



Ecological Impact Assessment (EcIA)

Survey site:

Former Buzz Bingo, 477 Hyde Road, Manchester, M12 5FL

Client:

Kellen Homes

Survey date:

04/03/2026

Project:

This report is prepared to inform a planning application with Manchester City Council. This proposal can be described as the demolition of the existing on-site building and the construction of three apartment buildings (106 apartments), and 26 residential properties with associated gardens and parking access.

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

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.

Executive Summary

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Tables 1, 3 & 4 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Protected and Priority Species	The site offers limited opportunities for birds, widespread reptiles, amphibians, and hedgehogs. A mammal burrow was identified on site, with suitable dimensions for badgers. B1 and B2 were identified as having no features present are suitable for roosting bat species.	To ensure compliance with legislation and good practice, precautionary working methods should be adopted during construction for widespread reptiles, amphibians, and hedgehogs, including maintaining vegetation at a low sward, covering excavations or providing escape ramps, and implementing sensitive lighting to avoid impacting commuting and foraging bats. B1 and B2 are being demolished, and trees along the northern boundary are being lost.	Badger surveys will be required to characterise the sett types present and the usage of the site by badgers. This will comprise the deployment of a single wildlife camera over a period of 3-4 weeks. A low impact lighting strategy will be implemented post-development. This report will be updated following the phase 2 survey results.
Notable Habitats	The closest priority habitat comprises open mosaic habitat on previously developed land, located ~230m north of the site.	No direct impacts to any designated sites will occur as a result of the proposed development, due to the low overall impact of the development from such sites (where known), alongside additional factors such as distance in combination with connectivity disrupting barriers.	None.
Biodiversity Net Gain	The proposed development will require a Biodiversity Net Gain (BNG) assessment.	The proposed development will result in the loss of areas of grassland, mixed scrub and urban trees. This will lead to a net loss in biodiversity at the site.	The BNG assessment will calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain.

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Introduction and Context

Introduction

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.

No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author's knowledge, by any other consultancy.

Methodology

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.](#)

Limitations

Whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report is a preliminary assessment and does not provide a complete characterisation of the site. Nor does it represent a full botanical assessment. It assesses the likelihood of protected, notable and important habitats and species being present, based on a site and landscape level habitat value-based risk assessment. This is based upon the ecology, biology and known distribution of species as currently understood.

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 survey was completed outside of the optimal survey period (April to October) for ground flora, and as such the accuracy of botanical assessment and condition assessment data may be limited in terms of species visible and ground conditions at the time of survey.

Results, Impacts and Recommendations

Site Location and Landscape Context

Table 1: Site location and landscape context

Site Location		
The site is located at National Grid Reference SJ 87771 96253 and has an area of approximately 1.41ha comprising one building, developed land; sealed surface, introduced shrub and modified grassland. The site is located east of Manchester city centre, on the southern side of the A57. The surrounding area is predominantly urban infrastructure with commercial buildings, residential streets and a leisure centre in close proximity. On the opposite side of the A57 is Gorton Park, a recreational park with grassland and scattered trees.		
Priority Habitats and Designated Sites		
Summary of Survey Findings		
<u>Priority Habitats</u>		
There are 3 priority habitats located within 2 km of the site. These comprise open mosaic habitat, deciduous woodland and traditional orchard. The closest priority habitat is open mosaic habitat on previously developed land, located ~230 m north of the site.		
The site is surrounded by urban development and the A57 runs adjacent to the northern boundary. The site is not considered well connected to any of the nearby priority habitats.		
<u>Designated Sites</u>		
There are no other statutory sites within 2 km of the site. There is 1 statutory site within 10 km of the site. This is listed below:		
Table 1a: Statutory sites within 10km of the site.		
Designation	Reason for designation	Distance from site
Rochdale Canal SAC 10km	A review of the JNCC database shows that the Rochdale Canal received its designation due to its capability to support significant populations of floating water-plantain	4805m N

		Luronium natans in a botanically diverse waterplant community which also holds a wide range of pondweeds Potamogeton spp.	
The site does fall within the impact risk zone for Hollinwood Branch Canal SSSI however, the proposed development type is not listed as possible high risk with regard to this designation. The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre. Whilst some habitats in the wider landscape may host designations, the immediate environs of the site do not host habitats likely to be of designable quality. Impacts No direct impacts to any designated sites will occur as a result of the proposed development, due to the low overall impact of the development from such sites (where known), alongside additional factors such as distance in combination with connectivity disrupting barriers. Recommendations No recommendations.			

