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Technical Note

Project	Mayfield, Manchester
Subject	Mayfield Depot
Project no	0060098
Date	5 March 2024

Revision	Description	Issued by	Date	Approved (signature)
P01	Updated ecological surveys	MLS	05/03/2024	AG
P02	Updated ecological surveys revised report	MLS	20/03/2024	SH

1 Introduction

Buro Happold has been appointed by Broadwick Group Limited to undertake ecology services, including an updated ecological site walkover and preliminary roost assessment of the Mayfield Depot located to the southeast of Manchester Piccadilly Station in central Manchester.

The updated ecological site walkover and preliminary roost assessment were commissioned to support a planning application extension for the temporary change of use for the Mayfield Depot (reference: 123728/FO/2019), to be submitted in August 2024, which is as follows:

"*Temporary change of use for a 5 year period for the Mayfield Depot from Use Class B8 to Sui Generis Use Class, comprising theatre, music, dance, performance-related activities (Sui Generis), cinema and conferencing (Use Class D2), food and drink festivals including external food and drink operators (Use Class A3 and A4), art exhibitions and markets (Use Class A1/D2), marketing suites and offices (Use Class B1), with associated demolition, external alterations, landscaping, servicing and access.*"

This Technical Note has been prepared to present the findings of the updated ecological site walkover and preliminary roost assessment survey conducted on 15th January 2024 and to inform the updated planning application on the changes occurred on site since the last survey was undertaken in 2019.

1.1 Site context

The Mayfield Depot, hereafter referred to as the 'site', is situated in central Manchester, immediately southeast of the Manchester Piccadilly train station (OS central grid reference: SJ 85059 97674 – Figure 1-1). The site covers the old Mayfield Railway Station which previously was an overflow station for Manchester Piccadilly. The site has had several uses since the closure of the station, including as a warehouse and distribution depot, and currently is used as offices and as an event and conference venue.

The site comprises two levels, the lower level beneath the disused rail platform, and the upper rail platform level. The lower level comprises hardstanding, the main Manchester Depot Mayfield building, which is divided into internal sections – the Concourse, Freight Island, the Depot, including arches 5, 6 and 7, and Railway Arches 8, 9 and 10 (hereafter referred to as the 'Archive' – Figure 2-2), the latter sitting adjacent to the Depot building. The upper rail platform level comprises hardstanding and scattered introduced shrub. The site is located immediately to the north of Mayfield Park, and the wider landscape is dominated by dense urban development, with industrial/residential buildings and roads.

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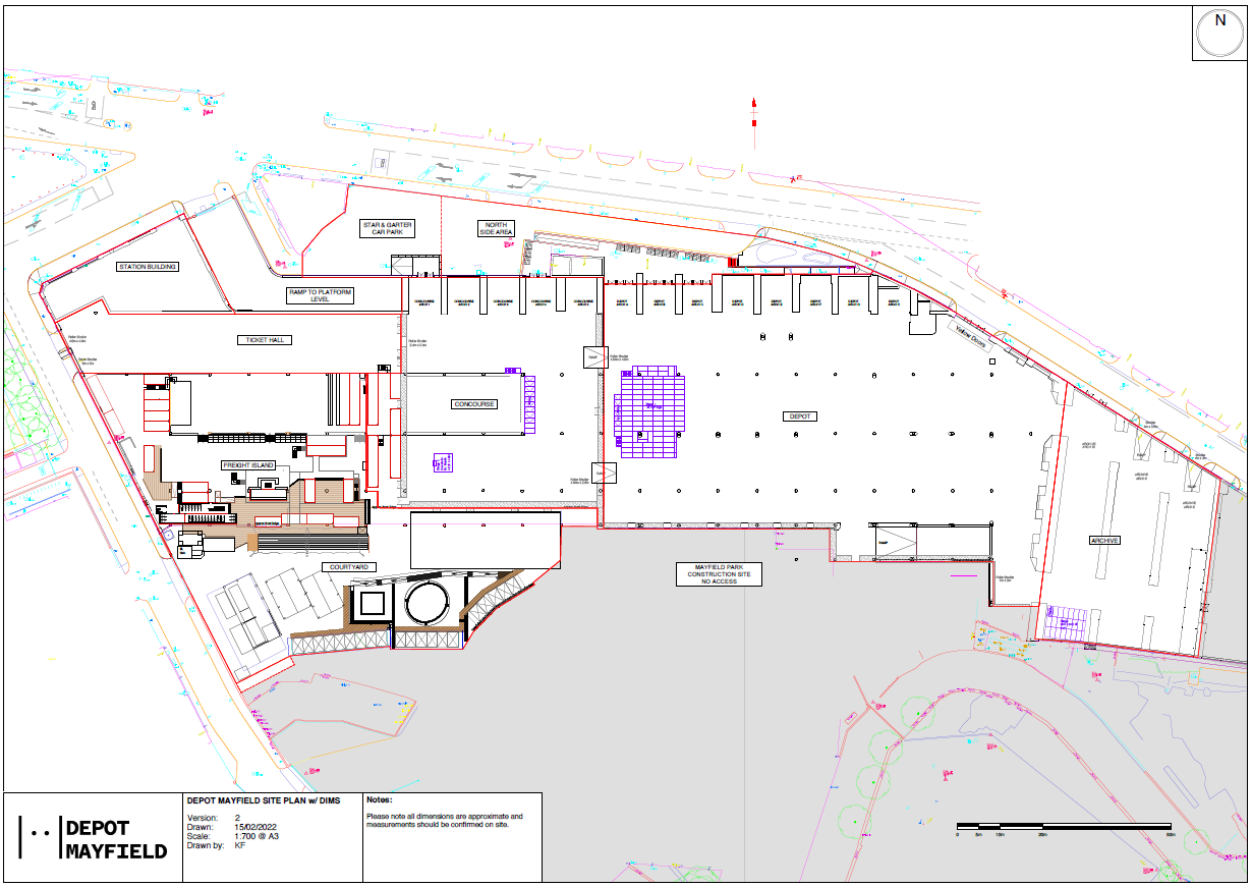

