
EASTLANDS ARENA LIMITED

CANALSIDE MANCHESTER

PRELIMINARY ECOLOGICAL APPRAISAL

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May 2025

Client	Eastlands Arena Limited
Site	Canalside Manchester
NGR	SJ 86809 98794
Report Title	Preliminary Ecological Appraisal
Surveyor and author	Helen Hamilton
Date of issue	23 rd May 2025
Status	Final

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1. INTRODUCTION

- 1.1 Helen Hamilton Ecology Ltd was commissioned by Eastlands Arena Limited to prepare a preliminary ecological appraisal and biodiversity net gain report for Canalside, Manchester, situated near Co-op Live, 1, Sportcity Way, Greater Manchester, England (NGR SJ 86809 98794).
- 1.2 This preliminary ecological appraisal is to support the planning application for the Canalside project, within the existing Co-Op Live boundary. The proposals are for a two-storey building, comprising food, beverage and retail space with associated WC, lighting, and other associated works, including external seating areas, integrated into the existing area of landscaping at Co-op Live.
- 1.3 The report provides detail of the methods used and contains:
- Desk study containing open-source information from <https://magic.defra.gov.uk/>
 - Habitat survey
 - Ecological recommendations.

Legislative and Policy Context

- 1.4 This text provides an overview of relevant legislation, and the actual wording of the statutes should be referred to for more detail where needed.
- 1.5 A range of international and national legislation has been established in the UK to protect important nature conservation sites and species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended); further details can be obtained from the Joint Nature Conservation Committee (JNCC) web site at www.jncc.defra.gov.uk.
- 1.6 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA), 1981 (as amended) and Countryside and Rights of Way (CROW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).
- 1.7 At the national level, the UK Post-2010 Biodiversity Framework published in 2012 is the Government's response to the Convention on Biological Diversity (2010). It describes the UK's biological resources, commits a detailed plan for the protection of these resources within the UK's devolved framework across England, Wales, Scotland, and Northern Ireland. The document identifies future priorities for nature conservation and adopts a more strategic approach, including ecosystem services and sustainability alongside biodiversity. Despite administrative changes following devolution, there is still an underlying objective of protecting and enhancing a range of priority species and habitats, often still based on the objectives and classifications of the original UK Biodiversity Action Plan.
- 1.8 Biodiversity 2020 is England's national biodiversity strategy. Building on the Natural Environment White Paper published in 2011, this provides a means of delivering the international and EU

commitments to biodiversity. Under Biodiversity 2020, Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

1.9 Finally, the National Planning Policy Framework (NPPF 2024) states that planning policies and decisions should “*contribute to and enhance the natural and local environment by:*

- a) *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b) *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- c) *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- d) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;*
- e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

Biodiversity Net Gain (BNG)

1.10 Under the Environment Act 2021 and its associated Statutory Instruments (Regulations), it is now mandatory for most major developments, and for many smaller developments, to achieve a minimum of 10% net gain. This is measured using a standard metric calculation undertaken by a competent person. It is based upon the on-site habitats present pre-development, and those that are to be created or enhanced.

1.1 One of the main principles of BNG is to achieve a balance between the need for development and the natural environment. BNG requires the developer to either incorporate additional habitat spaces or mitigate the loss by providing it elsewhere. BNG does not replace the mitigation hierarchy for valued ecological features, of AVOID – MINIMISE – MITIGATE - COMPENSATE.

1.11 Several exemptions exist where BNG is not required¹. E.g. Developments where no priority habitat is affected, and on-site habitats are less than 5m x 5m in area (25 square metres). Also planning permissions for development on sites with a biodiversity value of zero, i.e. no gain is required.

¹ <https://www.gov.uk/guidance/biodiversity-net-gain>

2. METHODS

- 2.1 All survey and reporting was undertaken by Helen Hamilton MCIEEM². Helen is appropriately experienced and qualified to conduct surveys of this type based on the CIEEM competencies for survey (CIEEM 2022).

Desk Study

- 2.2 The Multi-Agency Geographic Information for the Countryside website³ (MAGIC) was consulted on 10/4/25, to seek information on:

- European protected sites within 2km
- Nationally Protected sites within 1km
- Priority Habitats within 500m
- European protected species data within 500m.

- 2.3 Some protected species and non-statutory site data were included from an older report (dated 2023, also for Eastlands Arena Limited)⁴.

