20 May 2025

(1) BLACKPOOL AIRPORT OPERATIONS LIMITED AND (2) BLACKPOOL AIRPORT PROPERTIES LIMITED

SUMMARY OF WRITTEN REPRESENTATIONS

PINS REFERENCE: EN020028

1. This document summarises the written representation of Blackpool Airport Operations Limited (**"BAOL"**) and Blackpool Airport Properties Limited (**"BAOL"**) (the **"BA Entities"**), which respectively own and operate Blackpool Airport (the **"Airport"**), in respect of the application by Morgan Offshore Wind Limited and Morecambe Offshore Windfarm Ltd (the **"Applicants"**) for development consent for the Morgan and Morecambe Offshore Wind Farms Transmission Assets project (the **"Project"**).

2. BAOL is currently negotiating a cooperation agreement with the Applicants to secure the Airport's safe and uninterrupted operation during the Project. Negotiations have been positive, but some issues remain unresolved and/or may not be addressed by the cooperation agreement, namely:

    2.1 Construction sequencing and duration;

    2.2 Bird strike;

    2.3 Impacts of electromagnetic fields;

    2.4 Land sterilisation; and

    2.5 DCO controls.

3. All works within the Airport must be to the CAA's satisfaction and comply with the Airport's safeguarding obligations.

4. The BA Entities will keep the Examining Authority informed on these matters and reserve the right to submit additional representations as required.

DWF Law LLP

20 May 2025

20 May 2025

WRITTEN REPRESENTATIONS

ON BEHALF OF

(1) BLACKPOOL AIRPORT OPERATIONS LIMITED AND (2) BLACKPOOL AIRPORT PROPERTIES LIMITED

IN CONNECTION WITH

THE APPLICATION BY MORGAN OFFSHORE WIND LIMITED AND MORECAMBE OFFSHORE WINDFARM LTD FOR DEVELOPMENT CONSENT FOR THE MORGAN AND MORECAMBE OFFSHORE WIND FARMS TRANSMISSION ASSETS PROJECT

PINS REFERENCE: EN020028

1. Introduction

1.1 This written representation is made in accordance with Deadline 1 of the examination timetable for the application by Morgan Offshore Wind Limited and Morecambe Offshore Windfarm Ltd (the **"Applicants"**) for development consent for the Morgan and Morecambe Offshore Wind Farms Transmission Assets project (the **"Project"**) by (1) Blackpool Airport Operations Limited (**"BAOL"**) and (2) Blackpool Airport Properties Limited (**"BAPL"**), together the **"BA Entities"**.

1.2 As set out in the BA Entities' relevant representations, **[RR-0245]** and **[RR-0246]** (the **"RRs**"), BAOL is the licensed operator of Blackpool Airport (the **"Airport"**). The land on which the Airport is situated is owned by BAPL. Both BAOL and BAPL are wholly owned subsidiaries of Blackpool Airport Limited, which is in turn wholly owned by Blackpool Council. The RRs also provide further background to the Airport's operations and the BA Entities' respective obligations in relation to the same.

1.3 As noted in the RRs, the BA Entities' interests in respect of the Project are considered broadly aligned at this stage. This written representation is therefore submitted on a joint basis. Where any particular matter applies to BAOL or BAPL only this is indicated below.

2. Cooperation Agreement

2.1 As outlined by the Airport at OFH1, the Applicants and BAOL have been in detailed discussions regarding the works on the Airport's operational land for several months, and are currently in the process of negotiating a cooperation agreement (the **"Cooperation Agreement"**), which is well-progressed. Given the commercially sensitive nature of the Cooperation Agreement, the BA Entities are not able to provide any substantive detail on its terms at this stage, but will keep the Examining Authority updated as required. The key principle that BAOL requires to underpin the Cooperation Agreement is to ensure the continued safe, efficient and uninterrupted operation of the Airport. All activities taking place within the Airport must also be to the satisfaction of the Airport's regulator (the Civil Aviation Authority, the **"CAA"**).

2.2 Whilst the BA Entities' key concerns are generally expected to be addressed through the Cooperation Agreement, there are certain issues on which the BA Entities may require further information and/or which may not be able to be addressed through the Cooperation Agreement. At this stage the BA Entities therefore consider it appropriate to draw the Examining Authority's attention to these matters, which are summarised in sections 3 to 7 below.

2.3 For completeness, the BA Entities also summarise below the matters raised in the RRs which it is hoped will be adequately addressed within the Cooperation Agreement and are not therefore considered live issues as at Deadline 1:

2.3.1 Construction techniques to be employed within the Airport;

2.3.2 The extent of the works corridor within the Airport;

2.3.3 Impacts on the Airport's operations during construction of the Project arising from matters such as dust and foreign object debris; and

2.3.4 Impacts on the Airport during the operational phase of the Project, for example impacts on apparatus such as the Airport's navaids (save as noted at section 5 below).

2.4 Concerns that have arisen since the date of the RRs in respect of (i) drainage / flood risk, (ii) permissible construction access routes to the Airport and (iii) the Airport's safeguarding obligations are also expected to be addressed through the Cooperation Agreement.

3. Construction sequencing and duration

3.1 As was noted during OFH1 and ISH1, the draft development consent order currently confers total flexibility on the Applicants in respect of the construction sequencing of the two projects which comprise the Project, such that they may come forward concurrently or sequentially (subject to the proposed seven year time limit for implementation of the development consent order).

3.2 The BA Entities listened to and acknowledge the Applicants' justification for this flexibility provided during the hearings, however it is clear that any impacts of the Project on the Airport's operations would be reduced to the extent that construction is able to take place concurrently and/or the overall construction period is able to be compressed. The BA Entities would therefore be supportive in principle of any controls in the development consent order which would secure this.

4. Bird strike and interaction with the Airport's bird hazard area

4.1 BAOL is required under aviation regulation to identify, manage and mitigate wildlife hazards, both within the Airport site itself and within a 13km radius of the site. The Airport has prepared and implemented a Wildlife Hazard Risk Assessment and Management Plan (the **"BA WHRAMP"**, a copy of which is appended to these written representations) which amongst other things ensures that sufficient risk management processes are in place to effectively manage any bird strike risk, particularly from pink footed geese. BAOL would draw the Examining Authority's attention to the following sections of the BA WHRAMP:

4.1.1 Section 0.5: Wildlife Hazard Assessment (pp.7-14), which sets out the identified bird strike risk within the Airport and the 13km safeguarding area.

4.1.2 Section 0.6: Risk Assessment of Hazard Species (pp.15-29), which sets out the risk assessment in respect of specific bird species (in particular, section 0.6.1 addresses pink footed geese).

4.1.3 Section 1.2.26: TEP/Blackpool Airport data showing locations of Geese 2023/4 (pp.99-100), which shows the bird strike safeguarding area together with levels of pink footed geese observed in the year 2023/24. Data from 2024/25 is currently awaited, but is understood to be largely unchanged, providing

evidence that the current management regime is operating effectively to keep bird numbers at an acceptable level.

4.2 The draft Outline Ecological Management Plan for the Project **[APP-212]** proposes a temporary construction mitigation area at Lytham Moss to mitigate general disturbance and potential impacts on geese, swan and wader feeding and roosting areas (paragraph 1.3.1.1 and Figure 1.3). This land falls within the Airport's safeguarding / bird hazard area under the BA WHRAMP (specifically field C1 shown at section 1.1.26 referred to above), and as a result is subject to existing arrangements to actively manage bird levels and dissuade large numbers from coming within close proximity of the Airport. Any improvement in the attractiveness of the habitat in the western area of the Moss would be most likely to involve the larger numbers currently found in the centre and east of the Moss, once they are subject to disturbance and disruption as a result of the Project, relocating to the west, near the Airport. This would represent a demonstrable and unacceptable safety risk to aircraft arriving at and departing the Airport due to the threat of bird strike.

4.3 This matter was discussed during ISH1, where the Applicants indicated that the ecological mitigation measures proposed are not intended to increase bird levels, but to maintain current levels across the wider assessment area. However, the BA Entities consider this to be a misunderstanding of the issue: it is not the overall numbers across the Moss area as a whole that the BA Entities are concerned by, but any increase in specific areas (i.e. at closer proximity to the Airport), which is exactly what the mitigation measures, as currently proposed, are intended to achieve at Lytham Moss.

4.4 In addition, the proposed construction compound to the east of Queensway (Works No. 18A/B) also lies within the Airport's safeguarding / bird hazard area. This could itself become an attraction to birds such as gulls, and therefore constitute a bird strike risk, unless managed appropriately.

4.5 During the hearings it was also noted that the Applicants intend to prepare a draft outline bird strike management plan for review by the BA Entities, and other interested parties concerned by bird strike risk (such as BAE Systems).

4.6 The BA Entities welcome further discussions with and assessment work from the Applicants on this matter, however at this stage it is unclear the extent to which the heightened bird strike risk can be satisfactorily mitigated whilst the Lytham Moss mitigation site remains in its proposed location, for the reasons outlined above.

5. **Impacts arising from electromagnetic fields ("EMF")**

5.1 The BA Entities have concerns regarding the possible impact of EMF arising from the Project's cables on Airport infrastructure and operations. The possible nature and extent of this impact is not yet understood and further assessment work is required.

5.2 The BA Entities note that the Applicants have commissioned RINA to undertake an EMF desktop study considering EMF impacts at the Airport – the BA Entities welcome this but are liaising with the Applicants to seek to understand the scope of the assessment, in order to ensure that it is adequate and will consider the impacts of EMF

on all relevant Airport receptors (being (i) aircraft and helicopters, especially aircraft using fly-by-wire; (ii) Airport navaids; (iii) Airport cabling and general cabling adjacent to the proposed cable route; (iv) Airport employees, users and other visitors; and (v) communications equipment, both installed and hand held).

5.3 In any event, the BA Entities must reserve their position in respect of EMF impacts pending the outcome of satisfactory assessments and an understanding of what mitigation may be available to adequately address any impacts identified.

6. Land sterilisation

6.1 The BA Entities, in particular BAPL, are keen to ensure that the Project does not result in the sterilisation of any land within the Airport from future Airport and other development. Discussions are ongoing between the land agents appointed by the BA Entities and the Applicants in this regard, and it is hoped that a satisfactory outcome can be reached.

7. DCO controls

7.1 Finally, notwithstanding the fact that bespoke mitigations are sought to be agreed with the Applicants through the Cooperation Agreement, it is recognised that there may be Project-wide development consent order requirements / control documents that have relevance to and/or would benefit the BA Entities. The BA Entities are therefore engaging with the Applicants on which requirements / control documents the BA Entities should be consulted on, and any consequential amendments to the draft development consent order will be captured by the Applicants in due course.

8. Conclusion

8.1 The BA Entities require the Applicants to demonstrate that the Project will not affect the Airport's safe, efficient and uninterrupted operations. Discussions with the Applicants have been constructive and largely positive to date and the BA Entities are hopeful that many of their concerns will be satisfactorily addressed through the Cooperation Agreement.

8.2 However, at this point there are matters which require further consideration, and in some cases may fall outside of the scope of the Cooperation Agreement.

8.3 BAOL is also under a duty to the CAA, who will need to approve all works within the Airport, to ensure the Airport's regulatory compliance. In particular, as was discussed during the hearings, works within the Airport's licensed aerodrome require approval under the CAA's CAP791 process. A separate technical note summarising the CAP791 process is being submitted by the BA Entities at Deadline 1, as agreed at ISH1.

8.4 As referenced above, BAOL is similarly under a legal duty in respect of safeguarding. BAOL has robust safeguarding procedures in place and is working with the Applicants to ensure that all construction activities falling within the Airport's safeguarding areas are adequately safeguarded and, where necessary, appropriate mitigations are secured.

8.5 The BA Entities will continue to keep the Examining Authority informed on the matters set out in this written representation and reserve the right to submit additional representations if for example satisfactory progress is not made in respect of the Cooperation Agreement.

DWF Law LLP

20 May 2025

Appendix: Blackpool Airport Wildlife Hazard Risk Assessment and Management Plan

Blackpool Airport

WILDLIFE HAZARD RISK ASSESSMENT AND MANAGEMENT PLAN

(INCLUSIVE OF WITHIN THE AIRPORT BOUNDARY, QUEENSWAY FARMLAND CONSERVATION AREA AND 13KM BIRD HAZARD AREA)

Document Number	CIMS/BA/AO/002
Version Number	V 3.2
Default Review Period	12 Months
Next Review Due	October 2025
Retention Period	5 Years
Security Status	COMPANY CONFIDENTIAL

DOCUMENT APPROVALS

Author	OSCM - Jim Johnson	October 2024
Document Owner	OSCM - Jim Johnson	October 2024

DOCUMENT HISTORY

This version now combines the previously separate elements of:

- Queensway (QFCA) BHCP created from the development of the housing area within the Queensway site
- Blackpool Airports bird strike risk assessment including data gathered from the 13km Bird Strike risk assessment and annual bird data.
- The airports Wildlife Hazard Management Plan (CIMS Doc AO 002)

AMENDMENT RECORD

No	Date	Description	Amended By
1.0	Jan 15	New company	
1.1	Oct 2017	Review	
1.2	Jan 2021	Full Review- incorporation of Queensway Farmland Conservation area (FCA) - (Approach and departure area for Runway28/10) and associated winter bird survey data. Hazard identification and risk assessment for each species and review of mitigations. Incorporation of 2020 strike data	J Johnson
1.3	August 2021	Review and incorporation of 2020/21 Winter Bird Survey Data and cropping plan	J Johnson
2.0	September 2022	Updating of bird strike data, 2022 cropping plan, 2021 Winter Bird survey results, updating of M55 Link road works, incorporation of all FCA Arrangements and controls, incorporation of Rowland Homes to replace Kensington as the housing area developers and update on development works.	J Johnson
3.0	June 2023	Updating of Winter Bird survey data, cropping plan and contact numbers	J Johnson
3.1	August 2024	Updating of Winter Bird survey data, cropping plan and next phase of Rowland Homes construction Phase	J Johnson
3.2	September 2024	Removal of M55 Link roads works- completed Incorporation of AO 13 - 13km Bird Strike Risk Assessment, AO/003 QFCA Bird Hazard Risk Assessment and Control Plan and AO 002 – Wildlife Hazard Management Plan - Renamed to AO 002 – Wildlife Hazard Risk Assessment and Management Plan	J Johnson

0.1 TABLE OF CONTENTS

0.2 Scope and Objectives

Scope

This document details how Blackpool Airport undertakes Bird Hazard Risk Assessment and applies appropriate mitigations in relation to within the airfield boundary, the 13km bird hazard area and identified risk and also data gathered from the Queensway Farmland Conservation area (FCA), Rowland Homes Development, and other planning and development submissions.

Objectives

- To undertake accurate and regular assessment of the risk posed to aircraft by various bird species, numbers, locations, seasonal variations and records of strike data and near misses.
- To mitigate the risk of bird strikes to its lowest practicable level through the identification and application of control measures
- To support the Lancashire biodiversity action plans and the purposes of the Queensway Farmland Conservation Area (FCA) to address some of the decline in number of target species and to take appropriate opportunities to enhance degraded habitats and populations and where resources allow, develop new habitats that are characteristic of the county.
- To support Rowland Homes with their ongoing development of the housing area whilst ensuring any bird hazard risk is assessed and controlled during development.
- To identify and document the ways in which the airport in partnership with The Environmental Partnership (TEP) and the Land Managers will work closely together to ensure the risk to aircraft by birds in the area is minimised as far as is reasonably practicable.
- To identify and ensure sufficient risk management processes and resources are in place at the airport to manage the bird strike risk effectively.

0.3 Document Change and Control

Blackpool Airport undertake all document change and control in line with the CIMS/BA/GT/001 - Document Governance manual which describes how all users prepare, review and issue procedural documentation that form part of the Airport CIMS.

0.4 INTRODUCTION

0.4.1 Wildlife Hazard Management Responsibilities

Blackpool Airport is required under aviation regulation to identify, manage and mitigate wildlife hazards within the airport itself and extending out within a 13km radius. This includes the area to the East of the airfield known as the Queensway Development, which includes the Queensway Farmland Conservation Area, which is within the approach and departure path for Runway 10/28 and the Rowland Homes Housing Area.

The UK, as a signatory to the Chicago Convention on International Civil Aviation, has adopted the standards and recommended practices (SARPs) specified in Annex 14 (Volume 1 Aerodrome Design and Operation), published by the International Civil Aviation Organization (ICAO).

