Workman LLP

Manchester Airport Bird Hazard Management Plan

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EXPERTS IN ECOLOGY

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1.0 INTRODUCTION

1.1 Introduction

1.1.1 RSK Biocensus have been commissioned by Workman LLP to prepare a Bird Hazard Management Plan (BHMP) for a new build warehouse at the World Freight Terminal at Manchester Airport. The proposed site layout is provided in *Figure 1*. A full planning application (ref: 131892/FO/2021) for the erection of a terrace of three Class B8 warehouse units (7,845m² gross internal floor area) with associated parking, access, and landscaping, following demolition of existing buildings, was approved on 2 February 2022. This consent is subject to a number of conditions, including the preparation of a BHMP (Condition 20 - see below). This BHMP has therefore been produced to discharge this planning condition:

Condition 20*: Prior to the occupation of the development hereby approved, a Bird Hazard Management Plan shall be submitted to and approved by the City Council as local planning authority. The approved management plan shall be implemented and remain in-situ in accordance with the details contained within it.*

Reason - In the interests of aerodrome safeguarding, pursuant to Policy DM2 in the Manchester Core Strategy.

1.1.2 A Bird Hazard Management Plan for the demolition phase of the development was received by Manchester City Council on 18 January 2022. This BHMP will cover the occupational phase of the development.

1.1.3 The objective of the BHMP is to identify and manage the attractiveness of the new development at Manchester Airport to bird species. Furthermore, this BHMP aims to minimise the potential problems associated with high levels of bird activity the development could cause given its proximity to aerodrome activity.

1.1.4 This report is written in the standardised approach suggested in The Civil Aviation Authority's Advice note 8: - "Potential Bird Hazards from Building Design". This advice note is included in *Appendix A* of this report.

1.1.5 The report sets out management and monitoring to decrease the attractiveness of the development site to specific bird species, thus limiting bird activity in the immediate area and abating the occurrences of problems associated with bird activity near airports.

1.2 Location and Landscape Context

1.2.1 The Site is to the south-west of Manchester Airport (central grid reference: SJ 80911 84823). It is bordered by Avro Way to the north-west, Pinfold Lane to the south-east, and Wilmslow Old Road to the west.

1.2.2 The Site is within the World Freight Terminal of Manchester Airport. This is a predominantly industrial area consisting of industrial units and offices with access roads. There is a narrow strip of woodland running between the Site and Wilmslow

Old Road along the south-western boundary and several broadleaved trees to the east of the Site which will be retained by the development.

2.0 RISK ASSESSMENT

2.1 Potential Bird Activity

2.1.1 To understand the future potential bird hazards at the Site, the likelihood of the proposed development either enhancing the existing habitat or providing new habitat or foraging opportunities at the Site must be investigated and understood.

2.1.2 Should the development provide these new opportunities, there is an increased potential to increase the numbers of birds in the area. A rise in bird activity near airports has been associated with an increased risk of potential bird strikes. However, the nature of bird activity, the species, and the time of the year are all key considerations in determining the likelihood of potential bird strike events.

2.1.3 Concern is given to any proposed development that may have the potential to significantly increase bird activity within the general proximity of an airport.

2.1.4 Therefore, the approach that has been taken for this proposed development has been;

- to assess the potential for bird species, associated with potential bird hazard risk, to be attracted to the development;
- design out as far as practical the features that would attract these bird species to the Site and enable them to nest and roost or loaf; and
- to recommend a management and monitoring regime to identify any problems that might arise and measures to address these if they do such as to select deterrents (e.g. anti-perching devices and bird exclusion products) that could be used as necessary.

2.2 Potential Risk Species and Design Considerations

2.2.1 The primary risk species are large flocking or nuisance birds such as pigeons (*Columba spp*)., gulls (*Larus spp.*), starlings (*Sturnus vulgaris*), and corvids (*Corvus spp*), which are all species of concern when considering bird strikes. Lesser black-backed gull (*Larus fuscus*) and herring gull (*Larus argentatus*) are the two main UK gull species which nest on flat and shallow-pitched roofs in urban and industrial areas.