- 2.4 It is important to note that the desk study results provide an indication of the species and habitats present in and around the site, and do not confirm current presence or absence of any.

Habitat Survey

- 2.5 The habitat survey was carried out on 9th April 2025 in bright sunshine.

- 2.6 The habitat survey provides the basis for this preliminary ecological assessment (PEA) which has been prepared following CIEEM guidance (CIEEM 2017). Habitats were mapped within the site boundary (see Figure 1) according to UKHAB system of assessment (UKHAB Ltd 2023). Summary plant species lists were compiled for each habitat. Condition assessments (where needed) followed the Statutory Biodiversity Metric (July 24) approach. Botanical nomenclature followed Stace (2019). Any invasive non-native species were noted, as well as those indicating sub-optimal condition.

Protected Species

- 2.7 Evidence and potential for protected species such as bats, nesting birds and badgers was sought during the survey.

Biodiversity Net Gain

- 2.8 The requirement for Statutory Biodiversity Metric (Defra 2024) was assessed, based upon the findings of the surveys.

² Full Member of Chartered Institute of Ecology and Environmental Management (CIEEM)

³ <https://magic.defra.gov.uk/magicmap.aspx>

⁴ It is not normal practise to include older data such as this, but given the tiny size of this site a fresh data request was not seen as appropriate, and the information provides sufficiently recent supporting evidence for the site's assessment.

Ecological Impacts

- 2.9 Potential ecological impacts were identified and relevant studies reviewed to assess the significance of these. Appropriate mitigation and compensation recommendations were made.

Limitations

- 2.10 For the field work, no access limitations were experienced. Field survey timing was acceptable, and for this site it is considered that all important plants were identified adequately for the assessment.

3. RESULTS

Desk Study

- 3.1 The desk study was centred around a national grid reference of SJ 86809 98794.
- 3.2 There are no European protected sites within 2km of site. There are no Sites of Special Scientific Interest (SSSI) within 1 km. There are no National Nature Reserves (NNR) within 1km. Clayton Vale Local Nature Reserve (LNR) is situated 760m to the east of the development site, across Alan Turing Way.
- 3.3 Only one non-statutory Local Wildlife Site⁵ (LWS) is located within 500m. The Ashton Canal Site of Biological Importance (SBI) is approximately 8m south of the site. The canal is rated a 'Grade B' SBI and is 4.9km in length. The canal is an important wildlife corridor linking Ashton with Manchester via Openshaw and provides an important accessible natural greenspace in an otherwise urban landscape. The canal supports a range of aquatic and marginal vegetation, including the European Protected Species floating water-plantain (*Luronium natans*) and the 'endangered' grass-wrack pondweed (*Potamogeton compressus*). Both plants are Priority Species for biodiversity on Section 41 of England's NERC Act 2006. Canals are a Greater Manchester Biodiversity Habitat.
- 3.4 One area of Priority Habitat Deciduous Woodland is located within 500m: 285m to the northeast across Alan Turing Way. Additionally, an area of Priority Habitat Wood Pasture and Parkland is situated 285m to the northeast, also across Alan Turing Way.
- 3.5 In terms of Protected Species, two species of bat have been recorded within 1km of the site, namely common pipistrelle (*Pipistrellus pipistrellus*) and a single record for soprano pipistrelle (*P. pygmaeus*) over 500m to the northeast of the site across Alan Turing Way. Badgers (*Meles meles*) are present within the search area, but all records are at least 300m from the site boundary and on-site habitats are completely unsuitable. The European protected species floating water-plantain also occurs within the search area, on the Ashton Canal approximately 144m to the northwest. The record dates from 2001, in Lock 4.
- 3.6 The Priority Species European Hedgehog (*Erinaceus europaeus*) have been recorded within the search area, to the northwest, but not adjacent to the site and on-site habitats are not suitable.

Habitat Survey

- 3.7 The site total area is 0.0453ha.
- 3.8 The site is an existing area of completely developed sealed land to the south of the newly constructed COOP Live venue. The hardstanding is either stone paving or hardwood decking on a steel frame. On top of this structure, there are two large planters landscaped with a total of four young urban trees and perennial herbaceous plants, all mulched with bark.
- 3.9 The site is illustrated in Plates 1 and 2.

⁵ Taken from data search for a previous report for same client, dated 2023.