Habitats and Flora

The site survey was undertaken by Nicola Baxter BSc (Hons), MSc (Hons), Consultant Ecologist.

Table 2: Survey weather conditions

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
04/03/2026	10.3	68	46	7.1	None

Table 3: Habitats and flora

Habitats and Flora: Conclusion, Impact or Recommendations <i>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.</i>
Onsite habitats
Summary of Survey Findings <u>Developed land: sealed surface (u1b)</u> The site is predominantly comprised of developed land sealed surface in the form of carparking and hard standing. In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, this habitat is not subject to a condition assessment and is automatically assigned a N/A condition. <u>Built-up areas and gardens (u1) - Introduced shrub (847)</u> Ornamental planting is present within the carparking species include. Species present within this habitat include willow-leaved cotoneaster (<i>Cotoneaster salicifolius</i>), laurustinus (<i>Viburnum tinus</i>), dogwood (<i>Cornus sanguinea</i>), cloudberry (<i>Rubus chamaemorus</i>) and barberry (<i>Berberis vulgaris</i>).

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, this habitat is not subject to a condition assessment and is automatically assigned a N/A condition.

Modified grassland (g4)

Low diversity modified grassland is present along the verges between the site and the adjacent property to the east. The grass is regularly mown.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the modified grassland was assessed to have a poor condition value.

Table 3a: Modified grassland species abundance.

Abundance	Species
Dominant	Perennial rye-grass (<i>Lolium perenne</i>)
Abundant	Cock's-foot (<i>Dactylis glomerata</i>)
Frequent	Red fescues (<i>Festuca rubra</i>), cleavers (<i>Galium aparine</i>), dandelion (<i>Taraxacum</i>)
Occasional	Creeping buttercup (<i>Ranunculus repens</i>), ground-elder (<i>Aegopodium podagraria</i>)
Rare	-

Mixed scrub (h3h)

Multiple sections of mixed scrub across the site.

Species present within this habitat include ash (*Fraxinus excelsior*), dogwood (*Cornus sanguinea*), dog roses (*Rosa canina*), small-leaved lime (*Tilia cordata*) and bramble (*Rubus fruticosus*).

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the mixed scrub was assessed to have a poor condition value.

Scattered Trees (32)

17 trees are present on site, comprising 7 small and 10 medium size. The survey identified common oak (*Quercus robur*), elder (*Sambucus nigra*), common ash (*Fraxinus excelsior*), and goat willow (*Salix caprea*), all of which are native to the UK. Several common oaks were assessed as being in good condition, with one exhibiting fissured bark and another showing moss on its stem and deadwood in its canopy. Two common ash trees were also in good condition, one with fissured bark and superficial crevices, and another with fungi present on its stem. A goat willow, assessed as moderate condition, presented historically felled stump with deadwood. Other common oaks and common ash were assessed as moderate condition, with no specific ecological niches noted for these individuals. All trees on site are young or semi-mature.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the individual trees were assessed to have the following condition values:

Table 3b: The individual condition scores of each tree on site.

No.	Tree	Condition Score	Size Category
#1	Common Oak (<i>Quercus robur</i>)	Good	Medium
#2	Elder (<i>Sambucus nigra</i>)	Good	Medium
#3	Common Ash (<i>Fraxinus excelsior</i>)	Good	Medium
#4	Common Oak (<i>Quercus robur</i>)	Moderate	Medium
#5	Common Ash (<i>Fraxinus excelsior</i>)	Good	Medium
#6	Common Oak (<i>Quercus robur</i>)	Good	Medium
#7	Common Oak (<i>Quercus robur</i>)	Good	Medium
#8	Common Oak (<i>Quercus robur</i>)	Moderate	Medium
#9	Goat Willow (<i>Salix caprea</i>)	Moderate	Small
#10	Small-leaved Lime (<i>Tilia cordata</i>)	Good	Medium

#11	Small-leaved Lime (<i>Tilia cordata</i>)	Good	Medium
#12	Silver Birch (<i>Betula pendula</i>)	Moderate	Small
#13	Silver Birch (<i>Betula pendula</i>)	Moderate	Small
#14	Silver Birch (<i>Betula pendula</i>)	Moderate	Small
#15	Common Ash (<i>Fraxinus excelsior</i>)	Moderate	Small
#16	Silver Birch (<i>Betula pendula</i>)	Moderate	Small
#17	Ash (<i>Fraxinus excelsior</i>)	Moderate	Small

Building (u1b5)

There are two buildings on site; one is a disused commercial building and one is an out-building. Full details for buildings on site are included within Table 4.