The requirements for this risk assessment are also based on requirements in the following documents:

- Article 10 of UK Reg (EU) No. 139/2014
- Chapter 5 of CAP 168 Licensing of Aerodromes
- UK Civil Aviation Publication (CAP 772) Wildlife Hazard Management at Aerodromes
- Blackpool Airport Safety Management System
- Blackpool Airport Safeguarding Procedures

Blackpool Airport is located on the Lancashire coast, with the coastline less than 1 km west of the end of the main runway, urban areas and a golf course immediately to the southwest and mixed farmland and conservation area to the east. Local bird populations are generally higher than "average" for a UK airport, and the fleet mix and movement frequency of aircraft using the airport require that the local bird strike hazards are assessed and appropriate mitigation measures are put in place. This document aims to achieve this requirement through analysis of bird species, bird strike risk by species type, identification of bird species location and seasonal variation and appropriate mitigations for all areas to reduce the risk of bird strike to as low as reasonably practicable.

0.5 WILDLIFE HAZARD ASSESSMENT

This wildlife hazard assessment describes identifies bird strike risk within the airport, within the areas of final approach and take off and out to 13km and also includes details of proposed or ongoing developments (including the Queensway housing development and associated open space and nature conservation proposals)

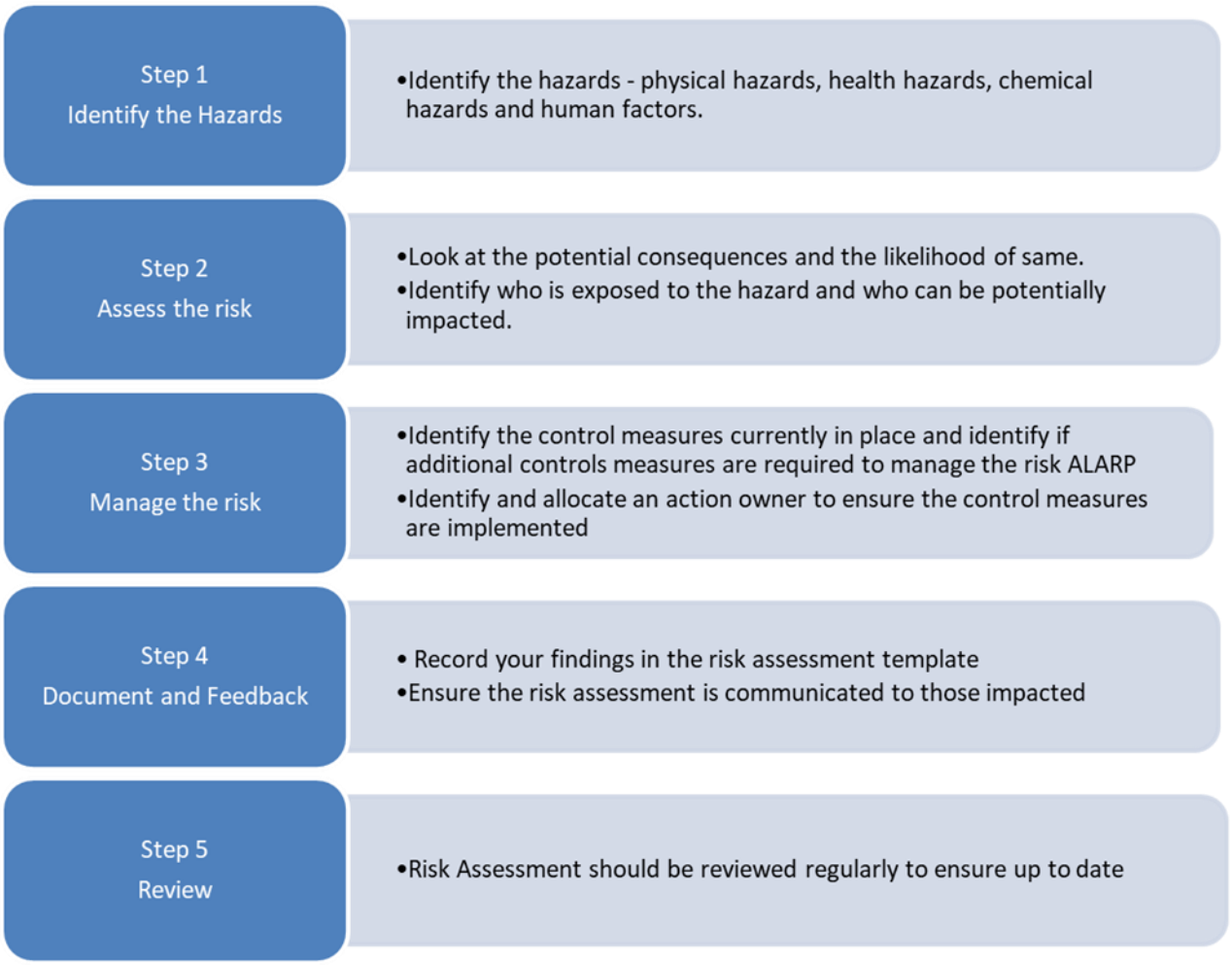
The assessment sets out what measures can be put in place, through design and management, to reduce risk of hazardous bird activity in the airport boundary, flightpath and out to 13km where risk is identified. It includes control measures during construction and management phases of development activities.

The bird hazard assessment considers all bird species potentially associated with birdstrike in accordance with literature on the subject and the results of monitoring by Blackpool Airport and TEP as well as any data available regarding actual bird strikes or near misses as appropriate.

Species considered include gulls, corvids, starlings, small passerines (including Hirundines), waders, wildfowl and wild swans. Whooper swan and Bewick's swan and pink-footed geese are also considered since these species are a Nature Conservation priority for the Lytham Moss therefore it is appropriate to prepare a species specific hazard assessment for these species.

0.5.1 Identification of Wildlife Hazard and Risk Assessment

For the purposes of this document the risk assessment process follows the 5 step process as listed within Blackpool Airports Safety Management System (SMS).



0.5.2 Hazard Identification of Common Species

Methodology: Assessment of known species by size (weight) and flocking tendency to identify extent of hazard(s) based on the expected worst case severity of a bird strike on aircraft using bird data by type, known previous strike data and outcomes

Score	1	2	3	4	5
Impact Definition (Bird Hazard Potential)	**Neglible-** Confirmed birdstrike /wildlife strike (No aircraft damage)	**Minor -** Confirmed birdstrike with light damage	**Major -** Aircraft damage-major within airworthiness tolerances	**Hazardous -** Aircraft significantly damaged outside airworthiness tolerance-accident crash narrowly avoided	**Catastrophic -** Extensively damaged aircraft beyond repair/ Aircraft accident / Loss of Life / High number of serious injures
Species	Linnet Skylark Grasshopper warbler Tree sparrow Reed bunting Grey partridge Corn bunting	**Single Strike** - Starling, Kestrel	**Single Strike:** Woodpigeon	**Single Strike:** **Corvids-**Rook, Magpies, Carrion Crow, Jackdaw Starling **Waders** – Lapwing, Oystercatcher, Curlew , black-tailed Godwit **Gulls:** Herring Gull, Lesser black-backed gull, Common Gull, Black-headed gull **Multiple Strike:** Woodpigeon	**Single or Multipe Strike:** Geese- Pink-footed, Greylag, Canada Whooper Swan, Bewick's Swan **Multiple Strike:** **Corvids-**Rook, Magpies, Carrion Crow, Jackdaw **Starling** **Waders** – Lapwing, Oystercatcher, Curlew , black-tailed Godwit **Gulls:** Herring Gull, Lesser black-backed gull, Common Gull, Black-headed gull

Species	Tendency to Flock Causing Multiple Strike	Weight-Heavy/Light (H/L) Responsive/Unresponsive to Bird scaring methods (R/UR)	Highest Bird Hazard Potential	Known presence and locations on airfield (leading to likelihood)
1. Geese- Pink-footed, Greylag, Canada	**Y Skeins of 50 – 2000**	**H** (2.2-2.7kg) **-R**	**5**	Rarely seen within airfield boundary- however, within approach areas for RW 28 (FCA). Generally to the South and North of flight path, although may transit North-South through flight path
2. Whooper Swan, Bewick's Swan	**Y- Up to 10**	**H-**(Bewicks -4.6 to 7.4kg, Whooper 8.2-11.2kg) **R**	**5**	Rarely seen within airfield boundary- however, within approach areas for RW 28 (FCA)- currently very low numbers. Geese generally to the North and South of the flight path and transit at low heights
3. Corvids- Rook, Magpies, Carrion Crow, Jackdaw	**Y- 10-100**	**H** (200-340g)-**R**	**5**	Mainly rooks throughout airfield, crows and magpies in smaller numbers with occasional Jackdaw. Mainly crows within FCA with Rooks, Magpies and Jackdaws also present
4. Lapwing (Key species)	**Y- 50 – 300.**	**H**(up to 800g) **-R**	**5**	Throughout FCA and airfield
5. Oystercatcher	**Y- 50+**	**H** (up to 800g) **-R**	**5**	Throughout FCA and airfield
6. Curlew (Key species)	**Y- 0 -250.**	**H**(up to 800g) **-R**	**5**	Not generally observed on airfield, Mainly within FCA

Species	Tendency to Flock Causing Multiple Strike	Weight-Heavy/Light (H/L) Responsive/Unresponsive to Bird scaring methods (R/UR)	Bird Hazard Potential	Known presence and locations (leading to likelihood)
7. Black-tailed Godwit	**Y-** 40+	**H** (up to 800g) **-R**	**5**	Not generally observed on airfield, Mainly within FCA
8. Herring Gull	**Y- 50+**	**H** (690-1440g) **-R**	**5**	Throughout airfield and FCA year round- higher numbers including juveniles July-October
9. Lesser black-backed gull	**Y- 50+**	**H** (620-1000g)-**R**	**5**	Throughout airfield and FCA -Mainly Aug-March
10. Common Gull	**Y- up to 50+**	**H** (430g)-**R**	**5**	Throughout airfield and FCA -Mainly Aug-March
11. Black-headed gull	**Y- up to 30**	**H** (280g)-**R**	**5**	Throughout airfield and FCA -Mainly Aug-March
12. Starlings	**Y-up to 2000**	**L** (58-100g)-**R**	**5**	Not generally seen on airfield, small numbers only transiting through. Larger flocks within FCA transiting fields at heights generally below 100ft
13. Woodpigeon	**N-low** (1-4)	**H (**300-620g)-**R**	**4**	Not generally seen but potential to be within any part of airport in small numbers

Species	Tendency to Flock Causing Multiple Strike	Weight-Heavy/Light (H/L) Responsive/Unresponsive to Bird scaring methods (R/UR)	Bird Hazard Potential	Known presence and locations on airfield (leading to likelihood)
14. Linnet	**N**	**L-U/R**	**1**	Common within FCA, Occasional-small numbers within airport
15.Skylark	**N**	**L-U/R**	**1**	Occasional-small numbers FCA and airport
16.Grasshopper warbler	**N**	**L-U/R**	**1**	Not seen
17.Tree sparrow	**N**	**L-U/R**	**1**	Occasional-small numbers FCA and airport
18.Reed bunting	**N**	**L-U/R**	**1**	Not generally seen
19.Grey partridge	**N**	**L-U/R**	**1**	Not generally seen
20. Corn bunting	**N**	**L-U/R**	**1**	Not generally seen

0.5.3 Risk Assessment of Hazard Species Methodology (Step 2)

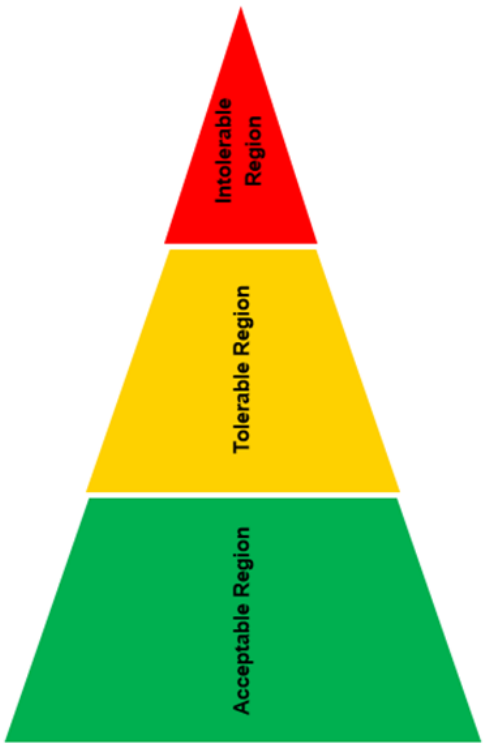
The product of the risk probability and risk severity score derives the risk rating.

The table using the probability and severity scores as axes shows all the different numeric combinations for the risk rating and is termed the safety risk matrix as illustrated below:

Likelihood based most recent year strike data	**Extremely Improbable**	**Improbable**	**Remote**	**Occasional**	**Frequent**
	1/10,000 A/C Movements	2/10,000 A/C Movements	3/10,000 A/C Movements	4/10,000 A/C Movements	5/10,000 A/C Movements
Likelihood based on 5 year strike average data	1/10,000 A/C Movements	2/10,000 A/C Movements	3/10,000 A/C Movements	4/10,000 A/C Movements	5/10,000 A/C Movements
Most recent year frequency is to be used for risk assessment if higher than 5 year average					

Likelihood	Severity				
	Negligible 1	Minor 2	Major 3	Hazardous 4	Catastrophic 5
5 – Frequent	5	10	15	20	25
4 – Occasional	4	8	12	16	20
3 – Remote	3	6	9	12	15
2 – Improbable	2	4	6	8	10
1 – Extremely Improbable	1	2	3	4	5

0.5.4 Risk Tolerability

Risk Tolerability	Description	Action Required
	*The risk level is unacceptable under the existing circumstances. Additional mitigations must be implemented or event or associated activities must be cancelled*	**Where an Intolerable risk is identified which cannot be brought to an acceptable level by the Risk Owner, a risk group should convene within a 24-hour period to identify further actions to bring the risk to an acceptable level. Action/operation must cease until sufficient mitigation is introduced to reduce to amber level risk**
	The risk level is acceptable based on the identified risk mitigations in place.	*Tolerable risks must be reviewed by Risk owner / risk assessment group and the Safety Manager to ensure ALARP. Must be captured on risk register for sign off*
	Acceptable risk – No immediate action / further action required	*Risk owner / risk assessment group must ensure control measures in place remain in place.*

1. Depending on the likelihood and severity of a risks, they may be red risks (Intolerable), amber risks (Tolerable) and green risks (Acceptable).
2. Reduce risks to ALARP and to manage the risk accordingly.
3. This is outlined in the previous table: Risk tolerability.
4. Risks are assessed on both an inherent (as is status with controls already in place) and residual basis (after additional mitigation measures have been incorporated).
5. Once the risk has been rated, it is assessed with a view to deciding whether the level of residual risk is tolerable and what further action is required.