Figure 1-1 Depot Mayfield building (comprising the Depot, Concourse and Freight Island) and Archive

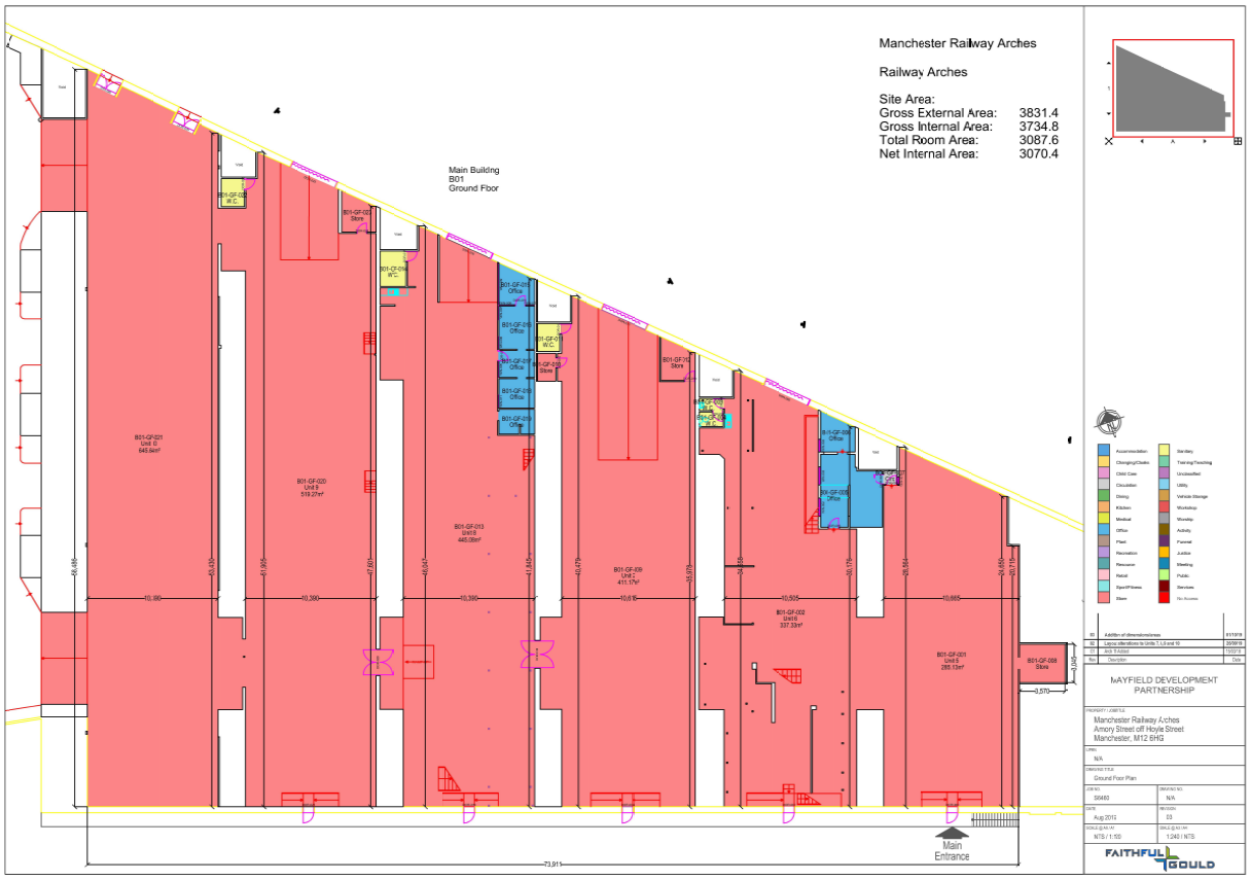

Figure 1-2 Manchester Railway Arches, directly adjacent to the east of the Depot Mayfield building, with the larger arches (8, 9, 10) forming the space known as 'Archive' as part of the Depot Mayfield venue

1.2 Methods

1.2.1 Desk study

The methods included a desk study comprising an ecological data search on the open-access Multi-Agency Geographic Information for the Countryside (MAGIC) website for information on statutory designated sites, priority habitats and records of granted protected species licenses within 1km of the site. In addition, the previous ecological survey work carried out for the site was also reviewed and considered as part of this assessment. The reviewed documents included:

- Wardell Armstrong (November, 2013) Preliminary Ecological Appraisal;
- Wardell Armstrong (June, 2014) Bat Survey Report;
- Buro Happold Engineering (November, 2017) Ecological Assessment and Bat Inspection;
- Buro Happold Engineering (November, 2017) Bat Survey Report;
- Penny Anderson Associates (March, 2019) Ecological Assessment; and
- Penny Anderson Associates (March, 2019) Bat Inspection and Emergence Survey Report – Building B2 and Culverts B24/B26; and

1.2.2 Updated field surveys

The updated field survey was conducted on the 15th January 2024 by an experienced ecologist from Buro Happold. The survey was undertaken in good weather conditions, with the day being dry throughout. The field surveys included an ecological site walkover to assess any changes in the extent or condition of habitats since the last habitat survey was carried out in 2019, an updated bat roost assessment of the site, and an updated assessment of the site for its potential to support other protected species. All accessible external areas of the site were walked, with habitat types and features present recorded in line with the UK Habitat Classification System (UKHab) survey methodology (Butcher et al. 2023)[1].

