, a previous survey was conducted along the western ditch, and it concluded that there was no evidence of water vole. The area is urban and is very disconnected to habitat suitable for water vole, therefore there is a suitably low risk for this species, but the suitable environment present on site cannot be ruled out.	No works will be undertaken within 5m of the top of the banks of the watercourse. Therefore, no impacts are anticipated on water vole as a result of the proposed development.	Owing to the nature of the proposed development and the low potential for impacts to water voles, further water vole surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of water vole at the site. • Heras fencing will be erected around the working area to prevent encroachment within 5m of the watercourse. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to the watercourse and any retained habitats which water voles could use. • Best practice pollution prevention measures will be implemented to minimise impacts to the watercourse and any retained habitats that water vole could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that water voles or evidence of water voles is identified, works must cease and advise must be sought from a suitably qualified ecologist.	None.
Birds	The trees present on site provide nesting habitat for birds, with inactive nests observed during the survey.	Trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/tree/vegetation should be undertaken	The installation of two bird boxes at the site will provide additional nesting habitat for birds.

	There is no suitable habitat on site to support wintering waterfowl.	and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The bird boxes will be installed on retained trees. General purpose bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain, and strong sunlight. Species-specific bird boxes should be installed in line with manufacturers specifications.
Invertebrates	The water bodies, the trees and vegetation on site will support populations of invertebrates, however, due to the common species present, these are unlikely to be notable species.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • Planting of native wildflowers.

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15,588 sq.m. 15,990 rg.m.

135 apaces 8 зрасез Барасея 27 эрвсия

architects

Great Bear Link 56

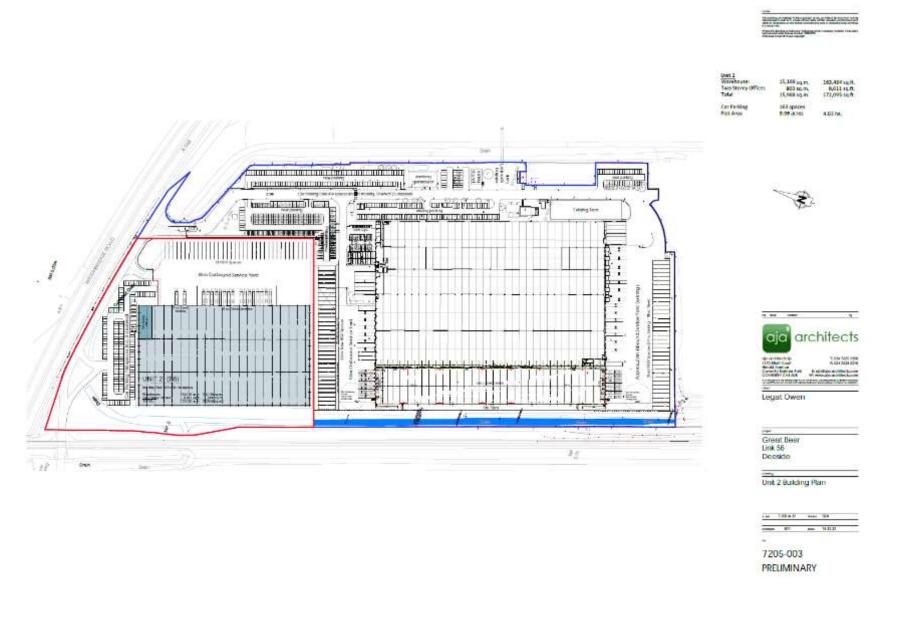
Site Layout Plan

7205-SK01 SKETCH PROPOSAL

Deeside Unit 3

Schedule of Accommodation All areas are approximate gross internal Car Parking Inc. Obsobled parking Inc. Mobility parking Car Parking with DVCP Sky Density Palette Store 55m Outbound Service Yard 26 'on dock' HGV Spaces (Total trailer parking 53 spaces) UNIT 3 (B8) (15.188 sq.m) (000 sq.m) (15.988 sq.m)