0.6 Risk Assessment of Hazard Species

0.6.1 Geese –Pink Footed (Sep-Apr), Greylag, Canada (year round)

NUMBERS/PRESENCE ON AIRFIELD/FCA	TIMINGS	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
During winter 2023/4 the largest numbers of pink-footed geese were recorded in field clusters C1,C2, C3, C9, C10 (total count for all observations ranging between 2000-10,000). Lesser numbers observed in fields C7 and C8 (total count for all observations ranging between 200-2000) and very low numbers in fields C5 and C6 ((total count for all observations ranging below 200). In general, these species are observed in field clusters C1, C2, C3, C5, C9 and C10, which are mainly directly to the north and south of the flight path. **Within airport boundary**- overflight/transit only, mainly Canada Geese	**Timings** Mainly seasonal **September - April** but with feral (Canada, Greylag) numbers <1000 all year round.	Mainly feeding on Barley and grass, will utilise cereal stubble, winter cereal, growing spring cereal, root crops and pasture. Local transiting from field to field. Usually scared from fields by dog walkers, low flying aircraft especially jets up to 6 times per day. Mainly present within Queensway FCA to the North and South of the approach/departure area for Runway 28/10. Local heights vary between 0 – 500' Geese are large birds and present a significant risk to aircraft operations. However, provided that any water habitats on aerodromes are effectively managed to exclude waterfowl, their presence is restricted to flight lines across the aerodrome, which in itself can be hazardous if not checked and understood. Flocks may occur on or near aerodromes. Canada geese are gregarious, roosting on lakes and ponds, and travelling several kilometres daily to feed on farmland, parkland and short grass. Pairs are widely dispersed on islands in lakes, rivers and gravel pits in the breeding season. Canada geese tend to be site-faithful, with females tending to return to their natal areas to nest each year. Flocks of feral, non-migratory 'Wild' geese commonly winter in Britain, notably in northern and eastern areas. These migratory Greylag and Pink-footed geese feed on farmland in large flocks, returning year on year to well-defined areas centred around roosts on lakes or estuaries. They often fly to roosts after dark and may stay airborne for extended periods if disturbed. They rarely venture onto airfields and are best dispersed using active deterrence measures if located.	Southport and Banks Marsh to Pilling where they feed on stubble. Dropping in to Queensway FCA at various times of the day. Flight lines usually N-S and vice versa. Transiting heights 1000 – 2000ft. Locations in FCA are generally outside of the flight path. (see winter bird survey data)	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0- 5 year average: 0 **5 YR STRIKE DATA-Airport** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0- 5 year average: 0 **Other areas within 13km Zone** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0- 5 year average: 0 **Aircraft Movements** 2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 2023 – 40,712 **Total: 182609- ave: 36521**

RISK ASSESSMENT-GEESE

Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	Location	L	S	Current Risk Level
Bird strike-**Heavy and responsive species** classification- 2.2-2.7kg-flocks generally in the region of 500 upwards	Multiple Bird strike of heavy species on aircraft during approach/departure for Runway 28/10	Aircraft Accident Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	Winter bird surveys -Numbers counted and managed with FCA by TEP and airport. Cropping plan distributed annually- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times, ploughing and rotation. Airport information plan lists warning for geese for Runway 10 climb out/28 Approach-Sep-April ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield Regular meetings with all parties Airfield long grass policy to deter bird habituation on the airfield Ongoing monitoring of Winter numbers Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA) Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28	Airport	1	5	5
				QFCA	1	5	5

0.6.2 Corvids –Rooks, Magpies, Carrion Crow

NUMBERS/PRESENCE ON AIRFIELD/FCA	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
Numbers within the region of 400 plus within whole area of FCA-Mainly crow, with rooks, Jackdaws and Magpies Minimum of 20 up to 100 within airfield boundary-Mainly Rooks with crows, Magpies and occasional Jackdaws Timings: Year round-Juveniles from August throughout Winter presents increased risk	**Within FCA**- Usually feeding, some breeding and loafing. Some feeding on potatoes and food put out for Swans. Generally below the height of aircraft **Within Airport boundary**- generally occupy areas south of Runway 28/10, to the South of Runway 31 adjacent to golf course and in ILS areas due to shorter grass and proximity to airport boundary and nearby rookeries. Rooks are gregarious and feed on soil invertebrates, grain and seeds, and roots on farmland and aerodromes. They find much of their food by vigorously probing the soil. They nest colonially, forming rookeries in tall trees, where they return for security. Dawn and dusk flight lines and pre-roost assemblies may increase the risk of a wildlife strike occurring. Their foraging range is restricted to a few kilometres from the rookery when nesting. Consequently, the presence or absence of rooks on aerodromes in the breeding season depends on the size and proximity of the local rookeries Carrion crows are involved in relatively few wildlife strikes despite a ubiquitous presence on aerodromes. Their presence, however, signals to other wildlife that the area is safe and may result in greater risks than initially appears. Their diet includes carrion, small mammals and birds, eggs, animals, soil invertebrates, grain and fruit and waste food. On aerodromes, carrion or dead insects around runway lights may attract them to runways. They will drop hard-shelled prey on runways and taxiways to break it open. Although common, jackdaws are involved in very few wildlife strikes, they commonly associate with other corvids and significant numbers may nest and/or roost in hangars. Jackdaws are very gregarious, often in mixed flocks on farmland and aerodromes. Their diet is similar to that of rooks, but on grassland jackdaws feed on surface-dwelling invertebrates, rather than digging for prey. They also take small mammals, eggs, waste and chicks. They roost communally, again, often with rooks in woodland. The most effective way of controlling corvids on aerodromes is a good LGP along with suitable habitat controls to prevent nesting opportunities, after which active control as per other species should be carried out.	< 200' height when transiting. Routes and times vary and are unpredictable.	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0 5 yr ave: 0 **5 YR STRIKE DATA-Airport** 2019 - 0 2020 - 0 2021 - 0 2022 – 1 (JD) **2023 – 1 (MG)** **5 yr ave- 0.01 per 1000 movements** **Other area(s) within 13km Zone** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0 **Aircraft Movements** 2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 **2023 – 40,712** **Total: 182609- ave: 36521**

RISK ASSESSMENT- CORVIDS –ROOKS, MAGPIES, CARRION CROW

Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	Location	L	S	Current Risk Level
Bird strike-**Heavy and responsive** species 200-340g- Potential for flocks of up to 500 although rarely such high numbers on the aiport	Single or Multiple Bird strike of heavy species on aircraft during approach/departure	Aircraft Accident / Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	1. Cropping plan distributed annually within FCA- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times, ploughing and rotation. 2. ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield 3. Regular meetings with all parties 4. Airfield long grass policy to deter bird habituation on the airfield 5. Ongoing monitoring of numbers 6. Removal/lopping of trees within airport boundary 7. Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA) 8. Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28 9. Regular visits to FCA for monitoring during Spring/Summer months	Airport	1	5	5
				QFCA	1	5	5

0.6.3 Waders-Lapwing, Curlew, Black Tailed Godwit, Oystercatcher

NUMBERS/PRESENCE ON AIRFIELD/FCA	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
Within FCA: The arable and pasture mixture of farmland within the FCA provides ideal wintering habitats for Lapwing, Curlew and Oystercatcher and Black Tailed Godwit. In general these wading species are seen during most visits to the FCA by TEP and Blackpool Airport **Within Airport Boundary:** Curlews and Oystercatchers, can occur on the airport in significant flocks (100+ birds) in the autumn and winter months and present a significant birdstrike hazard due to their large size (average almost 800g), flocking behaviour and their habit of occasionally settling in flocks on runways. . The football fields around the airport boundary also provide food and roosting areas, and, when these are disturbed for football games, this causes an influx of birds onto the airfield. Constant harassment by the BCU is applied and works well.	Lapwings prefer open habitats with low or sparse vegetation, especially grassland. Flocks begin to build in June or July as local birds disperse from breeding sites and others migrate to the UK. Some aerodromes provide attractive habitats to small numbers of lapwing during the breeding season, but can attract substantial flocks of non-breeding birds towards the end of the summer. Once harvesting and ploughing are underway from August, lapwing numbers on aerodromes decline as they move to exploit these seasonal feeding opportunities. They remain relatively scarce on aerodromes until October or November when large flocks reappear. Unless hard weather settles in, numbers can remain high in winter until spring migration in February and March. However, prolonged frozen ground or snow cover prevents lapwings from feeding and they are forced to move to seek better conditions further south or at the coast. The oystercatcher is primarily a coastal species but moves inland to moors to breed and to lowland water bodies in winter to feed. On aerodromes, particularly those near the coast, they will nest on gravel islands surrounding lights and marker boards, broken up paved surfaces, fresh drains and disturbed ground, such as rabbit holes. They will may also use shingle flat roofs that provide an ideal substitute for coastal shoreline areas. The curlew is often found on mudflats and grassland, often in large flocks in winter, mostly around the coast but inland in smaller numbers throughout lowland Britain and Ireland. They rarely alight on paved surfaces when nesting, but wintering flocks often do. An effective grass policy and active control are the best methods for preventing waders using aerodromes.	< 400' height when transiting. Routes and times vary and are unpredictable.	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0 5 year average: 0 **5 YR STRIKE DATA-Airport** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0 5 year average: 0 **Other area(s) within 13km Zone** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0 **Aircraft Movements** 2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 **2023 – 40,712** **Total: 182609- ave: 36521**

RISK ASSESSMENT- LAPWING, CURLEW, BLACK TAILED GODWIT, OYSTERCATCHER

Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	Location	L	S	Current Risk Level
Bird strike-Heavy and responsive species **Lapwings** (Wt:140-320g) flocks- up to 100+. . **Curlew** (Wt:575-1,000g) Flocks- up to 100+. **Black-tailed Godwit** (Wt:280-340g) Flocks 40+ (Mainly in FCA and not airport). **Oystercatcher** (Weight: 430-650g) Flocks up to 100+	Multiple Bird strike of heavy species on aircraft during approach/departure	Aircraft Accident Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	1. Cropping plan distributed annually- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times, ploughing and rotation. 2. ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield 3. Regular meetings with all parties 4. Airfield long grass policy to deter bird habituation on the airfield 5. Ongoing monitoring of numbers 6. Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28 7. Regular visits to FCA for monitoring during Spring/Summer months 8. Winter bird surveys by TEP and Blackpool Airport 9. Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA)	Airport	1	5	5
				QFCA	1	5	5

0.6.4 Gulls-Herring, Lesser black-backed, Common, Black-Headed

NUMBERS/PRESENCE ON AIRFIELD/FCA	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
Herring Gulls and Lesser black-backed gulls. Numbers generally range from 10 to 500 birds within FCA and airfield boundary. Gulls are present in the area year-round, breeding locally. Numbers increase in spring, autumn and winter and most of the strikes have occurred during these seasons. Daily, gulls may occur on the airport throughout the day and night, in particular from just before dawn to around 1 hour after dawn and a less intense increase from late afternoon to sunset. The local football fields also create a significant hazard in that they represent a natural food source, people also feed them there, and they are a daytime roosting site. Drainage works have significantly reduced standing water on the nearby football pitches. Herring Gull population has increased quite significantly over recent years.	Gulls feed predominantly on soil invertebrates, especially on disturbed ground, but can be found scavenging waste or hunting insects in the air. Most often they are encountered crossing an airfield when moving between their breeding or roosting sites, and feeding sites. These can include farmland, playing fields with short grass, sewage works, and landfill sites where food wastes are tipped. They will also forage along coastlines, estuaries, river banks and in parkland where they will readily adapt to take food from people. When not feeding, flocks may spend long periods on open undisturbed sites and commonly use aerodromes for security. During the breeding season, gulls of all species may be found nesting on rooftops of buildings (such as the CBRE buildings to the North West) both on and off the aerodrome. Numbers generally rise from July through to November and fall in March, but are present all year round, and therefore may be a birdstrike risk at any time. Ploughing fields nearby may cause short-term influxes of these species during the autumn months.	High level- <2000' and local 0 – 500' Also some thermalling behaviour in Spring, Summer and early autumn. Dawn and dusk transits are usually high level transitory, the rest are mainly local. Low Level- Flight lines develop between these fields with the gulls often crossing 01 /28 and 31 threshold at low level – less than 200 ft.	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0- 5 year ave- 0 **5 YR STRIKE DATA-Airport** 2019 – 2: 1 HG, 1 CM (0.06/1000) 2020 – 2: 1 HG, 1 CM (0.08/1000) 2021 – 4: HG (0.1/1000) 2022 – 6: 4 HG, 2 CM (0.15/1000) **2023 – 9: 8 HG, 1 CM (0.23/1000)** 5 year average: 0.13/1000 **Other area(s) within 13km Zone** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0 **Aircraft Movements** 2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 **2023 – 40,712** **Total: 182609- ave: 36521**

RISK ASSESSMENT- GULLS-HERRING, LESSER BLACK-BACKED, COMMON, BLACK-HEADED

Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	Location	L	S	Current Risk Level
Bird strike-Heavy and responsive species classification- **Herring Gull** (weight: 690-1440g) **Lesser black-backed gull** (weight 620-1,000g) **Skeins range from 10 to 500 birds**	Multiple Bird strike of heavy species on aircraft during approach/departure	Aircraft Accident Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	1. Cropping plan distributed annually- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times and rotation. 2. ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield 3. Regular meetings with all parties 4. Airfield long grass policy to deter bird habituation on the airfield 5. Airport information plan lists warning for Gulls mainly Sep-Apr transiting N-S / S-N. 6. Ongoing monitoring of numbers during Winter bird surveys 7. Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28 8. Regular visits to FCA for monitoring during Spring/Summer months 9. Approved culling to reduce should numbers increase enough to present a significant risk of strikes (CL12 Air Safety Class Licence Registration) 10. Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA)	Airport	2	5	10
				QFCA	1	5	5

0.6.5 Starlings

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

NUMBERS.	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
0 – 2000 transit throughout fields within FCA, generally flocks of up to 100 observed however. Small numbers observed within airfield boundary- generally 20 or less and less frequent Year Round	Usually low level transiting field to field. No murmurations seen. Care must be taken with reed, bean and fruit planting. Although the starling is involved in a relatively small percentage of birdstrikes in the UK, they can form large and dense flocks during feeding bouts or prior to joining a roost around dusk. Most strikes occur during and after the breeding season when flocks of juveniles are difficult to disperse from aerodromes. Starlings are omnivorous opportunists, taking a wide range of food including worms, insects, seeds, fruit, cereals, household scraps and other waste. However, grassland is the most important feeding habitat and flocks busily probe the ground with partly open bills. They progress over the ground with a characteristic 'rolling' motion in which birds from the rear periodically take flight and move to the leading edge of the flock. Thus, they appear to be able to overcome at least in part the problem of detecting predators when foraging in aerodrome long grass. Starlings sometimes 'shadow' livestock to prey on disturbed invertebrates and flies, and also 'hawk' for flying insects when they are abundant (e.g. crane fly, ants). Starling roosts can contain thousands of birds. Typically they roost in dense vegetation (not necessarily tall but usually difficult to penetrate) such as thorn thickets, game coverts, young un-thinned conifer plantations, reed beds etc. They nest between April and July in holes in trees, buildings and occasionally aircraft. The most appropriate forms of bird management practices vary from an effective grass policy through to proofing of nesting areas and removal of roosting habitat. Starling roosts can be dispersed by scaring action at dusk on several consecutive nights. Considerable effort and resources (and specialist advice) may be necessary to evict starlings from roosts using pyrotechnics, distress calls and/or lasers.	Low level.	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0-- 5 year average-0 **5 YR STRIKE DATA-Airport** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0- 5 year average-0 **Other area(s) within 13km Zone** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0 **Aircraft Movements** 2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 **2023 – 40,712** **Total: 182609- ave: 36521**

RISK ASSESSMENT –STARLINGS

Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	Location	L	S	Current Risk Level
Bird strike-light and responsive species, Weight: 75-90g - however potential (currently low for flocking in large numbers (murmurations)	Multiple Bird strike of lighter species on aircraft during approach/departure	Aircraft Accident Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	1. Cropping plan distributed annually- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times and rotation. 2. ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield 3. Regular meetings with all parties 4. Airfield long grass policy to deter bird habituation on the airfield 5. Ongoing monitoring of numbers during Winter bird surveys 6. Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28 7. Regular visits to FCA for monitoring during Spring/Summer months 8. Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA)	Airport	1	5	5
				QFCA	1	5	5

0.6.6 Woodpigeons

NUMBERS.	TIMINGS	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
Within FCA 0 – 10 with flocks up to 30 Within Airfield boundary- less common, generally individuals or pairs with some flocks up to 10 mainly transiting	Year round	Generally low level transiting from field to field. Feeding on Crops like cabbages, sprouts, peas and grain. Also buds, shoots, seeds, nuts and potato crop.	Low level transiting usually below 200ft.	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 - 0-5 year average -0
				5 YR STRIKE DATA-Airport
				2019 - 0 2020 - 0 2021 - 1 2022 - 0 2023 – 0-5 year average -0
				Other area(s) within 13km Zone
				2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0-5 year average -0
				Aircraft Movements
				2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 **2023 – 40,712** **Total: 182609- ave: 36521**

RISK ASSESSMENT- WOODPIGEONS

Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	L	S	Current Risk Level	Further action to reduce risk(s) and resulting risk index
Bird strike-heavy and responsive species, Weight: 480-550g	Bird strike of heavy and responsive species on aircraft during approach/departure	Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	Cropping plan distributed annually- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times and rotation. ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield Regular meetings with all parties Airfield long grass policy to deter bird habituation on the airfield Ongoing monitoring of numbers Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28 Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA)	1	5	5	Risk may increase due to changes in the general licence. Continue to monitor numbers and cropping plan.