2.2.2 Several heavy standard and standard trees are proposed to be planted at the entrance and to the rear of the Site. Therefore, the potential natural nesting habitat for wood pigeons (*Columba palumbus*) and corvids will increase.

2.2.3 Nesting jackdaws (*Corvus monedula*) can also use chimneys or similar structures such as cavities on roofs, but as there are no such structures known on the proposed roof, there is no potential for roof-nesting by this species.

2.2.4 Starlings prefer to nest in holes or cavities, at times using gaps to access under roof spaces. The proposed building design is unlikely to create new nesting areas for this species.

2.2.5 It is therefore anticipated that species which may use the new development are pigeons, jackdaws, and gulls. Jackdaws and pigeons could nest, loaf and/or roost in the new trees in moderate density, and gulls could nest, loaf, and/or roost on the roof of the building in low numbers.

3.0 MANAGEMENT PLAN

3.1 Reduction of risk

3.1.1 The following actions will be taken during occupation of the building to ensure that the risk remains low throughout the operational life of the buildings and planted trees.

3.1.2 The building has been designed with a shallow-pitched roof with a central valley. As stated in Advice Note 8, where shallow-pitched roofs cannot be avoided in the design, there must be access available by foot to all areas of the roof to ensure that any birds, nesting, roosting, and loafing can be dispersed and where necessary any nests and eggs can be removed (under licence).

3.1.3 Ensure there is safe and easy access to the roof at all times, preferably by way of a fixed staircase or door to facilitate regular monitoring of bird activity on the roof.

3.1.4 Decoy model birds of prey (such a peregrine falcon Falco peregrinus) will be installed in a prominent position on the roof in March and removed in July to be used as an anti-roosting and nesting deterrent. This would also aid in the deterring of birds within the newly planted trees around the building from nesting.

3.1.5 If dispersal of a large number of birds is required (defined as 20 birds of any on species or group of species), Airside Operations at Manchester Airport will be contacted before dispersal actions are taken.

3.1.6 There will be full cooperation with Manchester Airport Airside Operations staff if dispersal action is requested on site at any time.

3.1.7 If possible, nesting gulls should be deterred through regular disturbance through access and monitoring the roof. Should this not be possible and birds start to nest, further licensable interventions, such as egg-oiling, may be necessary. Advice must be sought from the relevant licencing authority (i.e. Natural England). A judgement as to what methods to use will be made at the time by an appropriately experienced and qualified ornithologist and/or pest control specialist.

3.1.8 Should disturbance or other interventions not deter repeated nesting attempts by birds on the roof, the roof should be covered with netting (of an appropriate size and gauge to ensure birds do not become snagged or trapped), or tensioned wires.

3.1.9 If birds successfully breed on the roof for two consecutive years, then the roof will need to be netted off to stop nesting in future years.

3.1.10 Any recreation areas for staff i.e. seating areas on site should be situated indoors. Any outdoor seating areas should have covered bins that are regularly emptied to prevent birds becoming attracted to food waste left by staff. This will be subject to a site wide waste management protocol. Signs should also be installed to inform staff that birds should not be fed outside the building.

3.1.11 Site staff and visitors will be briefed on the importance of good housekeeping and disposal of litter. Regular monitoring will occur and litter will be cleaned up and removed if good site working practices are not sufficient.

3.2 Monitoring protocol

3.2.1 A bird monitor should conduct regular inspections of the roof and trees as specified in detail below. The bird monitor can be any employee/s of the occupants of the building or of the property management company, provided they are suitably trained in identification and dispersal of relevant bird species as well as in safe roof access, or a dedicated pest/bird control company.

3.2.2 The bird monitor should fill in a logbook to record any positive or negative (i.e. no birds present) registrations. These records will be made available to Manchester Airport to inspect upon request. An example of a logbook is provided in Appendix B.

3.2.3 The bird monitor should also be vigilant for any birds using the roofs and trees between the routine checks and during the non-breeding season. If any flocks of birds are seen, the monitor should proceed to the roof to disturb and disperse them.

