

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Baldock Industrial Estate, Baldock, Hertfordshire SG7 6NG

Client:

Gateley Smithers Purslow

Survey date:

9th April 2025

Project:

This report is prepared to inform a planning application with the North Hertfordshire District Council. The proposal is described as:
To demolish the fire damaged parts of the building and to erect a replacement modern steel portal frame metal profile clad building.

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The survey, results, and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Site Location and Context					
The survey site is centred on National Grid Reference TL 24675 33262 and has an area of approximately 0.72ha. The site comprises one large industrial building (B1), which was subject to a substantial fire on the 11 July 2023, resulting in widespread damage and partial collapse occurred to the majority of the site. The remainder of the site is comprised wholly of developed land; sealed surface, with the occasional ruderals growing through the cracks as the site has been left since the fire. The site is situated within the town of Baldock and is immediately surrounded by other industrial units, with residential dwellings and their associated gardens surrounding the industrial estate. The surrounding landscape is comprised of the town of Letchworth Garden city to the west, disconnected to Baldock by the A1M motorway, and arable fields to the north, east and south. Aerial imagery shows the local landscape to have an urban character, with tree lines and hedges surrounding the residential gardens, and a pocket of woodland to the south.					
Survey Details					
The site survey was undertaken by Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Senior Ecologist, an ecologist with four years of experience, and holder of Natural England survey licences for bats [2023-11066-CL17-BAT] and great crested newt [2024-11998-CL08-GCN].					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
09/04/2025	10	62	80	12	none
Survey 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. A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report. The property and adjoining units were subject to a substantial fire on the 11 July 2023 where widespread damage and partial collapse occurred to the majority of the site. Because of this access to the site is restricted due to Health & Safety Contamination, therefore, the survey was undertaken from outside the boarding and used binoculars and ladders to see the building and over the boarding. Additionally, there was no access into the building, however, there are no loft spaces onsite.					

Ecological Survey Factor Conclusion, Impact or Recommendations	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings (UKHab codes used) • u1b – Developed land/sealed surface with ruderals (81) • u1b5 – Buildings	Local notable habitats The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km, including traditional orchards, deciduous woodland, ancient woodland, lowland meadows and lowland calcareous grassland. The closest notable habitat is deciduous woodland which is located 440m east, with lowland calcareous grassland located 470m south-east, lowland meadows located 1040m north, ancient woodland located 1510m south-east and traditional orchards located 1915m south-west. On-site habitat descriptions <u>u1b – Developed land/sealed surface with ruderals (81)</u> The site is comprised wholly of developed land; sealed surface. The hard standing is comprised of tarmac and concrete and is of negligible habitat value for protected species. However, as the site has been boarded up and left, ruderals have colonised small areas through cracks in the hard standing. The ruderals are comprised of willowherb (A), buddleia (A), ivy (O), thistle (O), nettle (O), purple dead nettle (R) and with the occasional shrubs including snowberry and cotoneaster. <u>u1b5 – Buildings</u> There is one building onsite which was previously split into different units, however, the building was subject to a substantial fire on the 11 July 2023, resulting in widespread damage and partial collapse occurred to the majority of the site. The building was previously a mix of

	single storey, two-storey and three-storey sections with pitched roofs clad in corrugated metal and asbestos and flat roofs clad in bitumen felt. However, since the fire, only the flat roofs on the single storey sections to the north and south of the building, a small two-storey pitched asbestos roof to the east and a small Dutch barn style asbestos roof to the west of the building was still retained.
<i>Foreseen Impacts</i>	On-site habitats The proposed development will result in the loss of a section of the building. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats. Notable habitats No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	On-site habitats None required. Notable habitats None required. Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. This is mandatory for larger developments and comes into force for smaller developments on 2nd April 2024. The project is unlikely to trigger the requirement for a biodiversity net gain assessment as it falls under one of the exemptions (state exemption e.g. self-build, less than 25m² of habitat being impacted etc), however the Local Planning Authority may still request a net gain assessment under their own local planning policy.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site is not subject to any designation.