Plate 1 Canalside Southeast View

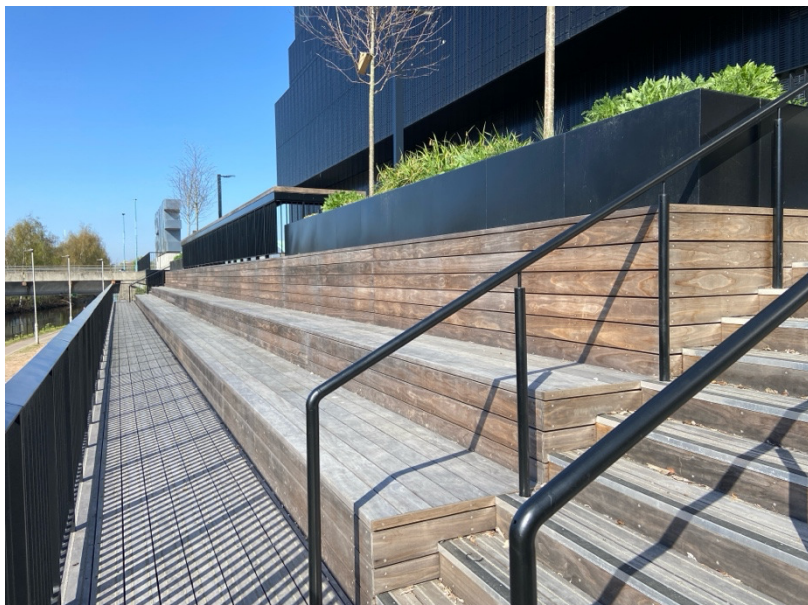


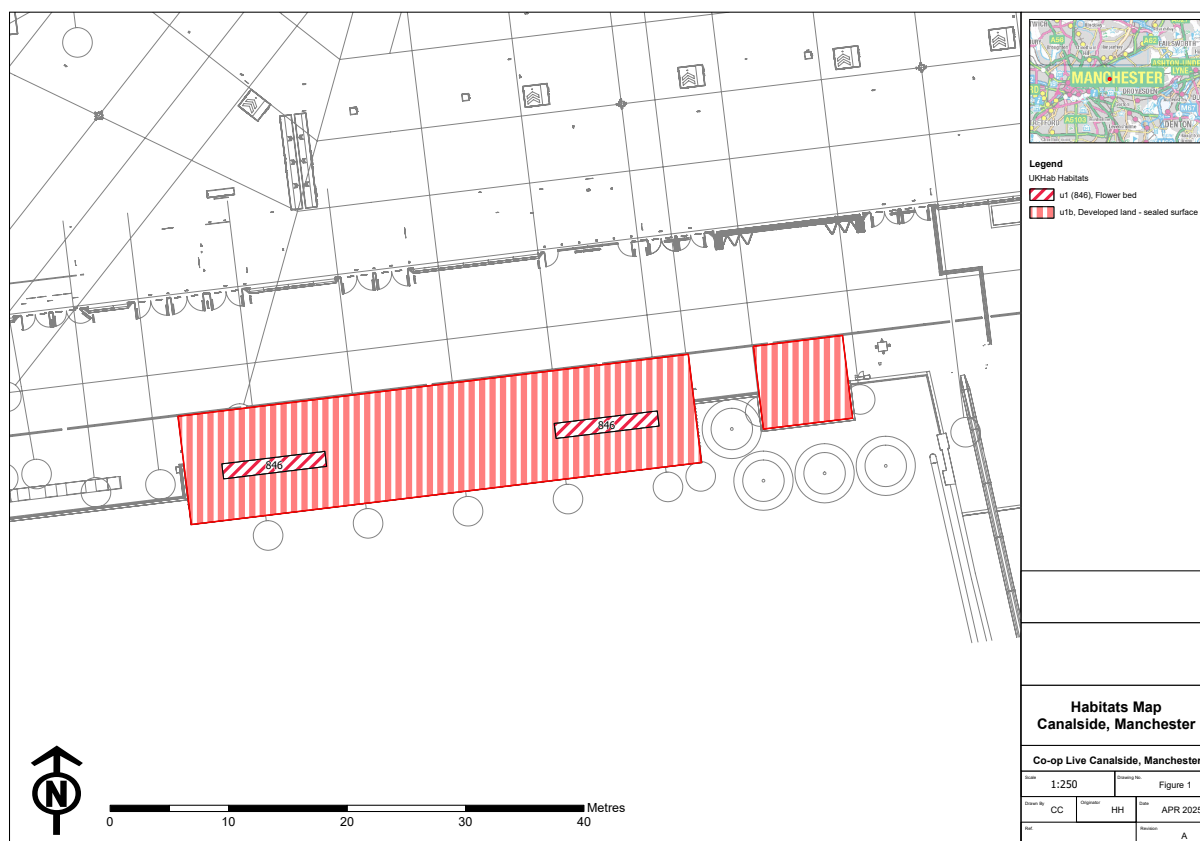
Plate 2 Canalside Northeast View



- 3.10 Figure 1 presents the map of existing habitats recorded on site according to the UKHAB codes.
- 3.11 Table 1 presents habitat descriptions for each part of the site. The condition of the developed land was not assessed.
- 3.12 Table 2 lists the botanical species with abundance categories: D=dominant, A=abundant, F=frequent, O=occasional, R=rare. A number are ornamental non-natives, with some native 'weeds' self-seeded also. Overall, the site is extremely species-poor, with a total of ten plant species recorded, including the trees.

- 3.13 In terms of protected species, no evidence was noted on site, and there were no suitable habitats. There were no invasive non-native species. The bat and bird boxes situated on the trees (as described in Table 1) were not occupied.

Figure 1 Habitats Map - Existing



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Table 1 Habitat Descriptions & Areas

Area habitats				Area Existing	Area Proposed
UK HAB CODE & NAME	SBM HABITAT NAME	DESCRIPTION	CONDITION	ha	ha
u1b Developed land - sealed surface	Developed Land sealed	Hardstanding of either hardwood or grey stone pavers. Well-maintained with no vegetation established.	NA	0.0430	0.0453
u1b, 846 Developed land - sealed surface, Flower bed	Developed Land sealed	Two large planters containing limited diversity perennial herbaceous plantings, plus two young urban trees in each (Sorbus aria). Planters mulched with bark. Planters are completely isolated from the ground, making them 'street furniture' within the u1b category. They do have some value though, and some weed plants have self-seeded into the boxes. The four trees were all of trunk diameter less than 10cm. Trees contained a single bat box and a bird box with no evidence of occupation.	NA	0.0023	0
			TOTAL	0.0453	0.0453

Table 2 Botanical Species

Common Name	Scientific name	* Ornamental	U1b, 846