The building and structures were assessed in accordance with the latest available bat survey guidelines[2] by an experienced ecologist. The survey made use of binoculars and torches to support the investigation of any potential roosting features identified.

1.2.3 Limitations

The bat roost entrance recorded in previous surveys in B23 (above Railway Arches 5 and 6) was not visible or accessible at the time of the survey. Images of the bat roost entrance were not included in previous reports. This is not considered to be a constraint to this assessment as no works are proposed in B23.

No other limitations were encountered during the survey.

2 Results

2.1 Desk study

2.1.1 Designated sites

A statutory designated site is recorded within 1km of the site boundary: stretches of the Rochdale Canal, designated both as a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). There are no other statutory designated sites within a 1km search area for the site.

Previous reports (2017 and 2019) relating to the Mayfield development area to the south and southeast of the site (Figure 2-1), identified that there are two Sites of Biological Interest (SBIs) within 1km of the site – Rochdale Canal, Stott's Lane - Ducie Street Basin SBI and Ashton Canal SBI. The Rochdale Canal provides habitat for regionally and internationally important species, such as floating water plantain *Luronium natans*, and the Ashton Canal is recognised as important for its submerged aquatic flora.

[1] UKHab Ltd (2023). *UK Habitat Classification Version 2.0 (at https://www.ukhab.org)*

[2] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

It is considered unlikely that the proposed extension of temporary use change of the site will result in adverse impacts on these statutory and non-statutory designated sites, and so they are not considered further within this Technical Note.

