



Airport City Limited Partnership

Premier Inn – Plot H5, Manchester Airport

Bird Hazard Management Plan

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RSK GENERAL NOTES

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**Author & Project
manager**

Liz Probert – senior
consultant

Signature



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**Technical and
quality reviewer**

Will Holden – Associate director

Signature



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Switchboard: +44 (0)330 223 1074 Company contact: Enquiries@rskbiocensus.com

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1.0 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 RSK Biocensus have been commissioned by MAG Airport Limited to prepare a Bird Hazard Management Plan (BHMP) in relation to the proposed construction of a new Premier Inn at Plot H5, Manchester Airport. This BHMP will cover the construction and occupational phase and will be submitted as part of the planning application for the proposed development.
- 1.1.2 The objective of the BHMP is to identify and manage the attractiveness of the proposed 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.
- 1.1.3 This report also sets out management and monitoring procedures to decrease the attractiveness of the proposed development 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 Landscape context

- 1.2.1 The Site is located to the south-west of Manchester Airport (approx. central grid reference: SJ 81855 85542), adjacent to the transport interchange. The site is encircled by hotel and office buildings, including the newly constructed Accor Tribe Hotel to the north and Voyager House to the south.
- 1.2.2 An existing plaza area between the proposed development and adjacent buildings contains landscaping and outdoor seating. Rows of trees and strips of vegetation provide a buffer between the wider development site and the M56 to the north, as well as Manchester Airport to the south.

1.3 Development proposals

- 1.3.1 A new Premier Inn hotel, featuring 229 bedrooms and standing at approximately 100.6 metres in height, is proposed for construction on Plot H5. The development will include landscaping which will feature a variety of tree species. Additionally, the hotel will include a restaurant with no outdoor seating.

1.4 **Relevant Guidance**

- 1.4.1 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.
- 1.4.2 This report has also been written using The Civil Aviation Authority's "CAP 772 - Birdstrike Risk Management for Aerodromes" which provides guidelines for the control of bird hazards within 13km of an aerodrome.

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 nesting or roosting habitat or foraging opportunities at the Site must be investigated and understood.
- 2.1.2 Should the proposed development provide these new opportunities, there is heightened potential to increase the numbers of birds in the area. A rise in bird activity near airports has been linked to an increased risk of potential bird strikes with aircraft. The nature of potential bird activity at the Site, the species that may be present/be attracted to it, 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. Therefore, the approach that has been taken for this proposed development has been:
- to assess the potential for certain bird species associated with potential bird hazard risk to be attracted to the development;
 - to 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 forage; 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 most common UK gull species which nest on flat and shallow-pitched roofs in urban and industrial areas.
- 2.2.2 Sustained construction phase activities such as the regular movement and operation of plant vehicles are likely to deter birds from using the construction areas, and the habitat within and surrounding the works area is considered unsuitable for ground nesting species such as lapwing (*Vanellus vanellus*) and skylark (*Alauda arvensis*). However, suspended periods of inactivity during construction may result in an increase in attractiveness of the area to feeding gulls, corvids and starlings due to the exposure of invertebrates during excavation and earth-moving.

Construction Activities

- 2.2.3 Any excavations or earthworks may lead to the accumulation of rainwater within the construction site and may encourage invertebrates, such as earthworms, to surface, thereby attracting species such as gulls, starlings, and pigeons.
- 2.2.4 Food waste generated by site workers may attract species such as gulls and pigeons. Additionally, it may draw vermin, which could further encourage birds such as gulls to the site.

Building Design

- 2.2.5 Nesting jackdaws (*Corvus monedula*) can use chimneys or similar structures such as cavities on roofs, but as there are no such structures known on the roof of the proposed building, there is no potential for roof-nesting by this species.
- 2.2.6 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. All cladding is intended to be flush, with windows recessed in the façade by around 300mm – this would not provide a sufficiently wide ledge for nesting by species such as pigeons or gulls.
- 2.2.7 The flat roof of the proposed building may provide nesting and roosting habitat for gull species. Any depressions in the roof may allow rainwater to collect, potentially attracting birds such as gulls.
- 2.2.8 Photovoltaic solar panels and potentially Air Source Heat Pumps will be installed on the roof of the building. The installation of solar panels may offer shelter, potentially enhancing the roof's appeal for nesting birds, including gulls, feral pigeons, corvids, and starlings, which may choose to nest beneath the panels.