Impacts

The proposed development will result in the loss of modified grassland, mixed scrub, urban trees and introduced shrub. This will lead to a net loss in biodiversity at the site.

Recommendations

The proposed development may require a Biodiversity Net Gain assessment, to calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain.

Invasive / Non-native species

Summary of Survey Findings

No non-native invasive plants were recorded on site or are considered likely to be on site, but, given seasonal limitations and the sites wider context, may be visible at other times of year.

Buddleia Buddleja davidii was recorded within sections of the introduced shrubs and mixed scrub in the western section of the site and in

the central carpark area. Although this species is not recorded in Schedule 9 of the Wildlife and Countryside Act. (1981) (as amended), it is generally regarded as a species of concern for native flora due to its highly competitive nature and ability to outcompete native sources of nectar. It is acknowledged by the Department for Environment, Food & Rural Affairs (Defra) as a non-native species with invasive tendencies.

Impacts

Buddleia can spread if not removed from the site and could colonise other areas of the site post-development. This could lead to native flora being outcompeted and decrease native diversity across the site, with detrimental impacts to nectar sources for invertebrates.

Recommendations

No further surveys but remain vigilant. Regarding management, the foliage of the buddleia should be cut to stump level and either chipped on site or removed immediately and disposed of at an appropriate facility. The roots can then be pulled and either chipped or immediately removed to a disposal unit. The areas where the plants were located can then be monitored to ensure that no new growth appears. If new growth is recorded, the steps taken previously will be undertaken again and repeated until complete eradication of the plant from the site.

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Fauna

Table 4: Fauna

Fauna: Conclusion, Impact or Recommendations

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.

Roosting Bats

Summary of Survey Findings

A review of the MAGIC database for European Protected Species Licences (EPSL) for bats within a 2km radius of the site has been completed. 3 EPSL were identified, as detailed below:

Table 4a: EPSL records within 2km of the site - bats

EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
2016-22910-EPS-MIT	Common pipistrelle	~980m southwest	Destruction of a resting place
2016-22910-EPS-MIT-1	Common pipistrelle	~980m southwest	Destruction of a resting place
2015-17752-EPS-MIT	Common pipistrelle	~1.4km west	Destruction of a resting place

No buildings or trees were present on site with suitable roosting features for bats to utilise.

Buildings

Building B1 Description

B1 is a two-storey, detached, brick-built, disused commercial building. The main roof is flat and constructed of bitumen felt. No bat evidence was found during the survey of this building.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B1 is assessed to have negligible habitat value for roosting bats due to the absence of any external roosting features and no suitable internal void space makes the building unsuitable for roosting crevice dwelling or void dwelling bat species.





B1 – Internal roof structure

Building B2 Description

B2 is a single-storey, detached, metal-framed out-building. The structure features a curved roof clad in metal sheeting. No internal voids were recorded. No bat evidence was found anywhere within the building.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B2 is assessed to have negligible habitat value for roosting bats due to no features present suitable for roosting bats.



	B2  Internal view of B2

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Trees

Trees along the northern boundary are to be lost as part of the development. Specifically, T1-T5, T7-T11, and T17.

Impacts

No impacts on roosting bats are anticipated.

Recommendations

None.

Foraging and Commuting Bats

Summary of Survey Findings

On-site scrub and Off-site tree lines could be used by local bat populations for foraging and commuting.

Impacts

The proposed development will result in the loss of modified grassland, introduced shrub and developed land sealed surface. Given the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats.

Recommendations

A low impact lighting strategy will be adopted for the site during and post-development, which will be designed to incorporate the measures laid out in the latest (2023) bat lighting guide Guidance Note 8 Bats and Artificial Lighting¹.

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats:

- Planting of locally characteristic tree, shrub and hedgerows to increase foraging opportunities.

Amphibians

Summary of Survey Findings

On-site habitats include sealed surfaces, poor diversity grassland, introduced shrub and unmanaged mixed scrub. No ponds were recorded on-site. The grassland and scrub are separated from each other by areas of sealed surface so do not provide suitable terrestrial habitats for individual amphibians migrating across the site. Whilst the habitats are suboptimal for foraging and commuting the scrub along the boundary does provide some value and therefore the presence of common amphibians cannot be discounted.

A review of MAGIC database found no granted EPSL for great crested newts (GCN) within 2km of the site.