0.6.7 Swans- Bewick's, Whooper and Mute

NUMBERS.	BEHAVIOUR.	FLIGHT LINES.	5 YR STRIKE DATA-QFCA
Within FCA 0 – 10. Winter Bird 2023/4 (40 day count) survey records show low numbers mainly of Whooper swans- 126 total count over the entire period counted Sep-Apr. Bewicks swan 0. **Whooper Swan:** Observed in field C1 (to the south of the flight path) on ten occasions with one observation in C8 which is near the flight path but way below the height of aircraft at this point- over 2km out from 28 threshold **Within airfield boundary**- occasional transit but rarely if ever present	Generally low level transiting from field to field. In the UK, feed in fields on leftover potatoes and grain. On their breeding grounds they eat aquatic plants and grass. Swans are large birds and present a significant risk to aircraft operations. However, provided that any water habitats on aerodromes are effectively managed to exclude waterfowl, their presence is restricted to flight lines across the aerodrome, which in itself can be hazardous if not checked and understood. (EWS netted). Swans mainly frequent rivers, lakes and small ponds, although they move onto farmland to feed, especially during winter.	FCA- 20 -100'. Direction varies. Recent potato food supplement over last few years has had little impact on numbers Airfield- occasional transit at height approx. 100-200ft	2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0 – 5 year average -0 **5 YR STRIKE DATA-Airport** 2019 - 0 2020 - 0 2021 - 1 2022 - 0 2023 - 0– 5 year average -0 **Other areas within 13km Zone** 2019 - 0 2020 - 0 2021 - 0 2022 - 0 2023 – 0– 5 year average -0 **Aircraft Movements** 2019 – 36,289 2020 – 26,137 2021 – 40,230 2022 – 39,241 **2023 – 40,712** **Total: 182609- ave: 36521**

RISK ASSESSMENT - SWANS- BEWICK'S, WHOOPER AND MUTE

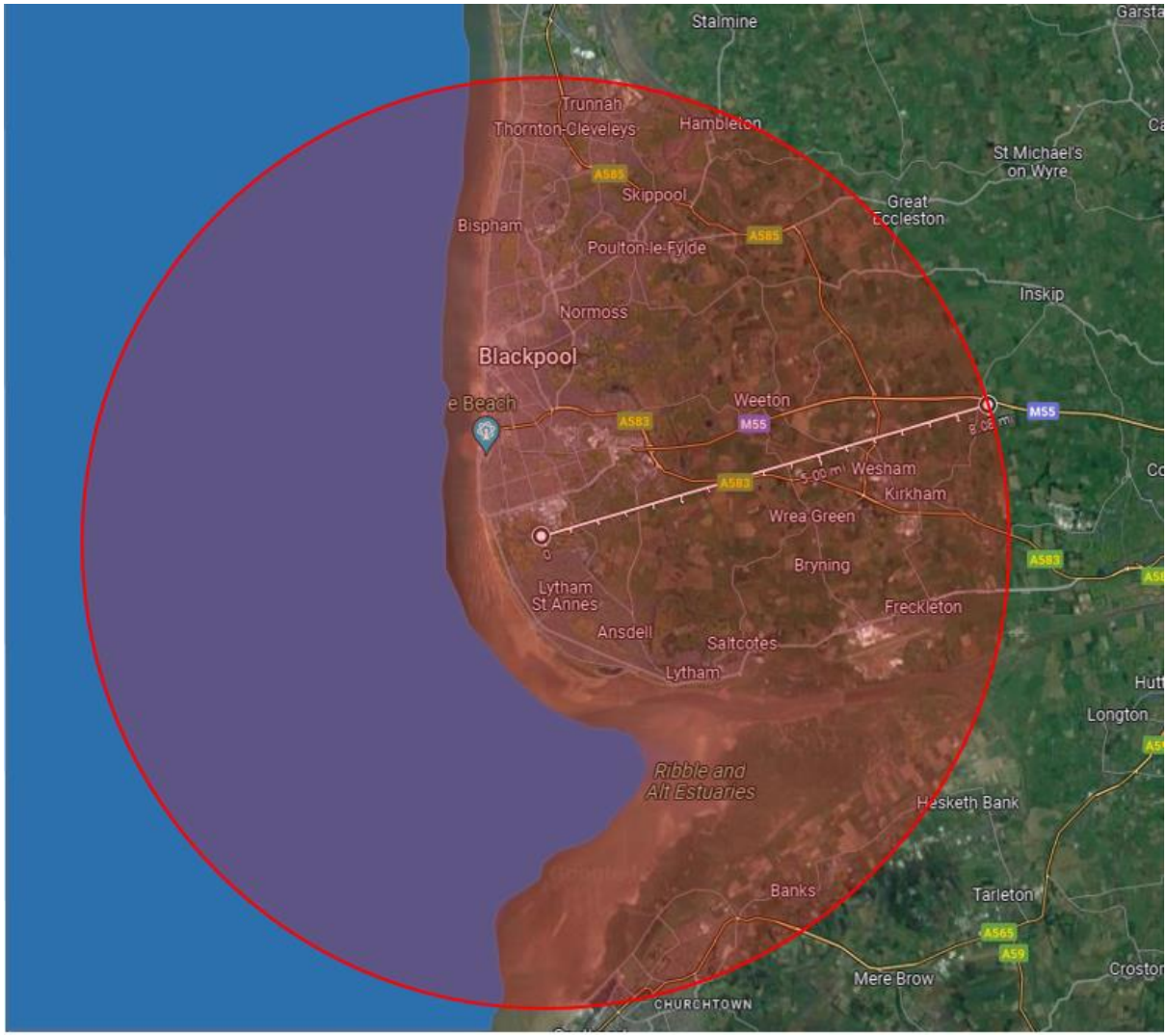
Generic Hazard	Specific components of the hazard	Hazard-related consequences	Existing mitigation	L	S	Current Risk Level	Further action to reduce risk(s) and resulting risk index
Bird strike-heavy and responsive species, Weight: BS up to 6Kg WS- 9-11Kg	Bird strike of heavy and responsive species on aircraft during approach/departure for Runway 28/10	Aircraft Accident / Damage outside of airworthiness tolerances / Damage within airworthiness tolerances	1. Cropping plan distributed annually- crops assessed/approved on a risk basis (food source) regular meetings with TEP and a level of control over crop choice, cropping times and rotation. 2. ATC inform aircraft of any increased bird activity/BCU permanent presence on airfield 3. Regular meetings with all parties 4. Airfield long grass policy to deter bird habituation on the airfield 5. Ongoing monitoring of Winter numbers 6. Recent improvement in FCA and airfield drainage removing standing water on approach/departure path Rwy 28/10 and southern side of Airfield/Runway 10/28. EWS East and West are netted to prevent swans. 7. Observation and patrolling by permanent Bird Control Unit on airfield combined with visual observation by ATC from Visual Control Room of approach/departure path for runway 28 (FCA)	1	5	5	Continue to monitor numbers for TEP targets in line with risk

0.6.8 Summary of Hazard Species and Risk Management

Species	Current Risk Rating	Adequately Controlled	Further Actions
Geese- Pink-footed, Greylag, Canada	5	Y	Continue to monitor
Swan -Whooper Swan, Bewick's Swan, Mute Swan	5	Y	Continue to monitor
Corvids- Rook, Carrion Crow, Magpie	5	Y	Continue to monitor
Waders- Lapwing Oystercatcher Curlew Black Tailed Godwit	5	Y	Continue to monitor
Gulls- Herring, Lesser black-backed, Common, Black-headed.(using 2023 peak strike frequency- 2/10,000)	10	Y	Continue to monitor
Starlings	4	Y	Continue to monitor
Woodpigeon	4	Y	Continue to monitor

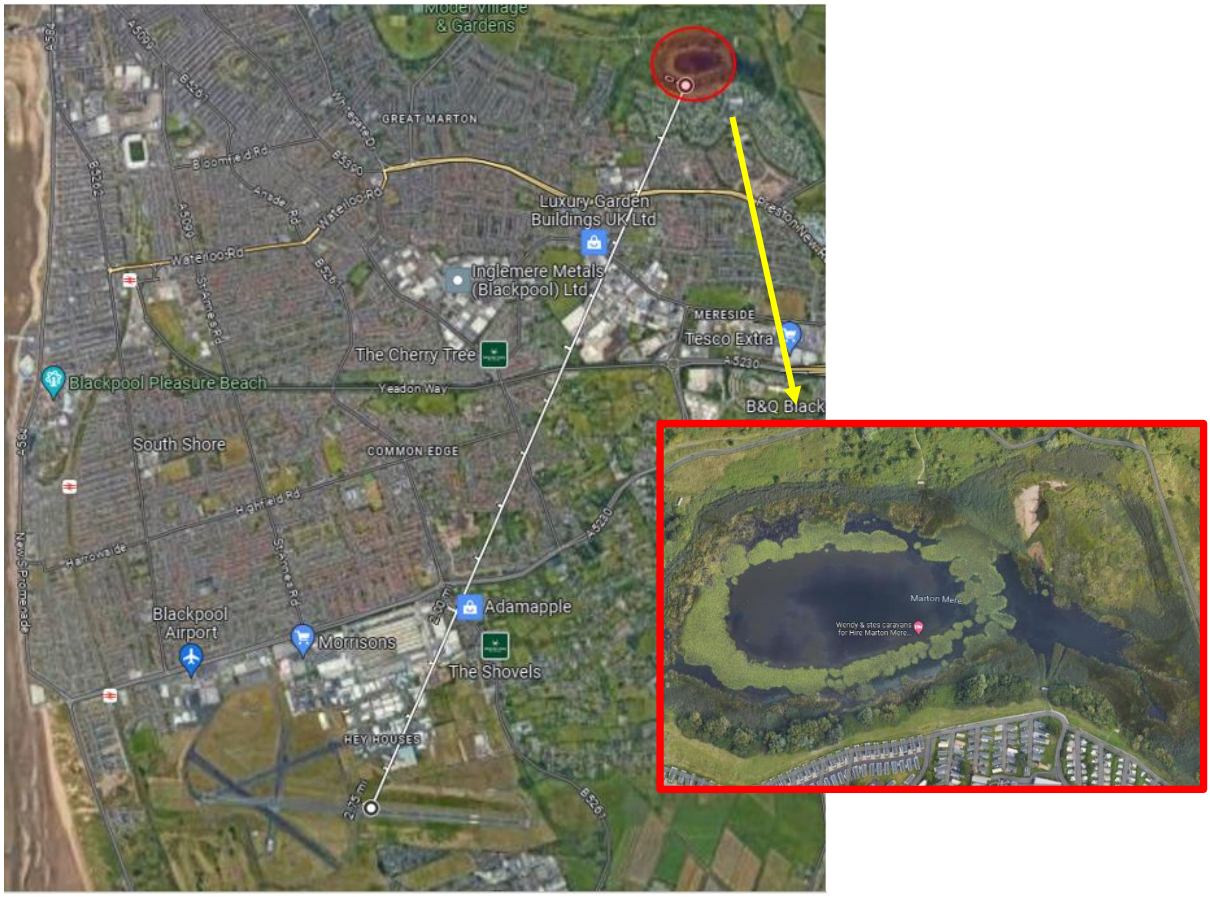
0.7 13KM BIRD HAZARD SURVEY DATA

13KM SAFEGUARDING ZONE



13 Kilometre Bird Attractant Areas

Marton Mere



Marton Mere, located approximately 4.5Km from the aerodrome is a SSSI with a wide diversity of habitat. It supports and attracts Geese, Gulls, Starlings, Curlew and Corvids. It is a factor which is expected to have some impact on flight lines for gulls and Geese near the airport.

Agricultural Land to the East

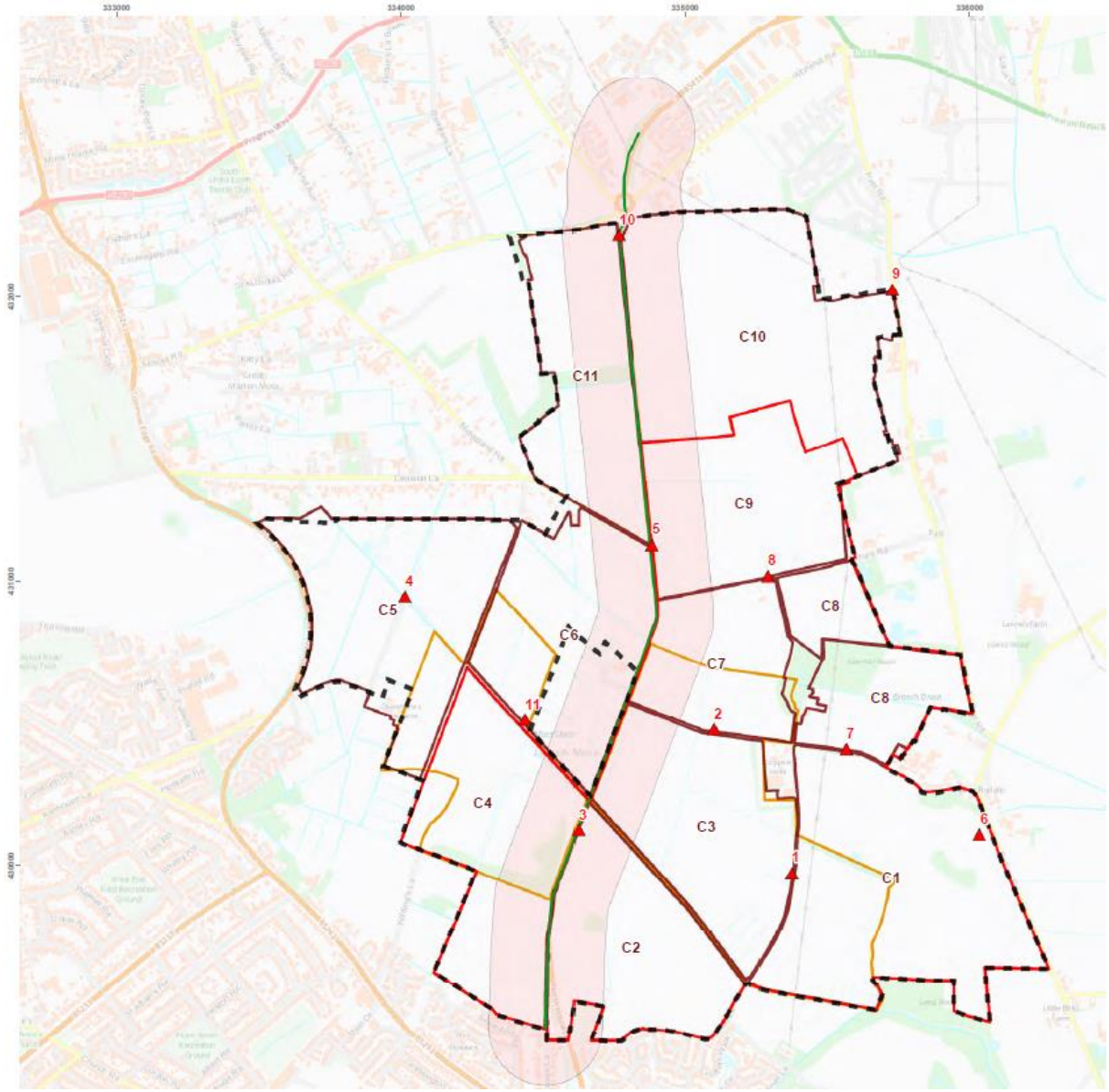
The land under Runway 28 approach is part of the Queensway Farmland Conservation Area (QFCA) and has its own habitat management plan supported by Natural England, The Environment Project (TEP), Rowland Homes developments, the local farmer (Bradleys) and Blackpool Airport.

Blackpool Airport has access to the land for undertaking scaring and dispersal actions where required and bird hazard surveys, particularly during the Winter Months where Geese are present. The airport and TEP conduct in the region of 20 visits each to the area over the Winter in order to monitor Geese numbers and location in relation to the flight path.

The local farmer provides the airport with Summer and Winter cropping plans which are designed to mitigate attractants within the approach path and therefore reduce bird activity. This has proven successful for a number of years now with low numbers of Geese within the field underneath the flight path and generally to the areas to the north and south.