	Statutory designated sites (within 2km) There are two statutory sites within 2km of the site, as detailed below: <u>Weston Hill Local Nature Reserve (LNR)</u> – located 570m south Areas of rare and valuable chalk grassland rich in wildflowers, butterflies and the woodland attracts many bird species. The site has some interesting archaeology including ancient cultivation terraces and chalk workings. There are many paths throughout although some are steep. The site is carefully managed to keep a mixed habitat and encourage wildlife to flourish. <u>Ivel Springs Local Nature Reserve (LNR)</u> – located 985m north The springs, which are the source of the River Ivel, provide a diverse area for wildlife including woodland, wetland and pasture. The site was used as a household rubbish dump until the 1950s when it reverted to rough woodland. Non-statutory designated sites The presence of non-statutory designated sites within 2km of the site cannot be established without data from Herts Environmental Records Centre.
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen. Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	On-site designations None required. Statutory and non-statutory designated sites None required.

Invasive / Non-native species																
Summary of Survey Findings		Buddleia was identified on the site which is listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981.														
Foreseen Impacts		Construction is unlikely to result of the spread of buddleia into any woodland, as the site is surrounded by other industrial units and residential dwellings and their gardens.														
Recommendations		No further surveys but remain vigilant.														
Invertebrates																
Summary of Survey Findings		There is very limited habitat onsite which could provide common invertebrates with opportunities to forage and shelter. However, the small areas of buddleia could be utilised, albeit limited. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.														
Foreseen Impacts		None foreseen.														
Recommendations		No further surveys.														
Bats																
Summary of Survey Findings		EPSL data A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are two EPSLs within a 2km radius of site as detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2015-8048-EPS-MIT</td><td>Common pipistrelle</td><td>325m north</td><td>Destruction of a resting place</td></tr><tr><td>EPSM2011-3393</td><td>Brown long-eared bat and common pipistrelle</td><td>560m north</td><td>Destruction of a resting place</td></tr></table> Foraging and commuting habitat			EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2015-8048-EPS-MIT	Common pipistrelle	325m north	Destruction of a resting place	EPSM2011-3393	Brown long-eared bat and common pipistrelle	560m north	Destruction of a resting place
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	There is very limited foraging and commuting opportunities for bats onsite as the site is comprised wholly of hard standing. The small areas of ruderals could provide limited foraging opportunities. The wider landscape is much more suited for foraging and commuting bats with residential dwellings and their associated garden with scattered trees and tree-lined boundaries. Roosting habitat Buildings to be impacted by the proposed development are assessed for their suitability to support roosting bats below. There is a total of one building on site: the main industrial building (B1). No evidence of roosting bats was identified on or within B1.
<i>B1 Building description</i>	<i>Photographs</i>
B1 is a detached part three-storey, part two-storey and part single storey brick and metal-built industrial building. The majority of the pitched metal roof has collapsed due to fire damage and therefore, approximately 80% of the building no longer has a roof. The roof that remains is predominately flat roofs located throughout the large industrial building. The flat roofs are bitumen felt lined and are in good condition with no gaps in which bats could roost. As well as a large, corrugated asbestos Dutch barn roof located in the western corner of the site. The Dutch barn roof is in good condition with no gaps or missing sections under which bats could roost. The doors and windows are metal and wooden framed and appear in relatively condition with no suitable bat roosting sites. However, most of the windowpanes are broken due to the fire, allowing access internally. The majority of the brickwork around the building appears in good condition with no gaps or cracks within which crevice-dwelling bats could roost. However, on the south-eastern elevation, the walls have partially collapsed, creating large gaps within the brickwork. However, these gaps are not a suitable roosting feature as they are too exposed. There are timber and lead flashing soffits around the building which are generally in good condition.	 

On the single-storey flat roof, on the north-west elevation of the building are 10 large pitched skylights which allow high levels of light internally.



Foreseen Impacts

Roosting habitat [Buildings]

Bats are very unlikely to be roosting within this building and therefore, the impacts to bats in this location as a result of the proposed development is extremely low. However, due to the nature of the site (i.e. derelict and falling down) suitable roosting features may become present in the future, albeit unlikely.