3.2.4 The most important period for monitoring birds on the roof is during the nest prospecting and egg laying/incubation period. This is when birds are looking for nesting sites and will be most prone and responsive to disturbance to discourage them from breeding. This should start in late March and continue until early June. Monitoring should occur every day during this period. During monitoring, the roof should be accessed and walked safely, and any birds present should be dispersed.

3.2.5 Should nesting problems persist beyond early June, further monitoring and potentially intervention measures will be required.

3.2.6 Should nesting become a persistent problem, other intervention measures, such as egg-oiling, may be required during the incubation period. However, it should be noted that an appropriate license from Natural England will be required.

3.2.7 Outside of the bird nesting period (mid-June to mid-March), monitoring inspections can be made twice a month, or more frequently if birds are observed from the ground to congregate on the roof.

APPENDIX A – ADVICE NOTE 8

SAFEGUARDING OF AERODROMES BAA Advice Note 8 Potential Bird Hazards from Building Design

Introduction

Aerodrome Safeguarding ensures the safety of aircraft and their occupants when in the vicinity of an aerodrome by controlling potentially hazardous development and activity around it. Safeguarding maps are lodged with the Planning Authorities and include a 13km radius circle, this is the area within which developments likely to attract birds require consultation. Aircraft are vulnerable to bird strikes and over 80% of bird strikes occur on or close to aerodromes and their operators are required to take necessary steps to ensure that the bird strike risk is reduced to the lowest practicable level. This note considers in particular the need to minimise bird attractant features of building design within the 13km 'bird circle'. The information in this advice note is provided as a guide only and the particular circumstances surrounding individual developments, precise location relative to the airport and aircraft flight paths, the numbers, behaviour and location of bird population in the area, and the location of other bird attractive features in the local environment, all have the potential to influence the final assessment of the level of risk likely to arise.

Safeguarding

Strategy If a building design is identified as being a potential bird hazard, the developer will be expected to modify their proposals to mitigate this risk. It is possible that as part of the mitigation, it will be necessary to produce and implement a Bird Management Plan (BMP) which must be maintained for the life of the building.

Building Size

Individual dwellings will not normally be considered problematic, however blocks of flats, multi use buildings, commercial and industrial buildings have greater potential to raise concerns. Generally for buildings with flat and/or shallow pitched roofs, if the roof area is less than 10m x 10m the number of birds likely to be found nesting, roosting or loafing on the roof are not likely to be significant, but this may not be the case for sites very close to the airport or aircraft flight paths.

Building Design

Buildings may be used by birds depending upon the design and use of the buildings and the availability of food in the nearby environment. Pigeons, starlings and gulls are the most common birds hazardous to aviation to be found in and around buildings. Pigeons make use of ledges of buildings to roost whilst starlings may roost both on and in buildings in vast numbers. Gantries and other complex structures offer potential perches and gulls are increasingly nesting on flat and shallow pitched roofs. 'Green' roofs can also be very attractive to birds. The following features should be considered when designing a building:

- Roof overhangs should be kept to a minimum

- Ledges beneath overhangs and external protrusions should be avoided where possible
- Steeply pitched roofs should be used to deter gulls from nesting, roosting, and loafing
- The roof space be designed in such a way as to prevent access by birds
- Self-closing doors to prevent access to birds or openings should have plastic strip curtains fitted.
- Where flat and / or shallow pitched roofs greater than 10m x 10m cannot be avoided in the design, there must be access available by foot to all areas of the roof to ensure that any hazardous birds, nesting, roosting, and loafing can be dispersed and where necessary any nests and eggs can be removed (see note below regarding licences).

Prevention, inspection and dispersal measures are included at Section 5, and comprise the following:

- Netting;
- Bird spikes;
- Distress Calls;
- Removal of Nests and / or Eggs (under the relevant Natural England licence as appropriate); and

  Inspections, where flat or shallow pitched roofs are present.