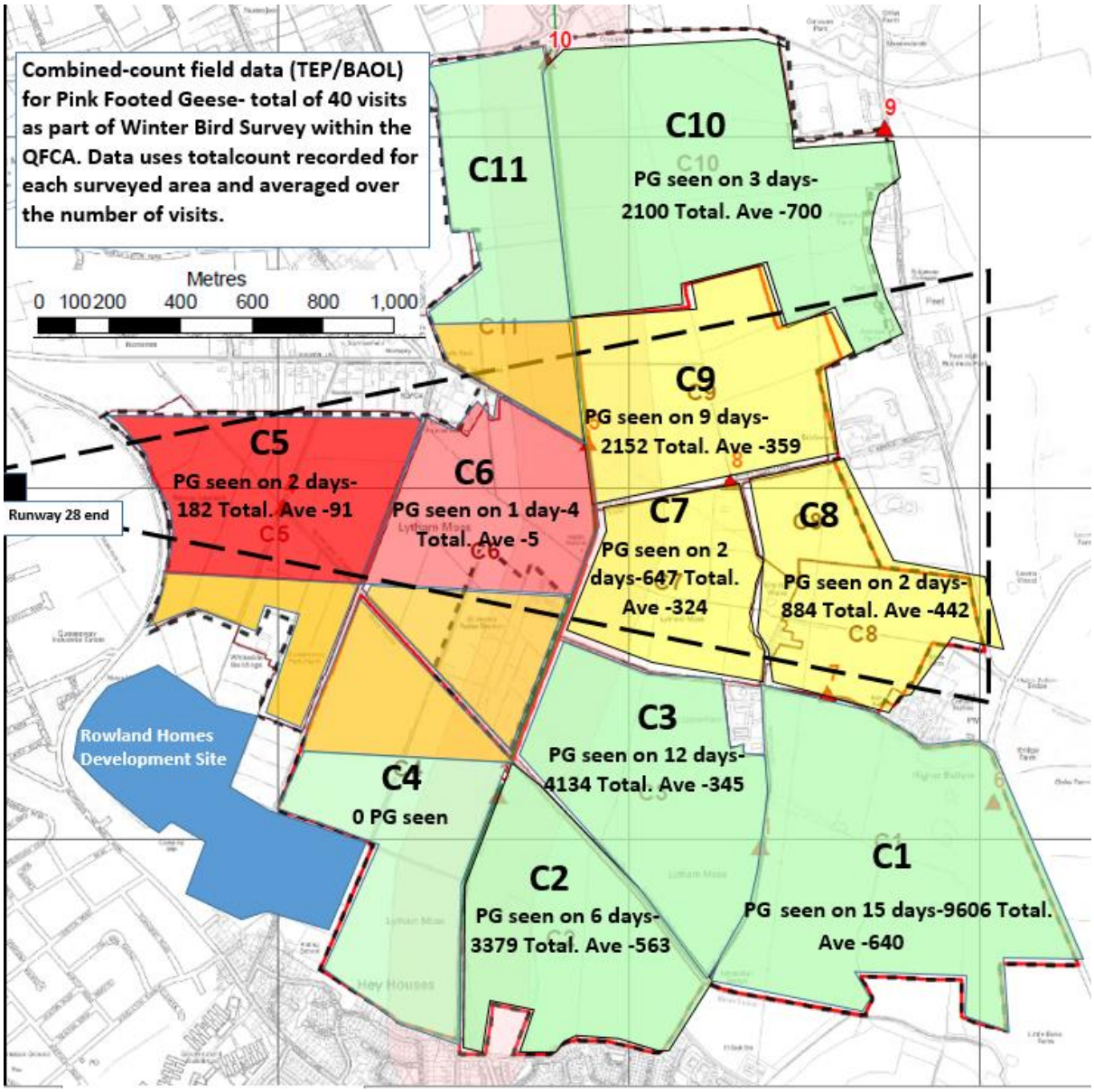
Geese fly across the 28 approach from Banks Marsh to Pilling in the North and occasionally land in the shaded area, generally in the fields to the North and South of the flight path.

QFCA Bird Hazard Monitoring Area



2023/2024 Winter Bird Survey- Geese Locations and Numbers

The below image shows the locations and numbers of Pink Footed Geese observed within the QFCA recorded over 40 visits between BAOL and TEP. The location of the Geese is managed via the cropping plan and ploughing times agreed with the local farmer and keeps the geese out of the main area of the flight path from Runway 28. Further details on the management of this area can be found in BAOL Wildlife Hazard Management Plan and Bird Strike Risk Assessment documents.



Rookeries

The main Rookeries are highlighted in the above image and are responsible for most corvids which access the airport.

Corvid numbers are generally in low numbers around the airfield. Previous large numbers observed within the Glide Path array and protected zone have reduced significantly over the past two years due to a combination of proactive dispersal and the installation of the football pitches to the North of the runway which has taken them off the airport.

Corvid strikes remain uncommon.

Playing Fields

Playing fields have the potential in the Winter months to be an attractant for gulls and wading species. The improvement with recent drainage works to the football pitches to the south and north of the runway has reduced standing water significantly over the winter months and as a result bird numbers of all types have dropped significantly over the past two years in these areas.

Gulls and rooks are observed in manageable number sin these areas and bird scaring methods along the perimeter fence line is successful in keeping numbers down. Single transiting gulls remain the risk when crossing between these areas rather than multiple gulls

Landfill Sites

None currently within the 13Km area.

Banks Marsh, Hesketh and Warton Banks

Banks Marsh / Hesketh Marsh

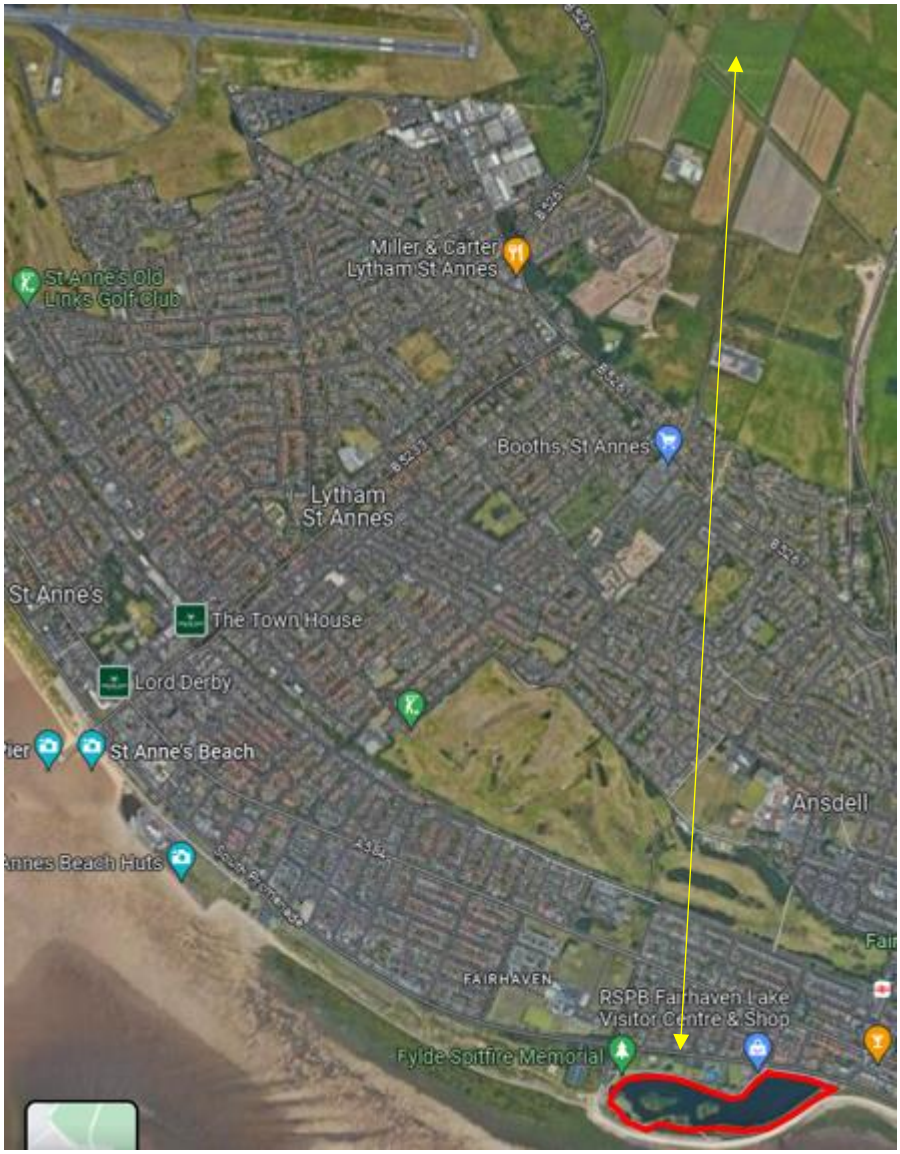
This is a well known migratory roosting area for Geese, Curlew and other wading species in the Winter months. Geese from here and Warton cross 28 approach to the east travelling North to Pilling marshes and back, this can be during the day or night.

Lesser Black Backed and Herring Gulls breed in the area from February to August in large numbers. A portion of these Gulls visit the colony to the North at the CBRE Hangar and feed and roost to the east of Queensway road area.

Warton Bank

This area is a Lesser Black Backed Gull Breeding colony. Both areas area part of a SSSI and therefore little can be done to reduce bird numbers in this area. Birds which make there way near to the airport however will fall under culling requirements of observed in numbers which create a hazard to aircraft.

Fairhaven Lake

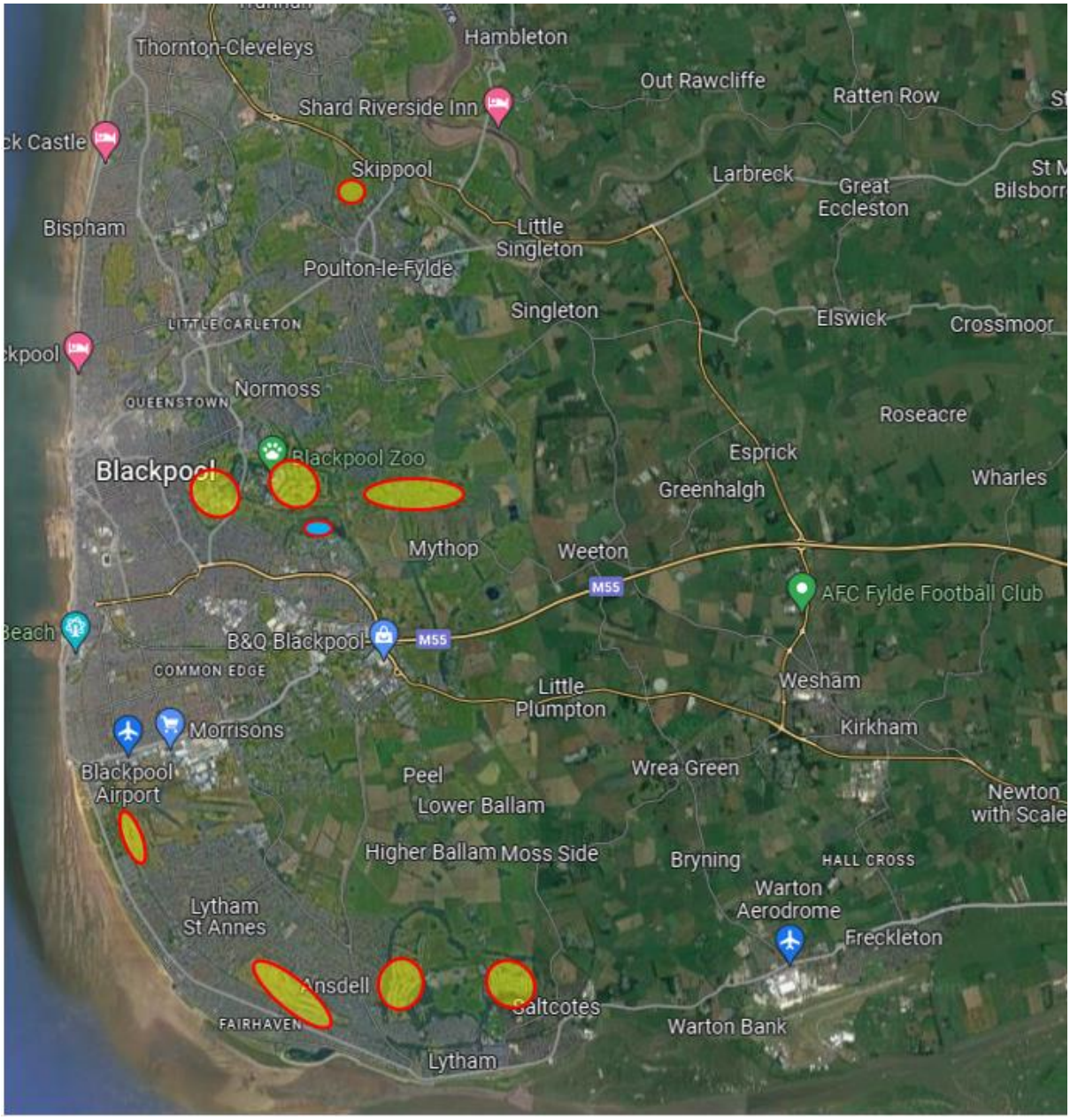


Fairhaven lake is home to a wide selection of Geese including Barnacle, Pinkfoot and Greylag with other waterfowl also resident.

In the Winter months geese fly from the lake to the North crossing the flight path of runway 28

NOTAM and ATC warning to pilots are sent out if high activity is observed. Warning of Geese is contained within the AIP

Golf Courses and Stanley Park Lake



The St Annes Old Links Golf Club next to the SW corner of the airfield is a dispersal route used by Curlew, Corvids and Gulls when scaring actions are applied on the airfield. Permission can be obtained for access into the Golf course as required if birds are observed in high number, generally however bird numbers are low due to human activity in the area.

Blackpool Stanley park comprises of golf course areas and its own lake which attracts gulls, geese and corvids.

Western Sand Dunes

The dunes attract various species of small waders. These however mainly stay away from the airfield and numbers have been reducing over recent years. Oystercatcher and Dunlins are mainly seen on the dunes and occasionally venture onto the airfield during periods of heavy rain where standing water is created. With the drainage works improvements undertaken in 2020/2021 this has further reduced activity

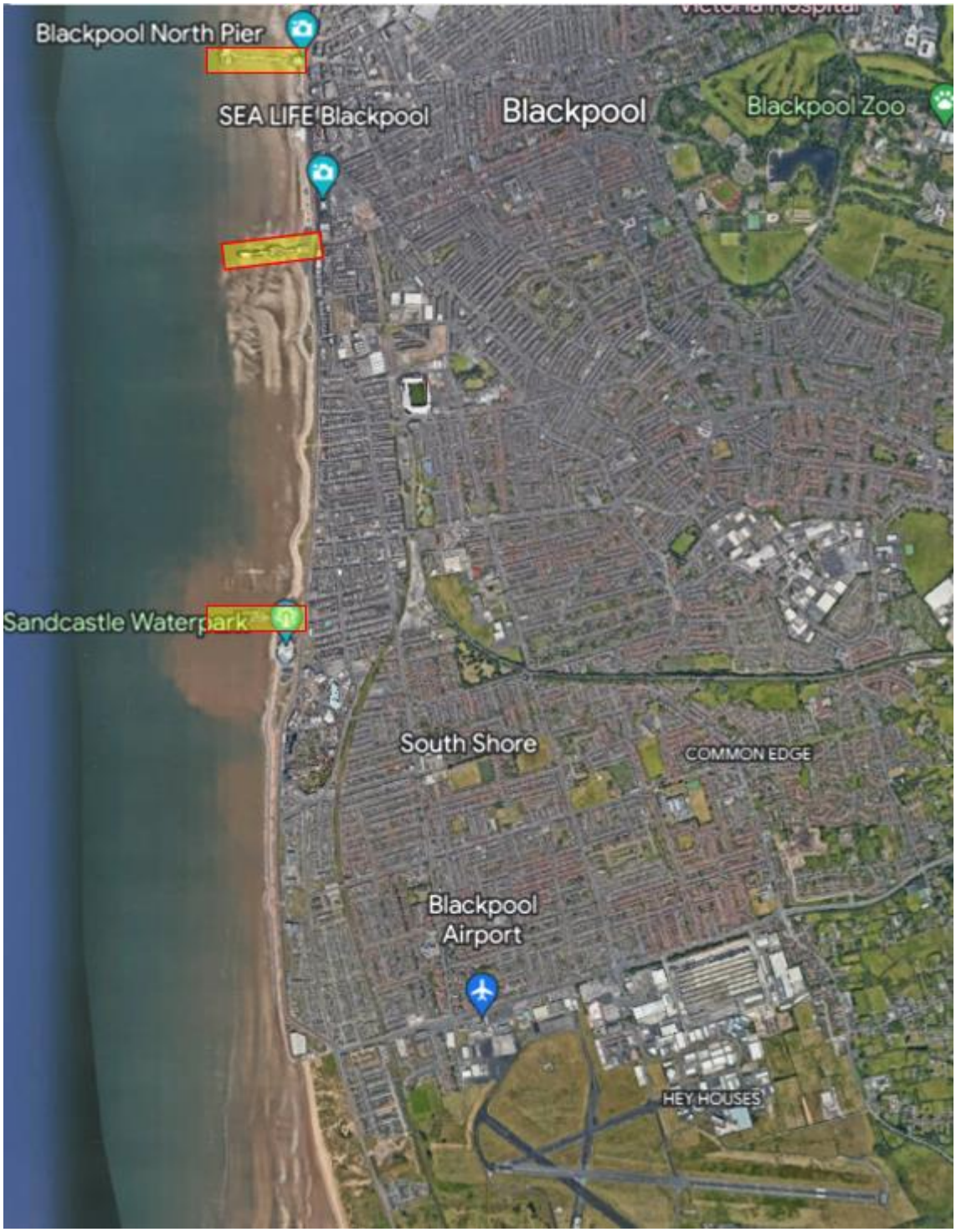
Former Aircraft Factory- CBRE Building

Herring and Lesser Black Backed gulls use the roof of this building as a breeding area. The construction of the roof (asbestos roof tiles) prevents access onto the roof for culling or egg removal, however, culling is applied on the airfield during times where there is a notable increase in gull activity (particularly juveniles from Mid-July to September).