WOODY			
Swedish whitebeam	<i>Sorbus aria</i>	*	O
HERBACEOUS			
Chickory	<i>Stellaria media</i>		R
Cone-flower species	<i>Echinacea sp.</i>	*	O
Hairy bittercress	<i>Cardamine hirsuta</i>		O
Nettle-leaved goosefoot	<i>Chenopodium murale</i>		R
Pendulous sedge	<i>Carex pendula</i>		O
Perennial rye-grass	<i>Lolium perenne</i>		O
Soft rush	<i>Juncus effusus</i>		R
Tansy	<i>Tanacetum vulgare</i>	*	O
Yarrow cultivar	<i>Achillea millefolium</i>	*	O

Biodiversity Net Gain

- 3.14 The whole site is classified as u1b - developed land, sealed, and thus has 'zero' value in the Statutory Biodiversity Metric. Therefore, the site qualified for a 'de minimis' exemption and no BNG calculation is needed.
- 3.15 Some thought was given to this, because the planters encompass an area of 0.0023ha which is close to the minimum habitat threshold (of 0.0025ha). However, given their isolation from the ground surface, their recent establishment (within past 2 years as part of COOP Live development) and very limited flora, classing them as a formal habitat as listed in the metric seems inappropriate. They seemed more like 'street furniture' than habitat at this time.
- 3.16 In addition, it is suggested to reuse the plants including the trees in similar features to be established on top of the proposed new structure, so much of the existing ecological value could be retained on site. Plans for this aspect are yet to be decided so the areas given in Table 1 represent a worst-case scenario in which no planter habitat is retained/recreated in the new development.

4. ECOLOGICAL IMPACTS

Figure 2 Habitats Map – Proposed



Proposals

- 4.1 Figure 2 presents the post development habitat map. Plates 3 and 4 illustrate the indicative proposals for the site, from the same perspectives as shown in Plates 1 and 2. Table 1 shows the areas of each habitat pre- and post-development.
- 4.2 Potential ecological impacts of proposals are:
- Habitat loss
 - Disturbance by lighting (bats)
 - Disturbance by noise (bats).