A check was also completed for great crested newt class survey license returns and historic pond surveys. 6 records were identified, as detailed below:

Table 4b: Great crested newt class survey license returns and historic pond surveys

Record Type	Distance to Site
Great crested newt class survey license returns	~1.8km southeast
Great crested newt class survey license returns	~1.8km southeast
Great crested newt class survey license returns	~1.8km southeast

Great crested newt class survey license returns	~1.8km southeast
Great crested newt class survey license returns	~1.8km southeast
Great crested newt class survey license returns	~1.8km southeast

No ponds are located on, or adjacent to, the site. A review of aerial imagery shows there is a single man-made ornamental pond ~35m to the east of the site.

No ponds were found on-site. There is a fountain ~35m to the east, in the carpark of the neighbouring property. It is a man-made pond with a fountain, it has high vertical sides, no submerged vegetation and there is a pump system to create a continuous current. These factors and the lack of suitable terrestrial habitat make the fountain unsuitable for great crested newts.

Impacts

The proposed development will result in the loss of ~0.185ha of mixed scrub, grassland and introduced shrub within 100m of a potential breeding pond, if great crested newts are present. When completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a 'green' risk score, which states: 'offence highly unlikely'.

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures:

- A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians 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 amphibians 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 amphibians from utilising these areas.
- Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians 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 common amphibians 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.
- In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist.

Reptiles

Summary of Survey Findings

The scrub on site provides suitable shelter, foraging opportunities for reptiles, albeit suboptimal due to the lack of connectivity to other suitable habitats. The wider landscape offers limited habitat for reptiles due to the urban infrastructure lack of mosaic habitat favoured by reptiles, however the scrub and introduced shrubs will provide some value. As such, the presence of reptiles on site cannot be discounted.

Impacts

The proposed development will result in the loss of mixed scrub and introduced shrub. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more suitable habitat locally. However, site clearance could result in the death or injury of reptiles, if present.

Recommendations

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 for widespread reptiles during construction, including the following measures:

- Site clearance works will be undertaken during the amphibian hibernation season (November to February) insofar as is possible.
- 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.
- Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.

- If any reptiles 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.

Birds

Summary of Survey Findings

No evidence of nesting birds was identified on or within the vegetation on-site, however the trees, introduced scrub and mixed scrub provide suitable shelter and could be used by common nesting 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.

Impacts

Mixed scrub and introduced shrubs 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.

Recommendations

Any vegetation 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, depending on species present, until the young have fledged.

Badgers

Summary of Survey Findings

The grassland, and mixed scrub on site offer foraging, commuting and sett excavation opportunities for badgers. A burrow entrance was identified within the grassland along the northern boundary, in the direction of the park across the road. A single entrance was identified, no spoil heaps, latrines or mammal paths were found on-site but the dimensions of the opening and shape are consistent with badgers. The entrance measured 12" wide, 6.5" tall, with an approx. depth of 11" before extending horizontally. The burrow entrance appeared to travel in a northern direction, underneath the adjacent Hyde Road, in the direction of the neighbouring Gorton Park.

Impacts

The proposed development could result in the destruction of the unconfirmed sett on the site and could kill or injure any badgers present.

Recommendations

Badger surveys will be required to characterise the sett types present and the usage of the site by badgers. This will comprise the deployment of a single wildlife camera over a period of 3-4 weeks. Such surveys can be undertaken throughout the year, in accordance with current survey guidelines (Harris et al, 1989). Disturbance, damage or destruction of active badger setts will require a badger development licence.

Riparian animals

Summary of Survey Findings

There are no riparian habitats on or adjacent to the site.

Impacts

No impacts are anticipated on riparian animals as a result of the proposed development.

Recommendations

None.

Hazel dormouse

Summary of Survey Findings

The site lies outside of the known current range for hazel dormice. There are no suitable habitats on site to support hazel dormice.

Impacts

No impacts are anticipated on hazel dormice as a result of the proposed development.

Recommendations

None.

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Invertebrates

Summary of Survey Findings

The site provides limited habitat value for a variety of commonplace species but is unlikely to support important species and assemblages. In particular, the deadwood will provide value to saproxylic invertebrates.

Impacts

The proposed development will result in the loss of mixed scrub, urban trees and introduced shrub. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat locally.

Recommendations

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates:

- Retention of scrub pockets
- Planting of pollinator friendly grassland species
- Installation of insect hotels
- Incorporation of log piles/dead wood
- Incorporation of bee bricks into the fabric of the new building. These should be installed 0.5m above ground level on a south-facing elevation with no obscuring vegetation
- Creation of rock and brash piles.