The main activity from gulls is early morning and late evening where they go to feed and return, the gulls are generally in the form of a stream of activity of single birds.

There are generally 500 breeding pairs at this location each year of which some enter the airfield to access standing water in particular. Recent drainage and pavement works had reduced the numbers previously, although Winter 2023/4 saw an increase in numbers above average due to prolonged and excessive rainfall creating open patches of standing water which brought the gulls onto the airfield. Combined with the new football pitch site to the north of runway 28 and constant harassment/scaring actions are applied for any gull activity on the airfield.

South, Central and North Piers



The three piers, North, Central and South provide a roosting site for large numbers of starlings. They are not normally a problem on the airfield with occasional, comparatively small numbers in May between 30-100.

Persimmon Home Site

The Persimmon homes site is now fully developed from what was previously a building site. The landscaping has been arranged and has no standing water features or trees to attract birds. Since the building works have been applied and residents moved in there is generally low bird activity in this area.

Summary

Due to the airfield location and surrounding areas consisting of coastline, estuaries, farmlands there is a large scale of bird activity within the 13km consisting of a wide variety of species of which many fall within higher risk categories for bird strikes such as large and heavy birds and/or those species with the potential to flock in large numbers.

Considering this however, there are comparatively low bird strikes reported on aircraft operating at Blackpool Airport with gull species being the more common when strikes do occur. There are no reports of Geese or wading species having been struck in recent years despite the location of these birds around the airfield.

	Gulls					Corvids				Waders			Geese			Others/Passerines				
	Black Headed	Herring Gull	Common Gull	Lesser BB	Greater BB	Rook	Magpie	Crow	Jackdaw	Lapwing	Oystercatcher	Curlew	Greylag	Pink Footed	Canada	Starling	Swallow/Swift	Pigeon	Skylark	Kestrel
2019		1	1														1			
2020		1	1																1	
2021		4																1		
2022		4	2						1											
2023		7	1				1													1

The influence of the airport into local developments through the planning and safeguarding process as well as relationships with local landowners and farmers is to be maintained as these are recognised as key contributory factors to bird strike reduction alongside the airports own habitat management and bird control actions.

1 MANAGEMENT PLANS AND MITIGATIONS

1.1 WITHIN AIRPORT BOUNDARY

When the risk rating is identified as within the tolerable or acceptable region, the Risk Assessment must consider potential Mitigating Actions to reduce the probability and / or severity to as low a level as reasonably practicable (ALARP) in line with the hierarchy of controls.

Required Risk Reduction Measures for Effective Bird Hazard Reduction

1.1.1 Habitat Management

A Long Grass Policy is an essential first stage in reducing the airfield's attractiveness to hazardous birds. Properly implemented, it is highly effective at excluding Lapwing, and small gulls from the grassed areas of airfields. Blackpool Airport currently applies a long grass policy.

Drainage is essential for ensuring minimal standing water is available to encourage birds onto the airfield in search of fresh water. The airport has a relatively high water table so the requirement for well-maintained drainage is even more important. Significant work has been undertaken in 2020 to improve drainage on the south side of the airport with further work completed in 2021 along the eastern boundary of the airfield. At present there are no areas of significant standing water present on the airfield due to recent improvement works.

Note- There are two emergency open water supplies situated at either end of the main runway (10/28) which are netted to prevent birds.

Trees- Removal of lopping of trees within the airport boundary and where possible, within the surrounding areas of the airport to prevent further habituation by species such as rooks. Continuous work is applied to reducing the number of trees and lopping to reduce nesting and perching.

1.1.2 Active Bird Dispersal:

Continuous bird patrols and sustained scaring actions are proven to have a positive effect in reducing habituation and the numbers of almost all hazardous species. The airport Bird Control Officer is present on the airfield throughout its operating hours and operates a range of bird scaring equipment including a bird scaring laser, portable bird scaring distress call unit, bird scaring rockets, decoys and lures.

Blackpool currently does not currently use falcons, however, if bird numbers become excessive this option will be reviewed.

Shooting: To reduce numbers of hazardous species is required as a very occasional, necessary reinforcement to active bird dispersal, acknowledged by and provisioned for in bird protection law. The airport retains a license to cull birds when numbers appear to be excessively high increasing the risk of a bird strike and uses an external contractor (Paul Cross Pest Control Services- forearms and national game council licensed).

1.1.3 Safeguarding

A system of planning consultation to control bird. Attracting (and other potentially hazardous) developments (such as landfill sites, large bodies of open water, etc.) nearby and prevent associated hazardous bird concentrations or mass movements which may affect the aerodrome. There is an ongoing need to maintain an effective local safeguarding arrangement with the Local Planning Authority.

Blackpool Airport is an officially safeguarded aerodrome designated by the government. A safeguarding consultation process exists as part of the planning process to address proposed developments with the potential to affect the safety of officially safeguarded aerodromes, which includes Blackpool Airport. The consultation process includes a means to address potential bird attractant developments within a 13 km radius circle of the aerodrome. Safeguarding maps are used to define the 13 km radius circle and are lodged with local planning authorities. The 13 km circle is based on a statistic that 99% of birdstrikes occur below a height 2000 ft, and that an aircraft on a normal approach would descend into this circle at approximately this distance from the runway.

1.1.4 Surveillance and Monitoring

The purpose of surveillance will be to assess all flight activity of potential birdstrike priority species within or across the Airport flightpath. Surveillance will typically be undertaken in at regular intervals during the airports operational hours and will entail recording a range of information including (1) time and date (2) bird species and size of flock (3) route of flock across the Airport flightpath – location and direction (4) height of the flock when it crosses the flightpath.

It is important to record flock height since it is necessary to establish whether a flock of birds was flying at a height that could lead to a potential bird strike. Survey forms, daily wildlife log and maps will be used to record all of the required information. The BCO will vary the times that the surveillance of the Airport flightpath is undertaken to cover all periods of the day including the time immediately after dawn and the time immediately before dusk.

Although high-risk times and species can be identified, the bird hazard is ever present and liable to rapid change. Therefore, it is necessary for BCU staff to maintain a high level of surveillance and take action when needed to attend the relevant area(s) to remove priority birds on or before their arrival in the flightpath.

Surveillance falls into two categories:

Basic Surveillance – regular watching by the BCO to establish the baseline activity and to maintain awareness of bird activity across the flightpath – note: the local flying community and airport based operators are regularly encouraged to report any observed bird activity on approach or departure to the airfield.

RUNWAY 28 OBSERVATION POINT SHOWING CLEAR VIEW OF RUNWAY 28 APPROACH

Acute surveillance – additional watching at times when bird activity is at its peak, has reached higher levels than usually present or when construction work or agricultural activity is causing fluctuations in bird numbers which requires the BCO to be within the FCA.

Basic Surveillance work would be undertaken across the entire year with an equal coverage for each month. Assuming that the BCO would spend on average 6 hours a week of counts, this would provide 300 hours of data within the daily log after one year.

Acute surveillance will also be needed at times of particular bird activity, including times when fields have just been ploughed, or at times of wildfowl migration, or at times during construction when soils are exposed, there will be an additional need for surveillance of the flightpath.

Blackpool Airport may also advise of periodic build-ups of problematic species in the wider area which introduce flightlines across Queensway. For example, demolitions in the industrial areas where gulls roost may cause fluctuations in numbers.

At such times of acute surveillance, there will also be a need for direct co-ordination with Air Traffic Control who will advise the BCU of incoming flights from a 20 mile distance and request that problematic birds are dispersed and/or situation reports are provided so that the Airport can notify Airmen (NOTAMS system). A patrolling and dispersal pattern will be agreed with the ATC.

If a potential bird hazard cannot be dispersed, or if to do so, would make the situation worse, then the BCU will inform the ATC

1.1.5 Record-keeping

The Airport BCU maintains a continuous record of bird and wildlife activity on and around the airfield, and of bird control activity in a log diary. BCO's complete and submit online ECCAIRS report forms for all `birdstrikes'. Completed reports are passed to the airport's Bird Control Co-Ordinator (BCC) for safekeeping and trend analysis. All bird strikes occurring within the Airport boundary or in the immediate vicinity (up to 1 km outwith) are reported, the airport also records `near misses' to aid trend analysis. Strike reports submitted by pilots anywhere up to the 13km radius will also be captured.

A Bird Control Log sheet /diary system is maintained to record shift handover times, pyrotechnics/cartridges used, equipment unserviceabilities, grassland maintenance activities etc. together with any observations that the bird control operative considers to be relevant. All details are assimilated by the Airport's BCC and produced as part of the monthly report.

It is intended that the Queensway BCU will keep daily count forms and will log bird control activity, in a manner consistent with the report style used by the Airport. The QBCU will pass information.

1.1.6 Methods of Active Bird Control

The following measures may be used, subject to legal restrictions and the protocol to avoid impacts on SPA species. The choice of method depends on its effectiveness for the target species, considerations of health and safety for operators and the public, impacts of neighbours and impacts on other wildlife. These are listed in (increasing) order of impact, with the intention that an escalation of techniques should be used by trained staff, with the lowest impact techniques being tried first. Of course, not all techniques are appropriate for all species or situations, and sometimes it may be less disturbing to use a high-impact method sparingly rather than repeatedly use a low-impact method. Nevertheless, the principle is one of escalation.

- Arm-waving
- Lure
- Raptor/predator decoys
- Bio-acoustics (e.g. distress calls)
- Use of bird scaring lasers
- Falconry
- Radio-controlled "falcons"
- Trapping and humane disposal
- Bird-scaring rockets and cartridges
- Shooting

The Wildlife Hazard Management Plan (WHMP) consists of a number of elements as follows

- A habitat management programme to minimise the attraction of the airfield and its environs for birds
- Surveillance carried out throughout operating hours of the airfield surface, approaches and departure paths and the airspace overhead and immediately around the airfield for hazardous concentrations and movements of birds
- Active dispersal of birds from the airfield by mobile patrols
- Warnings passed to Air Traffic Control (ATC) from the Bird Control Officer (BCO) of hazardous concentrations and movements of birds that cannot be immediately dispersed
- When required, shooting birds and removing nests and eggs when non-lethal measures prove ineffective or require reinforcement to retain their effect.
- Intelligence gathering and utilization through record keeping, surveys of the local area, data analysis and reporting to maintain operational standards and produce a sound and current background of knowledge on which to base and update bird control policy.
- A bird hazard safeguarding system agreed with the Local Planning Authorities and arrangements for consultation with planning applicants and other local stakeholders.

1.1.7 Roles and Responsibilities

Rescue and Fire Fighting Service (RFFS) are primarily responsible for the application of wildlife and habitat management duties. RFFS provide the main function for the bird control officer operated within a suitably equipped vehicle for bird dispersal and is available throughout the operating hours of the airfield. The BCO will report directly to the duty RFFS Officer in Charge and will ensure direct liaison with the duty Air Traffic Control Officer on any observed bird hazard and scaring actions.

The primary roles and responsibilities of personnel involved in the implementation of bird control policy at Blackpool Airport are outlined below:

Operations, Safety and Compliance Manager (OSCM)

The OSCM duties are to be the responsible person for:

1. Ensure that personnel understand how to assess and determine wildlife hazard and strike risks; understand the hazard management plan and have adequate resources to implement the plan
2. Monitor habitat changes on and in the vicinity of the aerodrome, and develop and implement appropriate management and control activities
3. Ensure adherence to habitat management, airfield grass policies and associated maintenance programme
4. Assessing hazard level on which to base the BHCP.
5. Implementing Bird Hazard Control Policy (BHCP) and the maintenance of the associated guidance documents, and reviews its implementation and efficiency regularly.
6. Determining policy and producing the BHCP, Publishing BHCP in the Aerodrome Manual (or referenced therein).
7. Supporting BCO in the implementation of BHCP.
8. Advising the Accountable Manager of the resources required for implementation of the plan for the airport.
9. Informing stakeholders on matters relating to bird hazard control.
10. Implement appropriate modifications to the habitat management /long grass maintenance programme and remedial measures where required in accordance with the BHCP.
11. Liaise with airport departments, planning agencies, local authorities, landowners, farmers and other organisations as required in regards to safeguarding the airport against proposals or activities which may increase the bird hazard at the aerodrome.
12. Identify elements of airport operations and areas on or around the aerodrome that have a high bird strike potential, and take action to reduce the hazard.
13. Produce and circulate reports and results on the progress of BHCP and on specific topics, safety briefs and bird hazard warnings as required using statistical analysis of bird strike data.
14. Carry out periodic surveys of bird concentrations and movements in the local area including 13km survey and liaise with local ornithological and conservation societies for additional information.
15. Carry out, or assist the aerodrome in safeguarding with, the assessment of proposed developments with the potential to attract hazardous birds notified by the local planning authority.
16. Identify potential hazards from collating local ornithological and other data, disseminate the information to BCO’s and Air Traffic Control and liaise with landowners on mitigation action.

Duty Officer in Charge of the RFFS

1. Ensure that operational aspects of this BHCP are implemented to the satisfaction of the Airport's WHMP and external auditors.
2. Advise OSCM, SAFO, ATSM and DATCO on all matters relating to wildlife and strike prevention and to assist with the production and development of BHCP.
3. Monitor bird control operations to ensure that BHCP is implemented and standards maintained.
4. Supervise bird control record keeping (log, bird counts, bird strike recording and reporting, shooting and habitat management diaries, etc.) ensuring that standards are maintained.
5. Monitor habitats and habitat changes on and around the aerodrome, develop countermeasures and make recommendations to OSCM.
6. Monitor and implement of habitat management/long grass programme in accordance with BHCP, and recommend modifications to OSCM
7. Analyse and interpret log records of bird control activities and bird count data.
8. Ensure the supply, safekeeping and correct maintenance of bird control equipment and consumables.
9. Organize, supervise and undertake control/dispersal action as necessary at breeding, feeding or roosting sites on and off the airfield.
10. Organise and co-ordinate grass cutting regime ensuring that it fits in with the bird control programme and does not raise the bird hazard unduly.
11. Organise the working regime, including shift patterns, training of both himself and staff members.

Bird Control Officer

RFFS and other staff members who are trained in wildlife management duties will carry out bird hazard control operations as follows: -

1. Continuous surveillance throughout operating hours of the airfield surface, surrounding land, approach and departure paths and the airspace overhead and immediately around the airfield (normally, those fields immediately adjacent to the perimeter fence and as far as practicable into the runway approach and climb out areas) for hazardous concentrations and movements of birds.
2. Active dispersal of birds from the airfield and its immediate environs by mobile patrols, using the equipment and techniques recommended as best practice in the airport's internal guidance documentation and CAP 772.
3. Warning ATC, and pilots via ATC, whenever a potential bird hazard cannot be countered immediately or without making the situation worse in the short term.
4. Implementation of the habitat management programme to minimise the attraction of the airfield and its environs for birds.
5. Intelligence gathering, record keeping and reporting to produce a sound and current background of data on which to monitor and develop the BHCP.
6. Record and submit bird strikes or `near misses' to the duty fire OIC, SAFO, OSCM and ATC
7. Abide by regulations for operating on movement areas, driving, health & safety, civil laws affecting the task, and ensure that personal permits and certificates required to perform the task are kept up to date.
8. Ensure bird dispersal equipment is used safely and correct PPE is worn
9. Assist with control/dispersal action as necessary at breeding, feeding or roosting sites on and off the airfield.
10. Maintain stocks of consumable held within their departments.