Management of birds relating to flat or shallow pitched roofs would include the following measures:

- Confirmation that access to all areas of the roof is available and by what method, to ensure that inspections can be carried out;
- Confirmation that inspections will be carried out year-round with increased frequency during the breeding season;
- Confirmation that any nests / eggs will be removed, with the appropriate licences first being obtained;
- Confirmation that any hazardous birds found nesting, roosting, and loafing will be dispersed when detected or when requested by Airfield Operations staff. In some instances, it may be necessary to contact Airfield Operations staff before bird dispersal takes place; Details of any dispersal methods to be used; and
- A log to be kept of bird numbers and species utilising the roof(s).

APPENDIX B – BIRD MONITORING LOGBOOK TEMPLATE

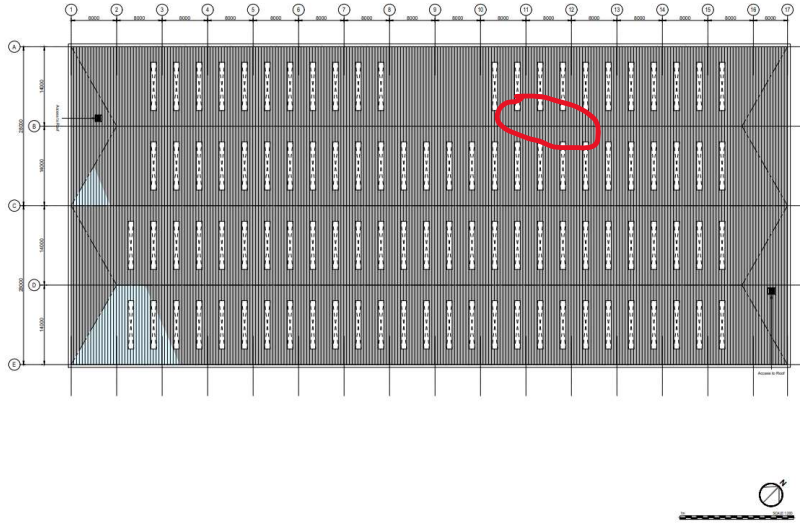
This template can be altered as required by the bird monitor, but should include the following:

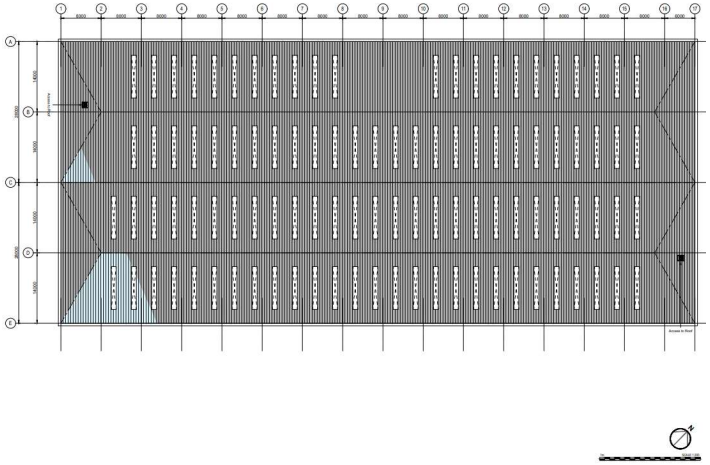
- The date of the inspection,
- the person who performed the inspection,
- numbers and species/species groups (e.g. herring gulls/gulls/pigeons) present,
- the action taken to disperse them,
- the direction in which they dispersed, and
- any action required as a result.

Null records (i.e. if no birds are present) should also be recorded.

Date	Time of inspection	Bird Monitor	Species/Species groups present	No. of birds present	Dispersal action taken	Reaction of birds to dispersal	Direction of dispersal	Action to be taken and personnel responsible
e.g. 11/07/2024	*e.g. 14:50*	*e.g. AB*	*e.g. gulls*	*e.g. 10*	*e.g. Birds dispersed,*	*e.g. all bird dispersed and did not re-settle on roof*	*e.g. south and west*	*e.g. no further action required until next inspection*

Location of birds



Date	Time of inspection	Personnel	Species/Species groups present	No. of birds present	Dispersal action taken	Reaction of birds to dispersal	Direction of dispersal	Action to be taken and personnel responsible

Location of birds