2.1.2 Habitats

The data search did not return any priority habitats within the site boundary. The priority habitats within 1km of the site include areas of deciduous woodland located about 430m south of the site, open mosaic habitat located about 730m north of the site, and the River Medlock, which is both a UK and a Manchester priority habitat. The river is culverted beneath the northern portion, in close proximity to the site, but has recently experienced enhancement to its previously channelised form as part of the establishment of the Mayfield Park, immediately to the south of the site boundary.

The previous habitat surveys undertaken in 2013 and for the Mayfield development area, the most recent of which was in 2019, identified a number of habitats across the site considered in this Technical Note (grey hatched area - B1, B2 and B23 - in Figure 2-1). Habitat across the site included semi-natural broadleaved woodland, semi-improved neutral grassland, scattered introduced shrub and scattered urban trees. The site otherwise was dominated by hardstanding and the building (Figure 2-1).

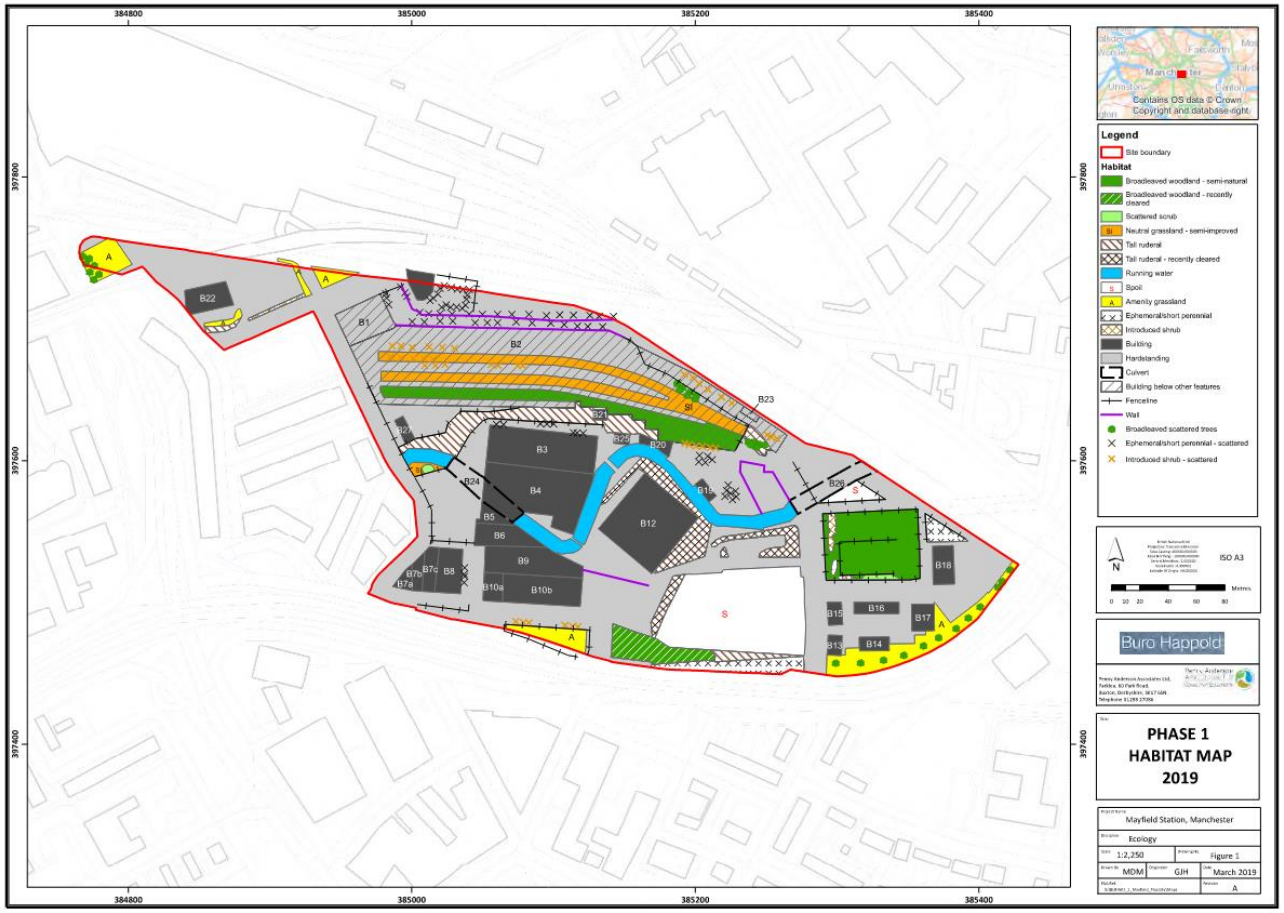

Figure 2-1 2019 habitat survey results for the wider Mayfield development, demonstrating semi-natural broadleaved woodland, semi-improved neutral grassland, scattered introduced shrub and scattered urban trees within the site at that time of the 2019 survey.