Landscaping

- 2.2.9 Several small trees are included in the landscaping plan for the proposed development, including three species of multi-stemmed trees at a height of up to 3.5m and five species of single stemmed trees at a height of up to 7.0m. These may attract small numbers of feral pigeons but are unlikely to attract starlings or woodpigeons (*Columba palumbus*), given the enclosed nature of the Site between the adjacent buildings.
- 2.2.10 The majority of the tree species included in the tree schedule for the Site do not produce soft fruits such as apples or cherries, and therefore are unlikely to attract flocks of birds including woodpigeon or thrushes (*Turdus* sp.). The trees may attract other smaller bird species, such as pied wagtails (*Motacilla alba*) however, these species are highly unlikely to cause bird strikes due to their size.
- 2.2.11 Trees included in the tree schedule are as follows:
- White-barked Himalayan birch (*Betula utilis jacquemontii*);
 - Witch hazel 'Jelena' (*Hamamelis* × *intermedia* 'Jelena') – a non-fruiting variety
 - Witch hazel 'Palida' (*Hamamelis* × *intermedia* 'Pallida')
 - Freeman maple 'Celzam' Celebration (*Acer freemanii Celebration*)
 - Birch 'Fascination' (*Betula albosinensis 'Fascination'*)

- Cut leaf or Fern leaf birch (*Fagus sylvatica Asplenifolia*)
- Honey Locust Tree (*Gleditsia*) - a non-fruiting variety

2.2.12 It is therefore anticipated that species which may use the new development are feral pigeons, corvids, and gulls. Jackdaws and pigeons could nest, loaf and/or roost in the new trees in moderate density, and gulls, pigeons, or starlings could nest and/or roost on the roof of the building in low numbers. These species may also be attracted to the site by food waste left by site workers, staff, or hotel guests.

3.0 MANAGEMENT PLAN

3.1 Reduction of risk - Construction phase

- 3.1.1 The following actions will be taken during construction phase of the proposed development to ensure that the risk of increased bird activity remains low.

Ground and earth works

- 3.1.2 Development activities that involve ground and earth works (including planting of trees and landscaping) will be managed to reduce bird-related risks by minimizing the attraction of corvids and gulls. This will be accomplished through the adoption of construction best practice guidelines, including the prevention of rainwater accumulation in any excavations. It may be necessary to cover any excavations overnight to prevent rainwater accumulation. Excavations should be monitored by site workers and any long-term (i.e. longer than several hours) accumulation of water should be reported to the site manager.
- 3.1.3 Piles of topsoil may attract birds such as starlings and gulls that will forage for any invertebrates that may be present in the soil. To mitigate this, any piles of topsoil produced during earth works and landscaping works should not be left in place overnight or for extended periods during the day unless they are covered with tarpaulin or a similar material, and it is advisable to clear them regularly.

Pollution prevention

- 3.1.4 The majority of artificial or chemical substances used during the construction phase are unattractive to bird species. However, the following pollution prevention measures will be used to minimize bird hazard:
- All waste from construction is to be stored within the site boundary and removed to a permitted waste facility.
 - Excavated soil will be stored on site or removed by a licensed waste disposal unit.
 - All construction workers must know the location of spill kit, which must be used in the event of a spillage or leakage.
 - A member of staff will be nominated as the environmental officer by the Contractor. Their responsibility will be to ensure best practice measures are implemented and adhered to.
 - Any non-compliance issues or other incidents will be reported to the site manager and project team.