Plate 3 Indicative Proposals Southeast View



Plate 4 Indicative Proposals Northeast View



Habitats

- 4.3 No significant impacts upon habitats are anticipated.
- 4.4 Habitat losses are minimal at this site as it is already fully developed land on sealed ground. Two large planters contain vegetation but are new-established, very species-poor and referenced within the urban category (u1b developed land, sealed). In addition, their size is below the minimum habitat area requiring BNG (i.e. less than 5m x 5m). For these combined reasons, the planters were not considered to qualify for statutory biodiversity net gain. The loss of habitat due to the proposals is considered insignificant.

- 4.5 However, the planters and their vegetation do provide some (albeit limited) habitat for invertebrates and potential small-scale food source for birds and other wildlife. It is proposed to re-use as much of the vegetation as new planting configurations on the site, or nearby so that some habitat structure is retained locally.

Lighting

- 4.6 Lighting could potentially affect bats using the canal for foraging and commuting. The only bat species recorded within 500m are common pipistrelle, with soprano pipistrelles present within 1km.
- 4.7 Me Engineers have prepared a Lighting Impact Assessment (2025), which includes consideration of the proximity of the Ashton Canal to the proposals. The report characterises the existing lighting conditions as 'E3' environmental zone – i.e. a suburban setting with medium district brightness.
- 4.8 The proposed lighting scheme has been designed to ensure that any lighting impacts to the canal are minimised; this has been achieved by:
- Design to the minimum light levels recommended by good practice guidance for each space and task area.
 - Internal lighting designed to focus within the building itself.
 - Use of dimmable lighting controls to fine tune the lighting treatments throughout the course of the evening utilising programmable digital timeclock.
 - The street lighting column previously erected to this edge to be removed and will not be replaced.
 - Using warm white light sources to both internal and external spaces of the building.
 - Only LED light sources with intrinsically negligible UV output to be utilised.
 - All external lighting will abide by the recommendations set forth in the Institute of Lighting Professionals (ILP) Guidance Note (GN08/23) 'Bats and Artificial Lighting at Night (2023)'.
- 4.9 As a result of the above, this assessment anticipates minimal further lighting impacts on bats (and other nocturnal wildlife) using the Ashton Canal from the proposals. The area is already impacted by existing lighting and canal towpath illumination. In fact, the removal of an existing lighting column and use of lower impact light wavelengths seems likely to slightly reduce the impact of illumination on bats overall, especially as the venue will not be operating all night.

Noise

- 4.10 Noise could potentially affect bats using the canal for foraging and commuting. Bat species recorded within 500m are common pipistrelle, with a single record for soprano pipistrelle within 1km.
- 4.11 A noise assessment was prepared by Vanguardia Limited (2025). Existing ambient noise levels (based on the audible range for humans) were measured at the nearest habitation to be 53dB L_{aeq} (p10). The noise levels are within Manchester City Council guidance levels and would be dominated by bass frequencies. Their report estimates that the additional 'target' music noise from Canalside (43dB L_{aeq}) would be unlikely to be measurable against existing ambient levels at that location, but it was some distance from the site, not on the Ashton Canal. Noise levels of 50dB or more have been modelled to affect approximately 200m of the canal immediately opposite the venue with levels tailing off beyond this zone (Appendix 1).
- 4.12 A study (Hooker et al. 2023) found potential for bats to be disturbed by music festival noises, with habitat fragmentation likely for some species. However, the study found common pipistrelle not significantly affected, while soprano pipistrelles were more sensitive. Overall, bats using higher

echolocation frequencies were less affected, with common pipistrelle less sensitive to higher decibels compared to other species studied.

- 4.13 The key habitat for bats is the Ashton Canal with common pipistrelle commuting and foraging likely, but no known roosts within 500m. While bats using the section of canal might be affected whilst foraging and commuting, the Hooker et al. (2023) findings suggest that bats with higher echolocation frequencies (e.g. common pipistrelles) can still commute and forage during high decibel music noise. Furthermore, the noisy period will be time-limited on performance nights, with all performances ceasing at 10 pm, leaving a period of relative quiet until dawn. Numbers of bats potentially affected are not known, but not likely to be high as urban areas do not offer optimal habitat for bats. Taken together, impacts from noise on bat populations are not considered likely to significantly affect populations.