Air Traffic Control (DATCO supported by ATSA)

1. Back-up surveillance for hazardous concentrations of birds whenever the airfield is operational
2. Passing warnings of bird hazards to pilots
3. Passing pilot reports of bird strikes or bird sightings to the duty BCO in an expeditious manner
4. Expediting the movements and operations of bird control patrols around the airfield
5. Supporting RFFS with wildlife management duties (OSS Staff).
6. Record and submit to the CAA bird strike information.

1.1.8 Habitat Management

Grass Management - Long Grass Policy

Aerodrome grassland has the potential to provide food, security and nesting habitats for a variety of birds. Studies and fact based research over many years has determined that grass that is maintained at a height of **200-300 mm** with minimal levels of weed infestation has been proven to reduce the presence of upright stems and the majority of hazardous bird species. This method of grass management is often referred to as a 'long grass policy' and is currently applied at the airport. The OSCM, SAFO and RFFS staff monitor implementation of the grass management programme.

Exceptions to the Long Grass Policy

The only current exceptions to the long grass policy are as follows:

1. Airfield lighting/signage - including taxiway and runway edges at varying widths to ensure visibility along the length of the area. Height to be 100mm-150mm. Weedkiller is to be applied to the immediate areas surrounding lights and signage on an annual basis.

2. Areas dictated by the grass height requirements of navigational aids:

ILS glidepath/Localiser: grass height of up to 100 mm is considered to be acceptable from the aerial to approximately 5 m beyond the monitors. A grass height of up to 200 mm is considered to be acceptable beyond this point up to the limit of the glidepath critical area.

3. Other areas as deemed operationally necessary by the OSCM, (i.e.-areas requiring bottoming out to remove excess thatch, helicopter aiming points, temporary grass parking areas)

Bottoming Out

Bottoming out is carried out when the observable thatch in a particular area of the airfield is observed as being in excess of 35-40 mm from the top of the soil profile. The period for applying bottoming out will only in the first two weeks of April, this may be extended until May if grounds conditions are not suitable in April. This is to ensure:

- Maximum regrowth of the sward during peak growing periods
- To preserve the nesting and egg laying periods of protected, non-hazardous species such as skylark, meadow pippet, linnet etc.

Due to high water table and drainage, the periods from Jan-Mar and Oct-Dec are not suitable for general cutting or bottoming out due to soft ground conditions and lack of regrowth of the grass during low temperature and reduced sunlight periods.

Rolling after bottoming out will not generally be undertaken due to the high water table and drainage of the grasslands as compaction of the soil will impair drainage.

Grass Cutting and Bottoming Out Plan

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Wet / Soft Ground	x	x	x							x	x	x
Bottoming out												
Full Airfield cutting												
Runway/taxiway edges/Nav aids												

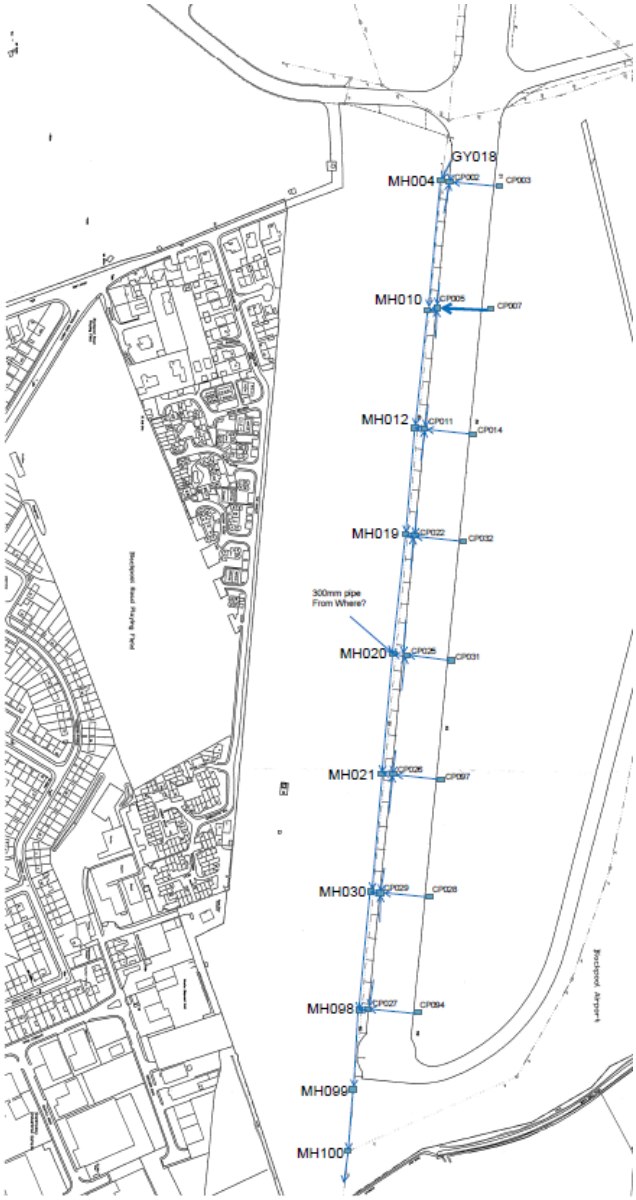
Grass Cutting Chart

Drainage

Drainage is monitored via the daily, weekly and monthly airfield inspection process; any areas found to be regularly subject to higher levels of standing water will be escalated on the airfield inspections escalation sheet for inspection, rectification by maintenance/OSCM.

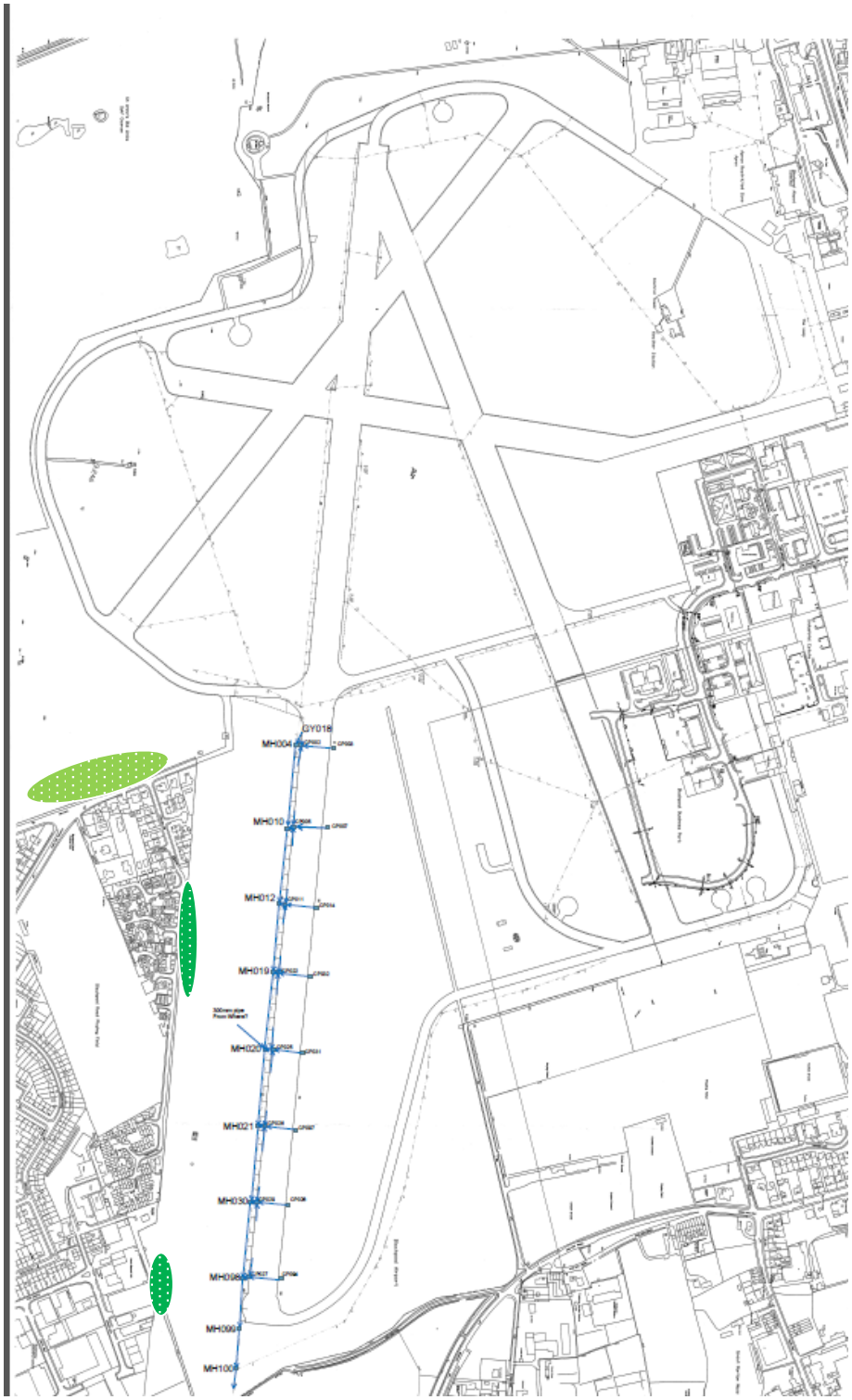
Historical/known issues

The blue shaded area as indicated below (southern section of Runway 10/28) has for a number of years been a consistent area of standing water attracting birds during October-March. As part of airfield drainage works in 2020/21 all drainage catch pits, channels and ditches (highlighted as blue lines) have been repaired, jetted and cleared up to the outfall leading out from the airfield boundary. This has led to a significant reduction in standing water during 2020/2021. The drainage ditch indicated as a green line has also been fully replaced with new pipework to further improve drainage on the airfield. This has had a notable effect and drainage has significantly improved during 2021 and 2022 but will continue to be monitored for any build-up of standing water in the area. 2023 did lead to increased standing water in this area due to significant and sustained period of rainfall beyond the normal seasonal and annual levels encountered generally.



Trees within the airfield boundaries

There are little to no trees within the airport boundaries with the exception of those highlighted below: these areas have been thinned out and lopped to a degree and will continue to be reduced further in 2024 and 2025.



Weed Control

i) Weed control will be initiated by findings of damage to the LGP or observations of the attraction of hazardous birds to feed on broadleaved weed species. Most wildflowers that occur in airfield grassland have little or no measurable effect on the bird deterrence of the GP, and wherever possible the use of herbicides will be avoided on environmental grounds.

ii) Where weed control is required, it will normally be targeted, and applied only in those areas where it is needed, rather than applied broadly over the airfield. Consideration will be given to the selection of the most effective and environmentally friendly products and the timing of applications.

Other Bird Attractions

Any new open water to be created on or near the airport by or on behalf of the airport owners will be assessed for its potential contribution to the airport's birdstrike hazard before proceeding. Sensitive location and/or passive exclusion measures may be required to mitigate any perceived increased risk

Any future tree planting or landscaping scheme will be assessed for its future bird attracting potential and modified as necessary before proceeding

Nearby building rooftops may attract large gulls (normally herring gull and/or lesser black backed gull) to attempt to breed and every effort is made to prevent this. Airport buildings will be inspected each spring to ensure that breeding gulls do not become established. Arrangements will be made to remove any gull nests that are detected. All roof inspections will be recorded. The buildings to the North East of the airfield have unsafe roofs and therefore cannot be inspected.

Bird control patrols will monitor continuously for the development of bird attractants (scrub growth, flooding etc) and determine and recommend appropriate remedial action to the SAFO and OSCM.

Construction or Earthworks on the Airport

Before any significant construction works or earthworks commence on the airport, the SAFO, OSCM and ATSM will conduct a local risk assessment to determine the potential of these works to attract hazardous birds and will recommend to appropriate modifications or mitigation measures. Works and reinstatement should follow the procedures laid down in the Departmental Instruction Manuals and Control of Contactors and Safeguarding Procedures.

Bird Attractants in the Airfield Environs

The RFFS, within the BCO function will monitor the areas in the immediate vicinity of the airfield to detect bird concentrations and recommend mitigation action to RFFS OIC and pass warnings to ATC, as appropriate. Around Blackpool Airport, local agricultural activity (particularly ploughing) cropping or, potentially, organised game bird shooting, may cause acute bird hazards in certain areas on occasion. Local agreement will be sought with landowners' to modify land use practices whenever a birdstrike hazard caused by a specific pattern of land use is identified.

1.1.9 Surveillance and Bird Control Patrols

Surveillance for birds is maintained throughout operating hours as follows: -

i) By RFFS: Vehicle mobile bird patrols through operating hours.

ii) Whenever RFFS is not actively patrolling the airfield (e.g. conducting other duties, and fire duties): support with be offered by suitably trained and equipped staff from ATC (OSS) , fuel and Maintenance Department. Enhanced surveillance from the Visual Control Room (VCR) by the Duty Aerodrome Controller (in addition to ATC's continuous duty of care) and will inform the staff conducting wildlife management duties of bird activity on the airfield.

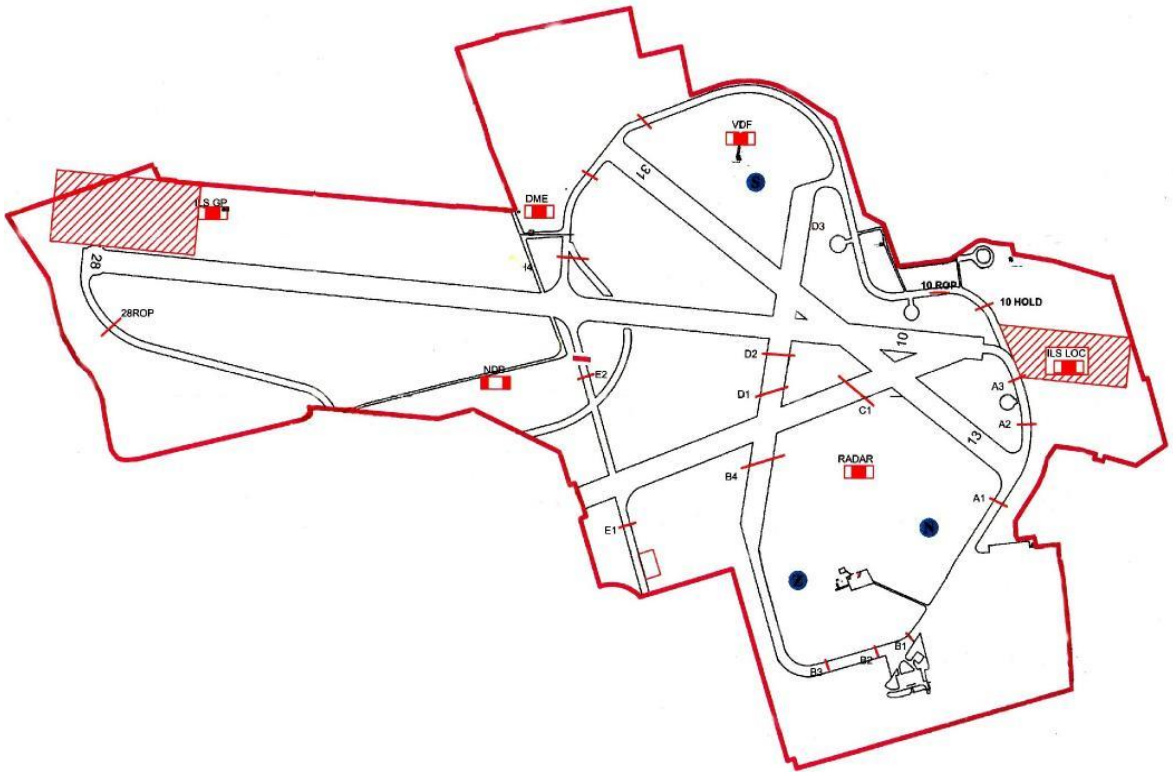
Aims

Although removing birds from the airfield and its immediate environs will achieve the greatest reduction in the birdstrike hazard, airfields that are completely and permanently bird free do not exist. However, the aim of the BHCP is to establish and maintain an environment in which hazardous birds are prevented from using the airfield for feeding, resting and commuting overhead. This is established and maintained by an active, efficient bird control organisation. Incoming birds are dispersed before hazardous flocks build up or gain access to the movement areas. Once this environment is established, bird movements (arrivals, transits and departures) are greatly reduced, and in most circumstances this aim is realistic and achievable. Although high-risk times and species can be identified, the bird hazard is ever present and liable to rapid change. Therefore, it is necessary for RFFS and ATC staff to maintain a high level of surveillance and act to remove birds on their arrival.