Removal of waste

- 3.1.5 Any food waste produced during the construction of the proposed development should be limited and must be appropriately disposed of by the site manager or other designated site contractor. Covered bins should be made available.
- 3.1.6 The construction site must be kept tidy at all times and any waste likely to attract birds must be collected in covered bins or skips.
- 3.1.7 Deliberate feeding of birds by staff or site workers will not be permitted.
- 3.1.8 Suitable kitchen and toilet facilities will be made available to site workers during the construction phase of the proposed development.
- 3.1.9 Any waste storage and handling operations will be conducted inside a controlled area to prevent problems with windblown litter. Any vehicles with an ejector trailer will be covered with vehicle nets. A competent driver with a Category C and E license will be required to check these nets are correctly installed and undamaged.
- 3.1.10 Pest and vermin control (including rodents such as mice and rats, as well as insects such as cockroaches) should be implemented as needed to prevent them from attracting birds such as gulls and starlings.

3.2 Reduction of risk - Occupation phase

- 3.2.1 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.

Prevention of roosting/nesting on roof

- 3.2.2 The proposed building has been designed with a flat roof. As stated in Advice Note 8, 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 (under licence).
- 3.2.3 Therefore there must be 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.
- 3.2.4 Where appropriate, deterrent measures such as spikes or netting will be used to deter nesting and roosting by making any ledges or gaps unsuitable or inaccessible by birds. It will not be possible to net the entire roof space, though it is anticipated that through the employment of suitable deterrent measures and regular checks of the roof, nesting and roosting of birds can be prevented.
- 3.2.5 The primary method for deterring nesting will involve regular inspections of the roof, including areas beneath the solar panels. Where feasible, netting should be installed to cover any gaps beneath the photovoltaic panels to prevent birds from nesting or seeking shelter underneath them.
- 3.2.6 Auditory deterrence measures, i.e. playing recordings of distress calls of birds of prey, may be implemented if other deterrent measures have been attempted and

deemed ineffective. When auditory deterrence is implemented, it will only occur during daylight hours and will be specifically targeted at roof areas, so as to avoid impacting hotel guests. Auditory deterrence will be used manually and not on an automatic system as this pairs the threat suggested by the auditory deterrent with the physical threat posed by human presence and helps to reduce the chance of habituation.

- 3.2.7 If dispersal of a large number of birds from the roof is required (defined as 20 birds of any one species or group of species), Airside Operations at Manchester Airport will be contacted before dispersal actions are taken.
- 3.2.8 There will be full cooperation with Manchester Airport Airside Operations staff if dispersal action is requested on site at any time.
- 3.2.9 Nesting gulls should be deterred through regular (at least once weekly between March and September) disturbance through access and monitoring of the roof. Should this not be possible, and birds start to nest, further licensable interventions such as egg-oiling will be necessary. Advice must be sought from the relevant licensing 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 ecologist and/or bird control specialist.
- 3.2.10 The killing of adult birds under licence may only be done as a last resort, where all other deterrent measures have failed and there is a significant risk of bird strike. The populations of many bird species are declining in the UK and herring gulls, lesser black-backed gulls, and starlings are species of particular conservation concern that may be present on or around the building.
- 3.2.11 If it is determined that deterrent measures have not succeeded and that lethal measures under license are necessary, guidance will be obtained from a qualified and experienced ecologist and/or bird control specialist on the appropriate course of action.

Removal of waste

- 3.2.12 Site staff will be briefed on the importance of good housekeeping and disposal of litter. Regular monitoring will occur by staff, and litter will be cleaned up and removed if good site working practices are not sufficient. No outdoor seating is proposed for the restaurant; therefore it is expected that no food waste will be produced.
- 3.2.13 Any outdoor smoking areas for guests and/or staff will have covered bins that will be emptied regularly by staff.
- 3.2.14 Signs may also be installed to inform guests/staff that birds should not be fed outside the building.