The creation of the Mayfield Park, which opened in September 2022, and the associated improvements to the River Medlock corridor, provide new ecologically valuable habitats to support a number of local and UK biodiversity priority species, including bat, bird and invertebrate species. The habitats created include urban green space, a priority habitat within the Manchester BAP. Further, the creation of the Mayfield Park delivered a network of green infrastructure, including landscaping with native species and replacement tree planting, incorporating wildlife planting for pollinators and providing habitat features. Whilst the Mayfield Park is offsite, it is adjacent to the site and offers suitable habitats for protected species that could use the site.

2.1.3 Species

A record of a bat species, common pipistrelle *Pipistrellus pipistrellus,* was returned about 100m southwest from the site on the MAGIC data search. The Mayfield Regeneration Development Bat Surveys conducted in 2017 recorded the presence of multiple common pipistrelle bats and bat roosts in the wider Mayfield area and on site, and a single Daubenton's bat *Myotis daubentonii* commuting along the River Medlock corridor. Surveys in 2017 identified four bat roosts within the current site area assessed in this Technical Note, the location of these are illustrated in Figure 2-2. All roosts identified were classed as 'low status' following the guidance in Mitchell-Jones (2004), due to being of individual to low numbers of bats of common species used in summer and not maternity sites:

- **B1** (northwest of the main Depot building): one summer day roost for one common pipistrelle bat in a crevice in the brickwork on the northeast facing the external wall (Figure 2-3);
- **B2** (main Depot building including the Concourse and Freight Island):
    - One internal non-breeding summer roost, up to four common pipistrelle bats, at locations where droppings recorded in 2013.
    - Hibernation potential recorded for common pipistrelle bats in suitable crevices within the building fabric.
    - One external day roost, for up to four non-breeding common pipistrelle bats, in the southern side of the building. The precise roost entrance was not confirmed.
- **B23** (above Railway Arches 5 and 6): an external summer day roost for one non-breeding common pipistrelle bat, of occasional use, in a gap between the brick wall and the wooden on the south side.

A historical record of a bat roost was also returned for B2 during initial works in 2016. Subsequent surveys in 2017, 2018 and 2019 did not confirm the presence of a roost at the recorded location.

Frequent bat activity was recorded at the upper level and to the south of the site. The river corridor adjacent to the south boundary of the site was considered to be the most important habitat for bats within the wider area. Bats were recorded foraging along the river corridor and occasionally entering the culvert to the southeast of the site.

Roosts have since been affected on site by the use of the Depot building and the de-culverting of the River Medlock. Mitigation roosting spaces are in place across the Mayfield Park, including two boxes mounted on the eastern end of the Depot building and within the restored river wall structure of the River Medlock.