Foraging and commuting habitat

	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. Artificial lighting The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.
<i>Recommendations</i>	Roosting habitat [Buildings] It is anticipated that any risk to bats can be reduced to an acceptably low level through the implementation of a precautionary working method during and post-development. This will include the following measures: • Works will be scheduled during the winter months (November to March) when bats are least likely to be present, insofar as is possible. • A toolbox talk will be given to contractors to make them aware of the possible presence of bats on the site. • The potential roost features will be removed by hand (where a risk still remains following the pre-commencement inspection) prior to any mechanical demolition. • 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. Foraging and commuting habitat No further surveys are required. Artificial lighting A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 Suggested biodiversity enhancements

	The installation of two bat boxes at the site will provide additional roosting habitat for bats. 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 box will be a specification suitable for crevice dwelling species such as Woodstone bat box or a similar alternative brand.
Birds	
<i>Summary of Survey Findings</i>	Buildings No evidence of nesting birds was identified externally on B1, however there was no access into the building. Pigeons were observed perching on broken metal beams internally, so the likelihood of nests internally is high. Therefore, the building is considered suitable for nesting. Trees and vegetation No suitable habitat present on site for nesting birds. Barn owls The site does not appear to provide any suitable nesting sites for barn owls. Overwintering birds Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
<i>Foreseen Impacts</i>	Buildings/trees The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Barn owls None foreseen. Overwintering birds None foreseen.

<i>Recommendations</i>	Buildings/trees Any building removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Barn owls None required. Overwintering birds None required. Suggested biodiversity enhancements The installation of a minimum of two bird boxes on the building will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box, Schwegler 1SP Sparrow Terrace, Woodstone Nest Box, or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site.

	Habitat suitability There is no suitable habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. Further, the site is comprised wholly of hard standing and is surrounded by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site. As such it is likely that reptiles are absent from the development site. Wider landscape The immediate areas adjacent to site include main access roads with kerbs and other industrial units with residential dwellings and their associated gardens to the north, east, south and west. Therefore, it is likely that the site is isolated from the wider area and so is considered suboptimal for reptiles.
<i>Foreseen Impacts</i>	No impacts are anticipated on reptiles as a result of the proposed development. The site does not form a connective pathway or stepping stone between areas of suitable reptile habitat in the wider landscape and the development is unlikely to lead to reptile habitat fragmentation.
<i>Recommendations</i>	None required.
Amphibians	
<i>Summary of Survey Findings</i>	EPSL and survey data A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site. Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and 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). No ponds are present on site or within 500m of the site.