Monitoring protocol

- 3.2.15 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 the identification and dispersal of relevant bird species as well as in safe roof access, or a dedicated pest/bird control company.
- 3.2.16 The bird monitor should fill in a logbook to record any positive or negative (i.e. no birds present) registrations during monitoring inspections. These records will be made available to Manchester Airport to inspect upon request. An example of a logbook is provided in Appendix B.
- 3.2.17 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. Other site staff should be made aware of the need to monitor bird presence on or around the building and report any sightings of flocks to the bird monitor.
- 3.2.18 The key 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 responsive to disturbance that will discourage them from breeding. This period can start in mid-March and continue until early June. Monitoring should occur at least once weekly during this period. During monitoring, the roof should be accessed and walked safely, and any birds present should be dispersed.
- 3.2.19 Should nesting attempts by birds persist beyond early June, further weekly monitoring inspections and potentially intervention measures will be required.
- 3.2.20 Should nesting become a persistent problem, other intervention measures such as egg-oiling will be required during the incubation period if eggs are found. However, it should be noted that an appropriate license from Natural England will be required. Advice should be sought from a suitably experienced ecologist and/or bird control company.
- 3.2.21 Outside of the bird nesting period (mid-June to mid-March), monitoring inspections can be made once 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

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 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 details:

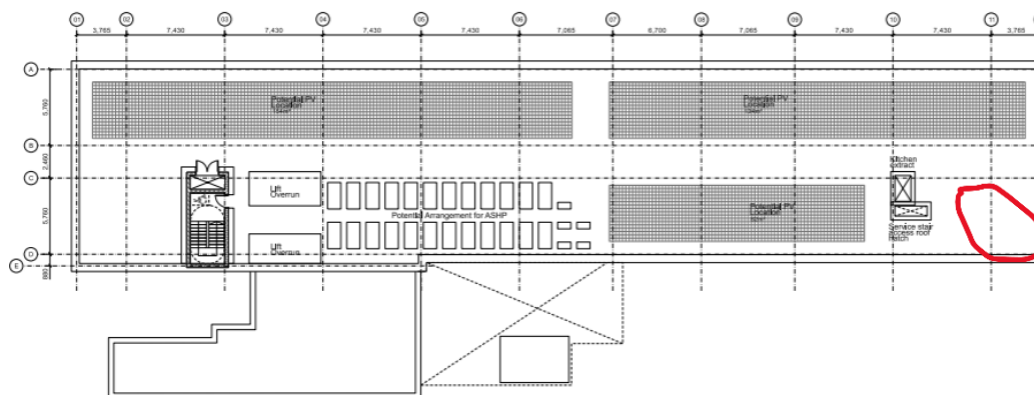
- The date of the inspection
- the person who performed the inspection
- numbers and species/species groups (e.g. herring gulls/gulls/pigeons) present
- the action taken to disperse them
- the direction in which they dispersed, and
- any action required as a result.

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

An example of a logbook entry is given below.

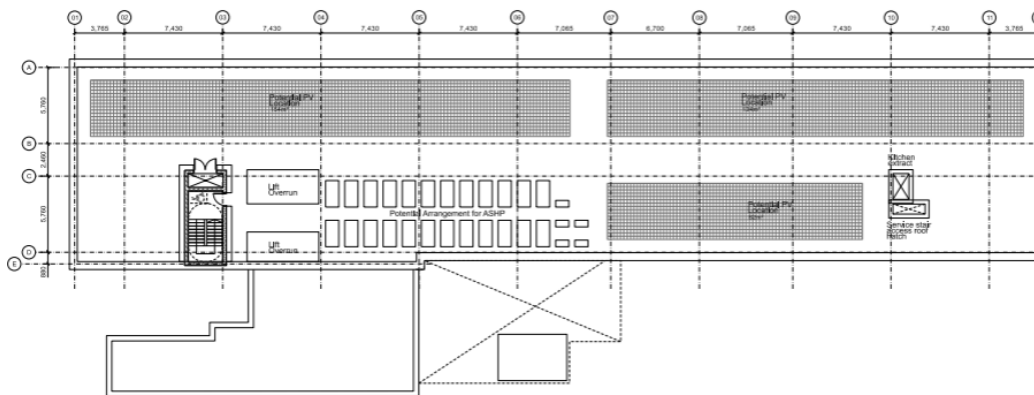
Date	Time of inspection	Bird Monitor	Species/Species groups present	No. of birds present	Dispersal action taken	Reaction of birds to dispersal	Direction of dispersal	Action to be taken and personnel responsible
e.g. 11/07/2025	e.g. 14:50	e.g. A. Hitchcock	e.g. gulls	e.g. 10	e.g. Birds dispersed by bird monitor	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



[illegible]

Location of birds





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