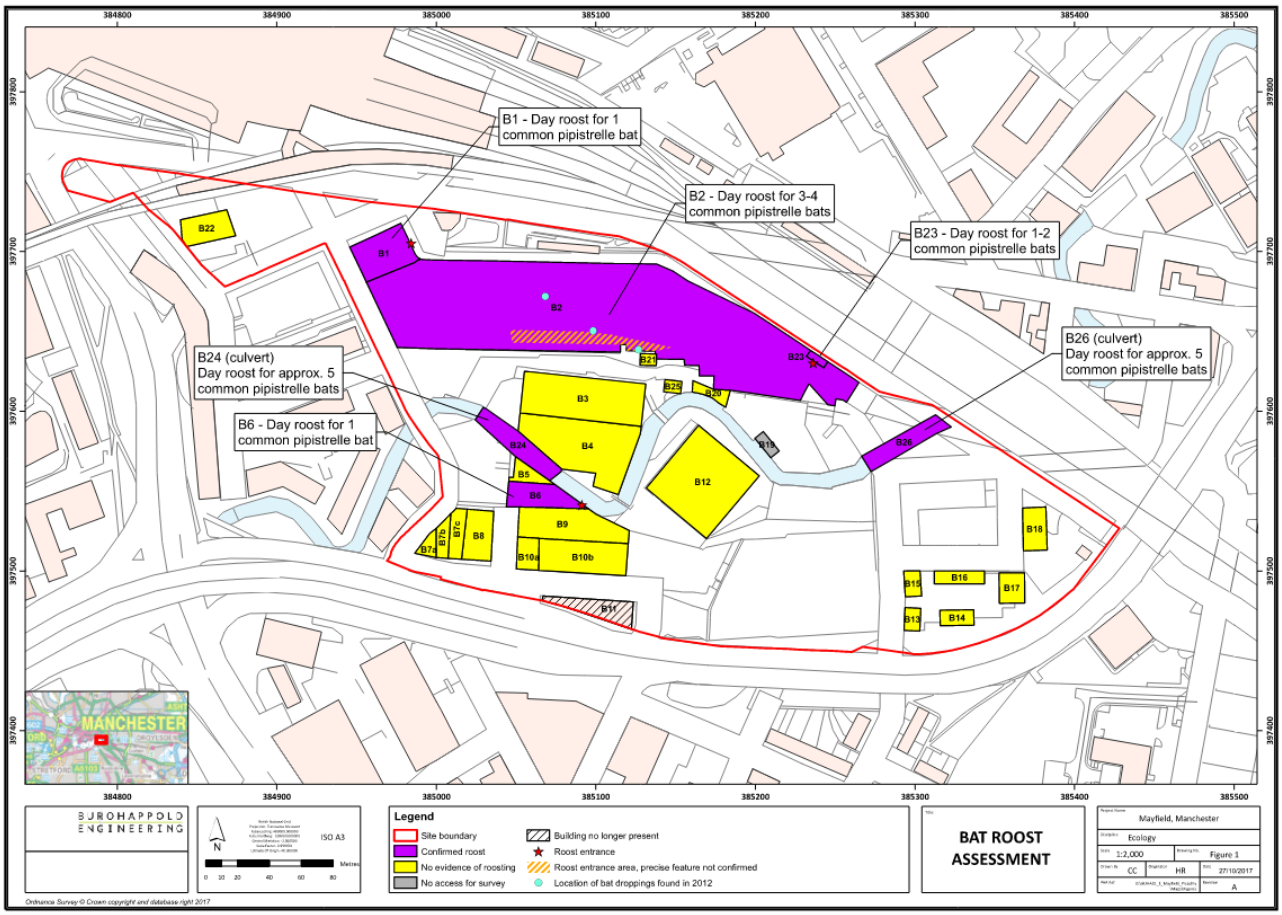

Figure 2-2 The 2017 bat survey results plan of identified bat roosts in the Depot building and arches and within the wider Mayfield Development area.

The results of other previous ecological surveys for the Mayfield development, identified habitats suitable for foraging and nesting birds. These included semi-natural habitats, some buildings, and scattered trees. Because of the brownfield nature of the baseline site, it was considered to have a suitable habitat for the black redstart *Phoenicurus ochruros*, a rare breeder in the UK known to occur near the site, although targeted surveys did not identify any on the Mayfield development or the site. Birds that were recorded on site during breeding bird surveys undertaken in 2017 of the wider Mayfield Development were generally common and widespread species that are often associated with urban, or more developed, areas. Such species included wren *Troglodytes troglodytes*, dunnock *Prunella modularis*, blackbird *Turdus merula*, great tit *Parus major*, blackcap *Sylvia atricapilla*, robin *Erithacus rubecula* and feral pigeon *Columbia livia domestica*. Starling *Sturnus vulgaris* and bullfinch *Pyrrhula pyrrhula*, were also recorded flying over the Mayfield Development, but were not considered to use the site.

The development of the Mayfield Park included the installation of new bat boxes within parts of the retained river wall, as well as features to support wagtails, kingfishers, generalist bird species and invertebrates and significantly increased the habitats suitable for many species.

2.2 Field survey

2.2.1 Habitats

During the field survey, it was found that the habitats previously recorded on site (see section 2.1.2) have largely been removed. This includes the southern strip of semi-improved neutral grassland, semi-natural broadleaved woodland, scattered introduced shrub in the southeast of the site and scattered urban trees, which were cleared when the ramp structure of the southern wall of B2 was demolished, and is now dominated by hardstanding and the building (Figure 2-4).