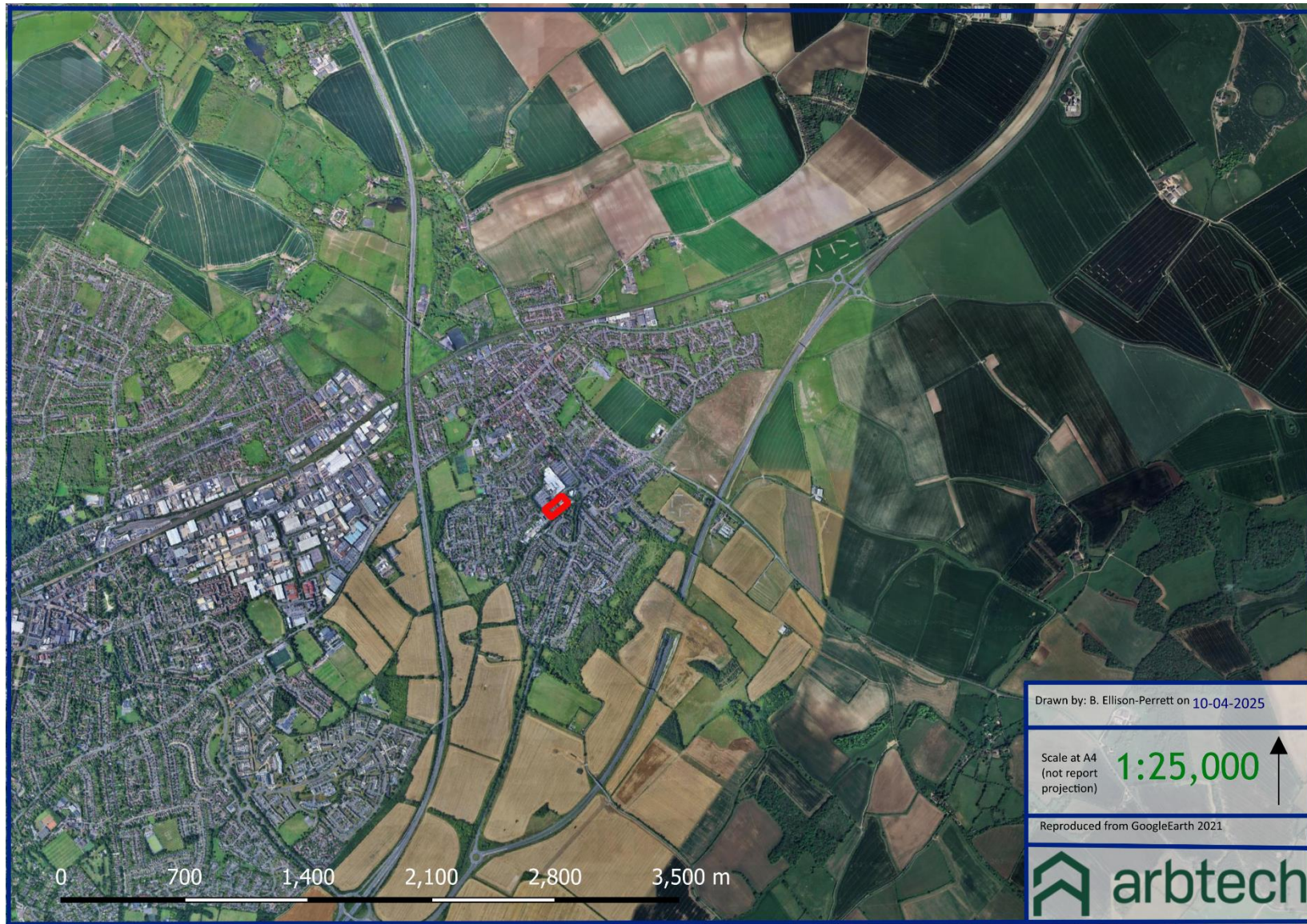
	Terrestrial habitat suitability The site provides no suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The site is comprised wholly of hard standing and the areas of ruderal do not provide adequate shelter for terrestrial amphibians. Given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. Further, there is limited suitable terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.
<i>Foreseen Impacts</i>	Given the lack of suitably connected breeding ponds within 500m of the site, the presence of GCN on-site is considered unlikely and therefore impacts to amphibians as a result of the proposed development are deemed to be acceptably low.
<i>Recommendations</i>	None required.
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The site is also surrounding by urban development (i.e. roads and buildings), which is sub-optimal habitat therefore reducing the likelihood of badgers being present within the surrounding area of the site.
<i>Foreseen Impacts</i>	No impacts are anticipated on badgers as a result of the proposed development.
<i>Recommendations</i>	None required.
Riparian animals	
<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site.

	Habitat suitability No evidence of dormice was found within the site. It is not anticipated that dormice are present on the site due to the lack of suitable habitats present. For isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright et al. 1994). There are no areas of woodland on the site that are big enough (20ha) to support a dormouse population.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The ruderal onsite provides very limited foraging and commuting opportunities for hedgehogs. However, it is surrounded by hard standing, reducing the suitability for hedgehogs. Furthermore, the boarding surrounding the site is likely to restrict access and egress of hedgehogs from the site. Although no evidence indicating the presence of hedgehogs was recorded, there is suitable, albeit limited habitat available onsite. The future presence of foraging and commuting hedgehogs for transient periods cannot be discounted.
<i>Foreseen Impacts</i>	No impacts are anticipated on hedgehogs as a result of the proposed development.
<i>Recommendations</i>	None required.