Other e.g. small mammals

Summary of Survey Findings

The scrub on site offers suitable foraging, sheltering and commuting opportunities for small terrestrial mammals such as hedgehogs. The site is well connected to more extensive habitats such as residential gardens to the south and Gorton park to the north, which could host established populations.

Although the connectivity of the site is limited with the surrounding urban infrastructure, hedgehogs are common to urban areas and can commute through gardens and gaps in fencing. As such, the presence of foraging, sheltering and commuting small mammals on site cannot be discounted.

Impacts

The proposed development will result in the loss of mixed scrub, urban trees and introduced shrub. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.

Recommendations

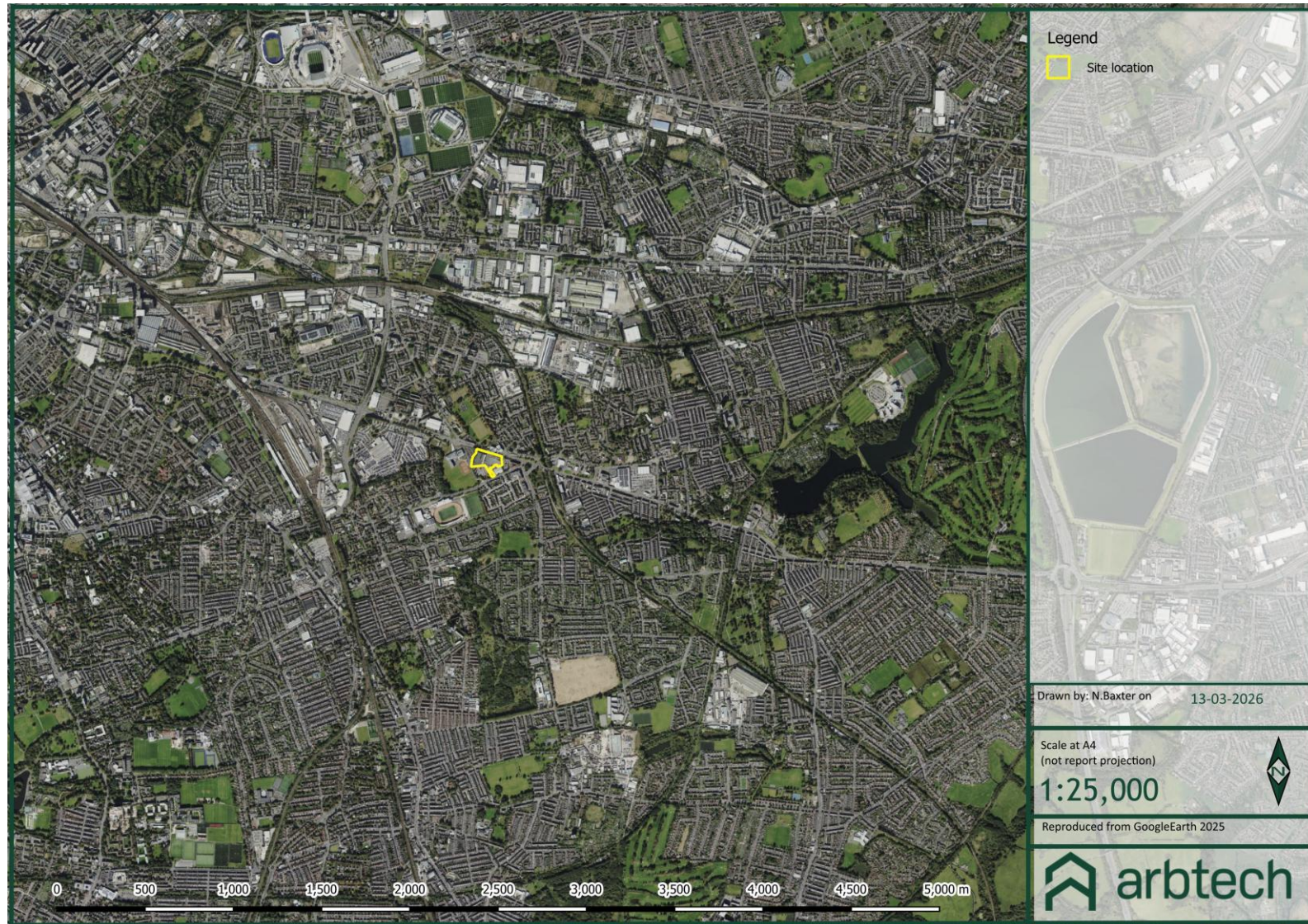
A precautionary working method will be implemented during construction, including the following measures:

- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- Any pipework exceeding 100mm will be capped overnight.
- 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 small mammals 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.