Buddleia dominated the remaining strip of semi-improved grassland (Figure 2-5). Additionally, a sedum roof was recorded in Freight Island (Figure 2-6), which was in poor condition with low numbers of species being present.

2.2.2 Species

2.2.2.1 Bats

The buildings B1 and B2, the Archive and B23 were re-assessed for their potential to support roosting bats. As identified in section 2.1.3, buildings B1, B2 and B23 fall within the site boundary, all of which were previously identified as having confirmed roosts at the time of the 2017 and 2019 bat surveys.

B1 and B2 - Depot building

Since the previous surveys of the site small changes have occurred in B1 and B2, these include:

- The ramp structure of the southern wall of B2 has been demolished (Figure 2-4);
- An additional gap was recorded in a small brick roof with a ceiling consisting of small arches, above the southern elevation of B2 (Figure 2-7); and
- A large hole was recorded in the ceiling of an internal room within B2 (Figure 2-8), which leads to a wide cavity that is highly exposed. The room comprises brick walls and brick arches, with wooden window panels covering the window gaps. The room is exposed to the outside due to a large part of a wooden window panel being missing. Due to the size and exposure of the hole and the room, the feature was identified to have negligible potential to support roosting bats. Proposed meanwhile uses for this space currently include an office, marketing suite to support the wider Mayfield site, a small cafe and workspace, or similar.

Where there is exposed brick in the internal sections of B1 and B2, the mortar is generally in good condition with no features identified that are likely to provide access to a suitable cavity space for roosting (Figure 2-9) with the exception of the potential roost entrance recorded in the surveys in 2013. Occasional missing or broken bricks were recorded internally in B2 but upon inspection, these did not provide any gaps suitable for roosting bats. Areas of the Concourse section of B2 are heavily lit, reducing the suitability for roosting bats in that section.

No evidence of roosting, such as droppings, was found during the survey. The bat roost potential of B1 and B2 is therefore limited to the features identified in previous surveys, excluding the ramp structure of the southern wall, and the additional gap recorded in the brick roof located in the southern elevation of B2 in the survey carried out in 2024.

The Archive

Since the previous survey, no changes have occurred within the Archive, deemed to have internal features potentially suitable for roosting bats (Figure 2-10). The Archive was heavily lit and no additional external potential features to support roosting bats were identified.

No evidence of roosting, such as droppings, was found during the survey in the Archive. The bat roost potential of the Archive is therefore limited to the external features identified in previous surveys.

B23 - Brick building above Railway Arches 5 and 6 (platform level)

Only external areas of the brick building above Railway Arches 5 and 6 (B23) were visible from ground level at the time of the survey. No evidence of roosting, such as droppings, was found during the survey and no additional potential bat roost features were recorded externally in B23 (Figure 2-11), limiting the bat roost potential to the existing roost entrance recorded in B23 in previous surveys.

Figure 2-3 B1 bat roost entrance in the form of a crevice in the brickwork on the northeast facing the external wall (yellow circle)

Figure 2-4 The southern side of the original building was demolished and most of the existing habitats removed. The vegetation in the photo forms part of Mayfield Park

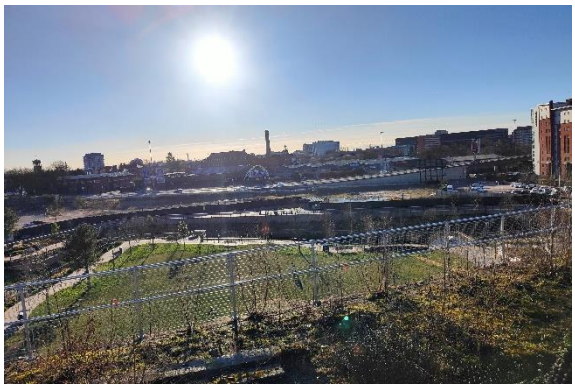

Figure 2-5 Remaining habitats on site (semi-improved neutral grassland)

Figure 2-6 Sedum roof recorded in Freight Island. The roof was in poor condition with limited plant species. Works are currently being carried out to improve the sedum roof (image: Beck)

Figure 2-7 A gap from a missing brick was recorded in the small arches to the south of the Depot building B2