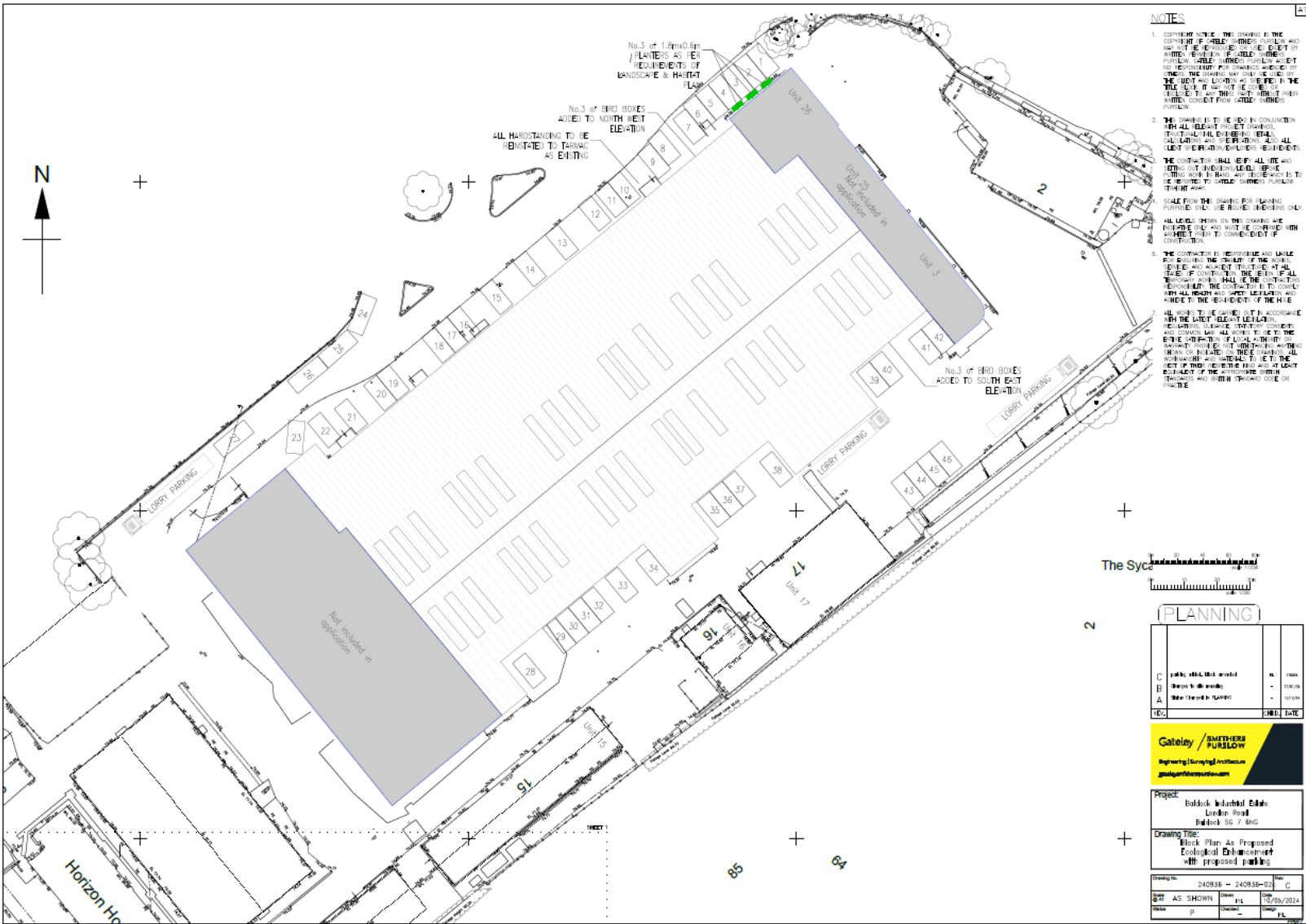
Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Habitat Photos

Developed land; sealed surface	
Photograph	Description
	The hard standing surrounding the building onsite.
Ruderals within the hard standing	
Photograph	Description
	The small areas of ruderals growing through the cracks in the hard standing.

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