Appendix 1: Proposed Development Plan



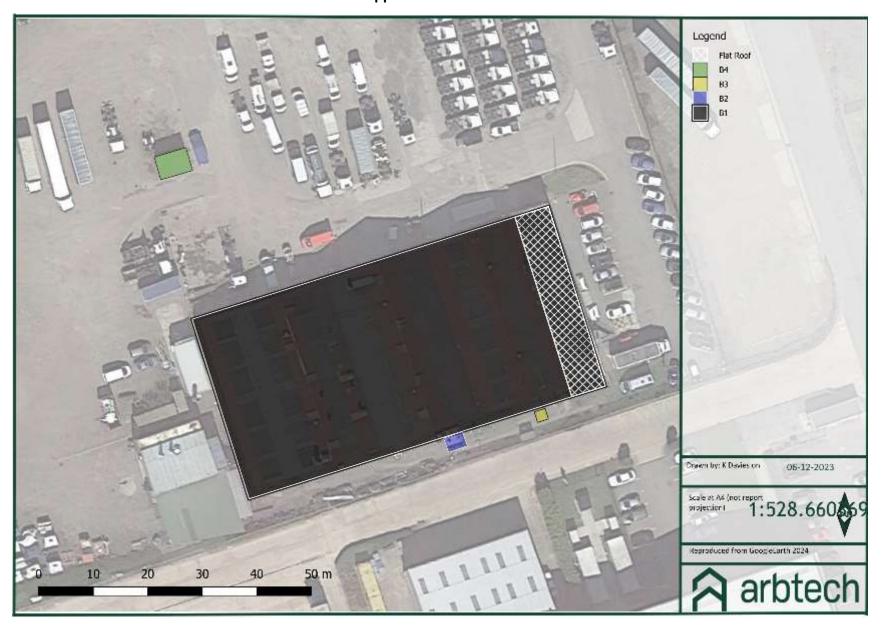
Appendix 2: Site Location Plan





Appendix 3a: Habitat Survey Plan

Appendix 3b: PRA Plan



Drawn by: K Davies on

Scale at A4 (not report projection) 1:6,500

Reproduced from GoogleEarth 2024

05-12-2023

Legend
Site Location
Pound
Buffered

Appendix 3d: Pond Location Plan

400 500 m

Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (sacs) and Special Protection Areas (spas) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (sacs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIS) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

Spas are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (crow) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. Sacs & spas). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education, and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (rigs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACS, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies, or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (crow) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers Meles meles are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure, or take a badger.
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof.
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof.
- Intentionally or recklessly disturb a badger when it is occupying a badger sett.

- Intentionally or recklessly cause a dog to enter a badger sett.
- Sell or offers for sale, possesses, or has under his control, a live badger.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural Resources Wales) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a set. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests, and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure, or take any wild bird.
- Intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy an egg of any wild bird.
- Sell, offer, or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as "Schedule 1" birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young.
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species.
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young.
- To impair their ability to hibernate or migrate.
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA, and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering, or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. The adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. Survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard, and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole Arvicola terrestris is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure, or take (capture) water voles.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection.
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural Resources Wales) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. The use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters Lutra lutra are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species.
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young.
- To impair their ability to hibernate or migrate.
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches, or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. Survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young.
- To impair their ability to hibernate or migrate.
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice Muscardinus avellanarius are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of Schedule 2 species.
- Deliberate disturbance of species in such a way as:

- To impair their ability to survive, breed, or reproduce, or to rear or nurture young.
- To impair their ability to hibernate or migrate.
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking.
- Protected against selling, offering, or advertising for sale, possessing or transporting for the purpose of sale.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural Resources Wales) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, crush, drown, drag, or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering, or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
- Deliberately pick, collect, cut, uproot, or destroy a wild Schedule 5 species.
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural Resources Wales) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed Fallopia japonica
- Giant hogweed Heracleum mantegazzianum
- Himalayan balsam Impatiens glandulifera

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. Earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle Cirsium vulgare
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock Rumex obtusifolius
- Common ragwort Senecio jacobaea

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY

Environment (Wales) Act 2016 and the Biodiversity Duty

The Environment (Wales) Act 2016 introduces a new biodiversity duty, which highlights biodiversity as an essential component of ecosystem resilience. This new duty replaces the biodiversity duty in the Natural Environment and Rural Communities Act 2006 (referred to as the NERC Act). Part 1 of the Act deals with Sustainable management of natural resources including Biodiversity and Resilience of Ecosystems Duty. The Environment Act enhances the current NERC Act duty to require all public authorities, when carrying out their functions in Wales, to seek to "maintain and enhance biodiversity" where it is within the proper exercise of their functions. In doing so, public authorities must also seek to "promote the resilience of ecosystems". As under the NERC Act the new duty will apply to a range of public authorities such as the Welsh Ministers, local authorities, public bodies, and statutory undertakers. This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long-term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

Planning Policy Wales (2021)

Paragraph 6.4.3 of the document refers to Biodiversity and Ecological Networks and states:

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. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. Information contained in sonarr, Area Statements and species records from Local Environmental Record Centres should be considered. Development plan strategies, policies and development proposals must consider the need to:

- Support the conservation of biodiversity, in particular the conservation of wildlife and habitats.
- Ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats.
- Ensure statutorily and non-statutorily designated sites are properly protected and managed.
- Safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- Secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent, and connectivity of ecological networks.

Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. Planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

a) Diversity between and within ecosystems.

- b) The connections between and within ecosystems.
- c) The scale of ecosystems.
- d) The condition of ecosystems (including their structure and functioning); and
- e) The adaptability of ecosystems.