Figure 2-8 Large hole in the ceiling recorded and deemed unsuitable for bat roosting

Figure 2-9 Arches within B2 deemed void of gaps or other features to support roosting bats

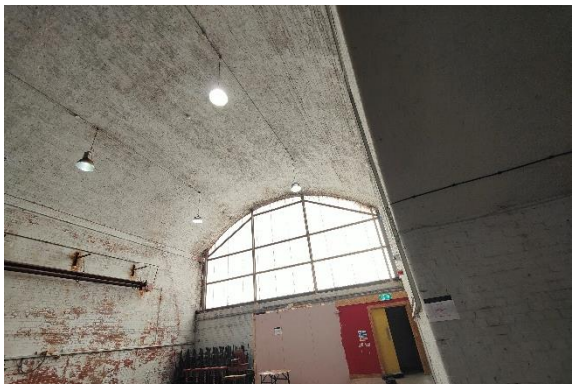

Figure 2-10 Potential bat roost features were not identified in the interior of Railway Arches 5 and 6

Figure 2-11 B23 above the Railway Arches 5 and 6. No additional external potential features to support roosting bats were identified in the accessible areas of B23 (image: Beck)

2.2.2.2 Other species

With regards to other species, the site generally has limited potential to support other species of note. The scattered introduced shrub is considered to have very limited potential to support nesting birds due to the size and density of the vegetation growth.

No other evidence or potential for protected, priority or notable species was identified during the survey.

3 Assessment and Conclusion

The site currently has limited ecological value due to previously recorded habitats having been mostly cleared as part of previous works and the site being dominated by hardstanding and the buildings. The proposals comprise to extend the temporary use change of the site and refurbish some internal rooms, including the existing bar in the upper section of B2. It is considered unlikely that the extension of the planning application will result in an adverse impact on ecology on site.

The following outlines mitigation actions that are considered appropriate for the intended use of the site:

- The internal features of the Archive and Railway Arches 5, 6 and 7 were deemed unsuitable to support roosting bats and no additional external features were recorded during the survey. There are no proposed works or change of use for the Archive or Railway Arches 5, 6 and 7, and therefore no impacts are anticipated in the Archive, Railway Arches 5, 6 and 7.
- No additional external features were recorded in B23 during the survey. If this were to change and any proposed works could impact the bat roost located in B23, an update assessment may be required, along with a licence from Natural England.
- It is considered that there will be no amendments proposed to the northeastern elevation of B1 where the bat roost was identified in 2017, and therefore there should be no additional impacts to identified bat roosts on site as those on B2 have already occurred. If there are likely to be modifications to the elevation of the B1 building, or if scaffolding/structures are required to support the development of the bar area in this location that may obstruct the roost either temporarily or permanently, an update assessment may be required, along with a licence from Natural England. Any lighting associated with the bar area above the roost in this location on B1 should not cause light spill onto the elevation below where the roost is identified.
- It is considered that, since no works are proposed in the southern elevation of B2 where an additional gap in brickwork was identified, there are no impacts anticipated in this section. If there are likely to be modifications to the elevation of the southern section of B2, an update assessment may be required.
- The use of B1, B2, the Archive and B23 is proposed to remain unchanged since planning application 123728/FO/2019, and therefore it is considered that additional impact resulting from the change of use is not expected.

It is considered that by applying the above mitigation actions, the proposed use of the site as a per planning application 123728/FO/2019 and the small refurbishment work proposed, will not result in an adverse impact on ecology within the site and locally.

3.1 Biodiversity net gain

Biodiversity net gain (BNG) is embedded within the National Planning Policy Framework (NPPF) and in numerous local planning frameworks. Nationally, developments are required to demonstrate a net gain in biodiversity as a mandatory element of planning applications since February 2024, due to the recently enacted Environment Act (2021).

The 2018 Mayfield Strategic Regeneration Framework (SRF) document identified that there will be five phases of developed plots (Baring Street Campus, Hoyle Street East, Hoyle Street West, Depot Mayfield and Wyre Street) across the wider Mayfield SRF, where each phase will need to deliver net gain to meet BNG requirements. Therefore, the Depot Mayfield will need to meet BNG requirements as part of the wider Mayfield SRF phased development. However, this planning application would not be considered part of the phased development due to the proposals comprising the extension of the temporary change of use and refurbish some internal rooms. The BNG requirements will be delivered as part of the long-term development of the site.