5. CONCLUSIONS

- 5.1 The proposal site is situated in a highly urban setting just south of the newly constructed COOP Live venue. The site is just north of the Ashton Canal.
- 5.2 No European protected sites, SSSIs, National or Local Nature reserves will be affected by proposals. Nor will any Priority Habitats be affected. The Ashton Canal SBI lies 8m to the south of the site but will not be affected directly.
- 5.3 In terms of European protected species, there are records for common pipistrelle bats within 500m, and soprano pipistrelle beyond this (one record). Pipistrelles (& other wildlife) species could potentially use the canal as a commuting and foraging habitat, but otherwise there are no habitats on site that would attract them. There is no potential for other protected species on site. There are no invasive non-native species either.
- 5.4 On site habitats are entirely urban – developed land sealed (UKHAB code u1b) including two large planters (UKHAB code u1b 846) which total less than 5m x 5m. The u1b has a value of zero in the Statutory Biodiversity Metric, therefore there is no requirement for Biodiversity Net Gain, even if the planters are counted as habitat, the cover less than the ‘de minimis’ area of 5m x 5m.
- 5.5 In terms of ecological impacts from proposals, habitat losses are insignificant.
- 5.6 Impacts from lighting proposals are unlikely to further negatively impact the Ashton Canal SBI and bats (or other organisms) using it; in fact, a small benefit may accrue as an all-night lighting pillar will be removed, and for the development additional lighting will be time-limited to the operation of the venue (until 10pm) plus bat-friendly light wavelengths will be used.
- 5.7 Regarding noise, common pipistrelles have been found not to be significantly affected by music festival noise (Hooker et al 2023), either its frequency or decibel. Within 500m of this site, only common pipistrelles have been recorded. Further away, soprano pipistrelles have been recorded, but the noise assessment (Me Engineers 2025) found that noise levels at this distance are unlikely to be above ambient levels, plus are within Manchester City Council limits for human habitation. Furthermore, on-site noise events will be time-limited, ceasing at 10pm on performance nights. Therefore, bats using the Ashton Canal are not considered to be likely to be significantly affected by noise from the venue.
- 5.8 Overall, the proposals have been assessed to have a minimal effect upon ecological receptors. There are no ecological requirements to address impacts. A single ecological recommendation relates to the re-use of existing vegetation (including young trees) where possible in the new development and the potential for planting additional wildlife-benefitting species.

6. RECOMMENDATION

Wildlife-Friendly Landscaping

- 6.1 If possible, existing vegetation from the planters, including the four young trees, should be re-used in the new proposals. The material is in good health and has established well in its urban environment. It has good potential to continue to develop to support biodiversity in such a location. If additional species are needed, natives or those with beneficial features for wildlife should be selected, to support the nearby Aston Canal habitat.
- 6.2 Advice on species selection can be sought from an ecologist or landscape architect, but in general, UK native plants or ornamentals which are not considered an invasive risk and have single flowers (double flowers often do not produce nectar) and seeds or berries are a good choice.

REFERENCES

- CIEEM, 2017. Guidelines for Preliminary Ecological Appraisal, 2nd edition. Technical Guidance Series. Chartered Institute of Ecology and Environmental Management (CIEEM).
- CIEEM, 2022. Competency Standard for Preliminary Habitat Survey. Chartered Institute of Ecology and Environmental Management (CIEEM).
- Defra, 2024. The Statutory Biodiversity Metric User Guide. www.gov.uk/defra
- Hooker, J, Emma Daley, Emma Stone, Paul Lintott, 2023. Assessing the impact of festival music on bat activity. <https://doi.org/10.1002/2688-8319.12250>
- ME Engineers, 2025. Co-Op Live Manchester Canalside F&B - Turnkey 2 Lighting Impact Assessment Document Number: BRA-MEE-ZZ-ZZ-RP-EL-7001 Revision: P01
- Stace, C., 2019. New Flora of the British Isles. Fourth Edition. C & M Floristics.
- UK HAB Ltd, 2023. UK Habitat Classification Version 2.0. <https://ukhab.org/>
- Vanguardia Ltd, 2025. Co-op Live – Canalside Noise Assessment VAN-102859-EN-RP-0030 102859 6 April 2025 Revision P01