In fulfilling this duty, planning authorities must have regard to:

- a) The list of habitats of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016.
- b) The State of Natural Resources Report (SONARR), published by NRW; and
- c) Any Area Statement that covers all or part of the area in which the authority exercises its functions.

Planning Authorities should also refer to up to date ecological survey information (where appropriate).

A proactive approach towards facilitating the delivery of biodiversity and resilience outcomes should be taken by all those participating in the planning process. In particular, planning authorities should demonstrate that they have sought to fulfil the duties and requirements of Section 6 of the Environment Act by taking all reasonable steps to maintain and enhance biodiversity in the exercise of their functions.

The broad framework for implementing the duty and building resilience through the planning system includes addressing:

- Diversity: to ensure mechanisms are in place to minimise further loss and that circumstances allow for species' populations to expand and recolonise their natural range (former range) or adapt to future change. This means development should provide a net benefit for biodiversity, and at the very least, with no significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity.
- Extent: to ensure mechanisms allow for the maintenance of existing assets and networks and promote the restoration of damaged, modified, or potential habitat and the creation of new habitat. This means that planning choices should incorporate measures which seek the creation and restoration of green networks and linkages between habitats and maintaining and enhancing other green infrastructure features and networks.
- Condition: Ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services. Planning decisions should not compromise the condition of ecosystems. By taking an integrated approach to development, for example, which considers both direct and wider impacts and benefits it should be possible to make a positive contribution. Planning for the long-term management of retained habitats is key to maintaining condition through for example, the use of planning obligations.
- Connectivity: to take opportunities to develop functional habitat and ecological networks within and between ecosystems and across landscapes, building on existing connectivity and quality and encouraging habitat creation, restoration, and appropriate management. The opportunities could include enlarging habitat areas, developing buffers around designated sites or other biodiversity assets or corridors, including transport and river corridors, and the creation of 'stepping stones' which will strengthen the ability of habitats and ecological networks to adapt to change, including climate change; and

• Adaptability to change primarily in the form of climate change, for both species (diversity) and ecosystems requires action to protect the extent, condition and connectivity of habitats, features, and ecological networks. Development plans, planning proposals and applications which build on protecting designated sites and securing and enhancing green infrastructure will be keyways of addressing the attributes of ecosystems resilience identified in the Environment Act as well as facilitating social and economic resilience aspirations of the Wellbeing of Future Generations Act.

Good Practice Guide GPG 3 (October 2015) NRW Approach to Bats and Planning

As explained in Planning Policy Wales (Chapter 5 - Conserving and Improving Natural Heritage and the Coast), the presence of a European protected species is a material consideration for a development proposal that would be likely to result in disturbance or harm to the species or its breeding sites or resting places. Planning Policy Wales also explains that planning authorities should seek the advice of Natural Resources Wales for all planning applications likely to result in disturbance or harm to bats and should always consult them before granting permission. Local Planning Authorities address this by screening applications to identify when there is a reasonable likelihood that bats may be present and, therefore, when to require a bat survey and report that will confirm if bats are present and if they likely to be disturbed or harmed by the proposal. The overall requirement on Local Planning Authorities, Natural Resources Wales and developers is to avoid harm or disturbance to bats and their breeding sites and resting places, unless Natural Resources Wales has given a licence to allow the harm or disturbance. Natural Resources Wales may only give a licence if the requirements for derogation are met, including that disturbance or harm to individual bats (or to their breeding sites and resting places) would not be detrimental to the maintenance of the population.

LOCAL PLANNING POLICY

Flintshire Local Development Plan (2023)

The [local plan name] can be viewed here: https://www.flintshire.gov.uk/en/PDFFiles/Planning/Examination-Library-Documents/FINAL-LDP-Written-Statement-English.pdf
The following planning policies have implications in relation to biodiversity and the proposed development:

- EN7 Development Affecting Trees, Woodlands, and Hedgerows:
 - Development proposals that will result in significant loss of, or harm to, trees, woodlands, or hedgerows of biodiversity, historic, and amenity value will not be permitted.
 - Where the impact of development affecting trees, woodlands or hedgerows is considered acceptable, development will only be permitted where:
 - a. the development maximises their retention through sensitive design measures; and
 - b. where the removal of trees is considered necessary, suitable replacements shall be provided elsewhere within the site; and
 - c. it results in a net benefit in biodiversity.

The Flintshire County Council Biodiversity Duty Delivery Plan

The Flintshire County Council Biodiversity Duty Delivery Plan can be viewed here: https://www.flintshire.gov.uk/en/PDFFiles/Countryside--Coast/Biodiversity/Flintshire-County-Council-Environment-Act-Section-6-Biodiversity-Duty-Delivery-Plan-update-2020.pdf

The following habitats have been identified on or surrounding the site (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

- woodland and trees
- scrub and wetlands

The following species could be present on the site or in the surrounding area (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

• all species