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:

- Creation of fence gaps (14cm x 14cm) to enable small mammals to travel freely through the site
- Creation of brash piles
- Installation of hedgehog houses in shady areas.

Appendix 2: Site Location Plan



Appendix 3: Habitat Survey Plan



Appendix 7: Site Photographs



Photo 1: Developed land; sealed surface



Photo 2: Introduced shrub



Photo 3: Modified grassland



Photo 4: Mixed scrub



Photo 5: Common Oak (Quercus robur)



Photo 6: fissured bark



Photo 7: Elder (Sambucus nigra)



Photo 8: Fissured bark



Photo 9: Common Ash (*Fraxinus excelsior*)



Photo 10: Fissured bark



Photo 11: Common Oak (*Quercus robur*)



Photo 12: Common Ash (*Fraxinus excelsior*)



Photo 13: Fungi on ash stem



Photo 14: Common Oak (*Quercus robur*)



Photo 15: Moss on stem.



Photo 16: Common Oak (*Quercus robur*)



Photo 17: deadwood.



Photo 18: Common Oak (Quercus robur)



Photo 19: Goat Willow (Salix caprea)



Photo 20: historically felled stump.



Photo 21: Small-leaved Lime (*Tilia cordata*)



Photo 22: Fissured bark



Photo 23: Small-leaved Lime (*Tilia cordata*)



Photo 24: fissured bark and ivy.



Photo 25: Silver Birch (Betula pendula)



Photo 26: Silver Birch (Betula pendula)



Photo 27: Silver Birch (Betula pendula)



Photo 28: Common Ash (Fraxinus excelsior)



Photo 29: Silver Birch (*Betula pendula*)



Photo 30: Ash (*Fraxinus excelsior*)



Photo 31: B1



Photo 32: Eastern elevation



Photo 33: View of internal roof structure



Photo 34: Internal view of B2



Photo 35: B2



Photo 36: Potential sett entrance

Appendix 8: Baseline Condition Assessments

Table 8a: Modified grassland condition assessment.

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	N
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 5/7
	Condition Poor due to failing one or more essential criteria.	

Table 8b: Mixed scrub condition assessment.

	Criteria Description	Criteria Passed?
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). At least 80% of scrub is native; There are at least three native woody species ² ; And no single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	N
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	N
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	Y
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	N
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N
		Total 1/5
	Condition Poor due to passing 1 of 5 criteria and all essential criteria.	

Table 8c: Scattered trees - #1 Common Oak (*quercus robur*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8d: Scattered trees - #2 Elder (*sambucus nigra*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8e: Scattered trees - #3 Common Ash (*fraxinus excelsior*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8f: Scattered trees - #4 Common Oak (*quercus robur*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8g: Scattered trees - #5 Common Ash (*fraxinus excelsior*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8h: Scattered trees - #6 Common Oak (*quercus robur*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8i: Scattered trees - #7 Common Oak (*quercus robur*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8j: Scattered trees - #8 Common Oak (*quercus robur*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8k: Scattered trees - #9 Goat Willow (*salix caprea*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8I: Scattered trees - #10 Small-leaved Lime (*tilia cordata*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8m: Scattered trees - #11 Small-leaved Lime (*tilia cordata*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8n: Scattered trees - #12 Silver Birch (*betula pendula*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8o: Scattered trees - #13 Silver Birch (*betula pendula*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N
		Total 3/6
	Condition Moderate due to passing 3 of 6 criteria and all essential criteria.	

Table 8p: Scattered trees - #14 Silver Birch (*betula pendula*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N
		Total 3/6
	Condition Moderate due to passing 3 of 6 criteria and all essential criteria.	

Table 8q: Scattered trees - #15 Common Ash (*fraxinus excelsior*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8r: Scattered trees - #16 Silver Birch (*betula pendula*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8s: Scattered trees - #17 Ash (*fraxinus excelsior*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

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Version Control

Status	Issue	Name	Date
Draft	0.1	Nicola Baxter BSc (Hons), MSc (Hons), Consultant Ecologist	13/03/2026
Reviewed	0.2	Elen Griffin BSc (Hons), MRSB, Senior Ecologist, Class 2 Bat Licenced	16/03/2026
Final	1.0	Nicola Baxter BSc (Hons), MSc (Hons), Consultant Ecologist	17/03/2026