Operating Area

Wildlife management areas to disperse birds and prevent birds from alighting on the airfield. To preserve the bird deterrent properties of the Long Grass Policy, vehicles are only driven on grass areas (except for established access tracks) in exceptional circumstances where birds could not otherwise be dispersed. The bird control vehicle on duty will operate from within the confines of the perimeter fence only. When a specific acute bird hazard is anticipated by prior intelligence (e.g. flocks of birds attracted by ploughing in the active runway approach) additional resources can be made available to provide additional bird control off or on the airfield as required. This should only be done with the agreement of ATC.

Wherever possible, in addition to surveillance of the airfield staff conducting wildlife management duties should actively look for concentrations of hazardous birds in the fields immediately adjacent to the airport perimeter and disperse them when it is safe to do so. This will increase the amount of time required for these birds to encroach onto the airfield, creating a "buffer zone" several hundred metres wide around the perimeter. The fields in the approach and climb out areas are particularly critical, and it should be remembered that birds in the runway approaches/undershoot areas are more hazardous to landing aircraft than birds on the runway. Birds may be dispersed from adjacent fields using distress calls, rockets or laser where possible.



Bird Control Operating Hours

Bird control will be available throughout the airport's operating hours including extension to operating hours.

Patrol Pattern

Bird control patrols will be provided during the working hours of the airfield. Wildlife management patrols will normally be continuous throughout airfield operating hours, except when required to carry out other agreed priority duties (which are normally fully compatible with bird control patrols) as follows

- Surface inspections.
- Foreign Object and Debris (FOD) recovery
- Bird runs will be conducted as required and throughout the period of multiple movements. ATC should perform a bird run while conducting pre-opening inspections.

Bird Control in Darkness and Low Visibility Procedures (LVP)

During conditions of compromised visibility (darkness or during LVP's) bird control patrols will be performed at intervals dictated by the need to protect aircraft movements while ensuring the safe separation of aircraft and vehicle movements.

After the continuous "daytime" patrol ceases, the vehicle carrying out bird control will operate only on the paved surfaces unless it is required to exit onto the grassed areas for safety reasons. At night, runway inspections will be carried out:

i) As and when required but at intervals no longer than 2 hours regardless of aircraft movements to ensure that roosting flocks do not become established on the airport.

ii) Whenever aircrew or airport personnel report sightings of birds on the airport.

These inspections may be treated as joint surface inspections and bird control patrols. There are no reliable technological aids to detecting and observing birds in darkness on airfields, especially where there is also a multitude of pinpoint runway and taxiway lights, so the vehicle headlights and supplementary lighting must be relied on. These tend to disturb birds as they illuminate them and retaining or re-acquiring contact is very difficult. It is common practice to limit activity to ensuring that the runway, taxiways and apron to be used are free of birds before a movement. The inspection should be made slowly vehicle to avoid over-running and scattering any flocks encountered, and it may be necessary to zigzag or make two runs to cover both sides of a runway. If birds are encountered, they are to be removed from the movement areas as gently as possible by 'herding' them with the vehicle. Other flocks may be present on the grass areas and, in darkness, it is important not to disturb them unwittingly. Distress calls or bird scaring cartridges must not be used in the hope of dispersing birds that have escaped detection. If it has been necessary to move birds, the runway should be repeatedly checked until just before the movement to ensure they do not return. Thorough clearance from dusk to 1 hour after darkness, including careful inspection of grass areas adjacent to runways and taxiways to detect roosting birds etc., and periodic checks through the night can establish a level of control similar to that achieved in daylight.

In LVP conditions, the basic procedure for bird control operations is to implement the night time approach of patrolling only the in-use paved surfaces and doing so at intervals designed to protect aircraft movements. Bird scaring cartridges are not to be used in such conditions, and if distress calls are used they should be played at the lowest volume possible to disperse the target birds only. Birds are reluctant to fly in such conditions, and it will probably be necessary to re-check the runway if birds are dispersed. If the RFFS considers conditions unsafe he/she should notify ATC and return to a safe location as soon as practicable.

1.1.10 Dealing with Site Specific Bird Hazards

Procedures for dealing with the bird species commonly encountered at Blackpool Airport are described in detail during training courses and in CAP 168. In general gulls, grassland plovers, pigeons and other common flocking species are the priority group, as at other airports in the UK. However, the following are site-specific local hazards that require special attention. Areas of interest off airfield within at least a 13km radius have been identified and are described in more detail in the Blackpool 13km Survey.

Transiting Gulls

Gull flight lines have historically been seen across 10 threshold flying between the various football grounds. Increased bird patrols in this area has substantially diminished this hazard. Further information is provided in the 13km Survey.

Roosting Gulls

Any roosting gulls found during the hours of darkness will be dispersed in a controlled manner, but only where there is a sufficient break in flying to allow the runway to be checked carefully after such dispersal action. Bird scaring cartridges are not to be used to disperse roosting gulls.

Waders- Oystercatchers, Curlews

A relatively small number of UK airports suffer problems with Curlews. Unfortunately, Blackpool has experienced problems with this species in recent years, with over wintering flocks proving a hazard. The primary cause of the problem was the tendency of the grass areas to become waterlogged during the winter months (high water table combined with high rainfall) which provides ideal feeding conditions for this species.

Through intense and persistent scaring actions and with the improvements to the drainage in 2020/21 leading to a significant reduction in standing water over the winter months, the situation with regards to wading species numbers seems to have reduced based on recent numbers.

A license to shoot and cull will be requested by English Nature if numbers appear excessive again. Regular monitoring of the relevant areas for Curlew food source is also carried out and appropriate action taken to limit the attractiveness in this respect.

Geese

Geese are not present within the airfield boundary with the exception of occasional overflying when transiting. The overflights are noted by the bird control officer and/or ATC and acted upon accordingly when observed.

Corvids

Corvids, of which mainly rooks are present on the airfield year round with numbers of crows, magpies and jackdaws also present. This is mainly due to a number of wooded areas within a few miles of the airport. Persistent scaring actions keep numbers to manageable levels and strike data currently for corvids within the last five years is negligible. Trees within the airport boundary have been cut or lopped in 2020/21 and are subject to ongoing works to prevent corvids nesting of perching within the airport as much as possible.

Mammals

Mammals found at Blackpool airport which may be a safety factor are Rabbits, Foxes and Moles. The soil at Blackpool is sandy and easily dug. As a result, there is a potential for rabbit infestation which can also attracted foxes.

Where excessive, contractors will be appointed to trap/cull rabbits and foxes. These foxes also help to control rabbits and clean any natural caused dead rabbits up which would attract gulls and corvids. The moles are evident in small numbers and are trapped when deemed excessive.

Former Aircraft Hangar Complex (Building North East Of Airfield)

The large former aircraft Hangar complex situated within the industrial park attracts gulls which lay eggs on the large roof area. From August onwards juvenile and adult gulls are present on the airfield in generally manageable numbers. They are attracted by standing water and generally appear on apron areas such as the main apron and loop apron due to uneven surfaces creating puddles. Adult gulls regularly transit from the hangar to the coastline and back for feeding and fro North South (Ribble Estuary). Due to the fragile roof construction access prevent nesting not currently possible, therefore consistent and determined scaring and dispersal actions are maintained. Number of strikes per year involving gulls is low, generally 2-5 per annum.

1.1.11 Equipment and Dispersal Methods

Bird Control Vehicle

Four-wheel drive vehicles with good all-round visibility are provided for the purposes of performing bird control duties on the airport. The vehicles are fitted with the necessary radio equipment, portable distress call broadcast equipment and suitable storage and security facilities for equipment.

Bird Scaring Pyrotechnics (Blank Firing Pistol)

The RFFS is supplied with a blank firing pistol, (non-lethal bird scaring pyrotechnics). All personnel are trained in the efficient and safe use of the pistols, and supplementary information is contained in the relevant Departmental Instruction Manual. A range of Personal Protective Equipment (PPE) is issued to all staff for the firing of the pistol. This equipment is to be used whenever it is to be fired.

- Bird scaring cartridges are very effective for rapid dispersal, and when time is short they are normally to be preferred over distress calls.
- Because the scaring stimulus can be directed, it is often possible to control dispersal direction and 'herd' flocks away from movement areas. Similarly, transiting birds can be turned back, and 'held' when they conflict with aircraft movements (taking care not to distract or alarm pilots). This directional control cannot normally be achieved by the use of distress calls.
- Attempting to `push' birds into a strong wind is rarely successful; they almost always break away and depart downwind eventually. Whenever possible birds should be encouraged to depart in the direction they appear to want to go.
- Bird scaring cartridges should not be used to hasten departure of birds put to flight by distress calls until the broadcast has been terminated, and should never be fired before the use of broadcast distress calls - it will cause a confused response.

Portable Distress Call Unit

The use of distress calls is effective as long as the birds are correctly identified to species and the right distress calls are then used.

Their effectiveness is well proven in the case of gulls, for example.

Birds normally react to distress calls in the following manner:

- They are alerted and take flight;
- They approach the source of the sound and circle overhead;
- Certain birds dive to assess the source of the threat.
- When the calls cease, the birds very often leave the area.
- When calls are associated with a dead or distressed bird, the reaction of most birds is to leave the area.

Some guidelines for the use of bird distress calls are as follows:

- The vehicle should be stationary;
- The vehicle should be upwind of the flock of birds;
- The vehicle (and loudspeakers) should face the flock of birds;
- The ideal distance between the vehicle and the birds is less than 100 meters;
- The broadcasting of distress calls should last for around 90 seconds

According to expert opinion, when distress calls alone are used, birds cannot precisely identify the threat or the predator and the safest action for them is to disperse.
In view of this, the dispersal of birds through the use of distress calls may take time.
The use of distress and alarm calls are one of the most challenging control methods to use. Not only is their effect somewhat subtle, the proper application of the method is challenging. As a result, few controllers use the method appropriately and effectively and as a result tend to abandon using the method all together. Repeated training by individuals who have successfully mastered the use of alarm and distress calls and the effective use of models should be used to provide controllers with expertise in the use of this method.

Hand Held Bird Scaring Laser (Agrilaser)

Used and operated in accordance with laser safety directive EN 60825-1:2014, the Bird control Vehicle/operator is supplied with a class 3B, dedicated bird control hand held laser device, only those who have undertaken the training course are permitted to use this device. Permission must be sought from ATC at all times prior to use.

Lures

A lure is a leather pad with an attached wing on a string. Waving it can be effective, but throwing it high into the air so that it falls to the ground with wings ‘fluttering’ will cause target flocks to fly up and directly away. This can work at ranges of several hundred metres. Birds react as if the lure is an individual 'in trouble' and may even approach to investigate and it also enhances responses to distress call broadcasts. Traditional falconer's lures, dead bird effigies, and even a tennis ball fastened in the corner of a black or white bin bag can prove useful tools.

Falcons

Currently Falcons are not being used at Blackpool airport this is under constant review and will be implemented if required.

Bird Scaring Decoys/Kites

Bird scaring ‘hawk’ kites, simulated dead bird decoys (gulls) and raptor decoys are held in stock and applied around the airfield during periods of increased bird activity, proven to be effective for deterring gulls

Shooting and Trapping

Shooting is a small, but necessary part of the airport bird control programme, and this necessity is recognised in the issue of General Licences to allow the taking of certain birds and their eggs to preserve air safety. Blackpool airport has also been granted the authority from English Nature to take Eurasian Curlews and their eggs due to the risk posed specific to Blackpool

Shooting Policy at Blackpool

This statement also incorporates other lethal control measures such as nest destruction. Shooting, using the shotgun, rifle, or air rifle as appropriate, and removal of nests and eggs will be carried out by an approved contractor within the provisions of the Wildlife & Countryside Act 1981 and associated licenses, and in accordance with the aims and policies described in CAP 772. At Blackpool, there are significant local conservation interests, and an additional degree of sensitivity is required when conducting lethal control of birds in the interests of flight safety. However, these concerns must not be allowed to endanger flight safety by adversely affecting the efficacy of bird control efforts at the airport. To achieve an acceptable balance between conservation and flight safety concerns, contractors licensed to use the shotgun or rifles, or engaged in nest destruction, should consider the following:

- The health and safety of airport employees, airport users and the general public are of paramount importance. If there is any doubt as to whether shooting can be carried out with no risk to human health and safety, DO NOT SHOOT. All shooting activities on the airfield must be agreed by the OSCM and ATC with suitable provision of licenses, risk assessments and method statements by the contractor (currently Paul Cross at Pest Control Services). Activities will be applied via airfield works and control of contractors procedures.
- The acceptable level of nesting gulls on the airport (normally herring gulls and/or lesser black-backed gulls on rooftops) is zero. ALL gull nests discovered on the airport are to be destroyed. The same targets apply to breeding rooks on the airport, whether in trees or on man-made structures.
- If birds from a local rookery cause significant problems at the airport (usually only rookeries less than 2km from the perimeter fence), control measures are carried out where possible. This will require an assessment of safety, the permission of the landowner and may require liaison with the local police.
- Lapwings, Curlew and oystercatchers will not be allowed to breed on the airport property within 100m of the runway or taxiways, nor in the runway undershoots.
- Licenses are normally renewed annually, and the list of species and the methods allowed may vary over time. It is important that the current licenses are displayed, and all contractors should be aware of the list of species, the methods allowed and the terms and conditions of the current licenses.
- It is the contractors responsibility, to be CERTAIN of the identity of any "target" bird to species level before shooting takes place. The airport currently uses Paul Cross Pest Control Services for any Gull or Rabbit culling activity- firearms license and national gamekeepers licenses are held
- Shooting is only to take place when non-lethal measures have been tried and have failed or are showing signs of failure.
- With the exception of starlings, small birds (such as swallows, swifts, skylarks, finches) are not to be shot. Although they are often struck by aircraft, they are generally considered too small to represent a significant risk.
- Any shooting will be carried out with discretion, and every effort made to minimise the risk of injury or unnecessary suffering to the target bird(s).
- Distress calls are NEVER to be used to bring birds within shotgun range (this is a condition of the General Licenses).
- Foxes & rabbits are to be culled regularly & a log kept of the numbers culled.
- Cartridges are to be kept secure at all times. They are never to be left unattended in an unlocked vehicle.

1.1.12 Intelligence Gathering and Utilisation

RECORD KEEPING

Bird Control Officers conducting wildlife management duties will be responsible for maintaining a continuous record of bird activity on and around the airfield and of bird control activity using the daily wildlife management log. Completed daily wildlife management logs are passed to RFFS Watch Managers on completion for safekeeping and trend analysis. ATC and/or RFFS will be responsible for completing and submitting CA 1282 bird strike report forms and/or ECCAIRS reports for all `bird strikes' as defined below. If identification of the species is not achievable, the RFFS will provide a sample/image of the bird struck. All bird strikes occurring within the Airport boundary or in the immediate vicinity (up to 1 km outwith) will be reported to the CAA, however, Blackpool record `near misses' internally to aid trend analysis.

Birdstrike Events

- Where a bird/aircraft collision is observed or thought to have occurred by aircrew or an observer on the ground.
- Where there is physical evidence in the form of signs of impact/damage on the aircraft and this can be reasonably attributed to a birdstrike.
- Physical evidence in the form of bird remains are recovered from a location on the aerodrome or vicinity in which on the balance of probability it was likely to have been struck by an aircraft.

Classification of Strikes by Severity

In line with Blackpool SMS, bird strikes will be recorded within the airports hazard log and risk register, each reported strike will be classified as to its effect as per the table below:

Safety Occurrence Classification Table					
Safety Occurrence Type	A	B	C	D	E
Wildlife Event	Extensively damaged aircraft (under Aircraft Occurrence)	Aircraft damaged outside airworthiness tolerance (under Aircraft Occurrence)	Aircraft damage within airworthiness tolerance (under Aircraft Occurrence)	Confirmed birdstrike /wildlife strike (No aircraft damage)	Unconfirmed Bird/wildlife strike

Near Misses

Where there is a safety related or potentially safety related affect i.e. Rejected takeoffs or pilot initiated go-arounds caused by bird activity. Additionally, pilot reports of a bird strike where there is no physical evidence will be reported as a near miss.

Non-Reportable Events

Where there is no safety related or potentially safety related effect i.e. Sightings of birds or delayed take-offs awaiting bird clearance.

Quality Assurance

Record keeping is a self-disciplining procedure for all staff involved in bird control operations. The OSCM will review bird control operations and records and, annually, analyses all records and produces a review report. Bird population trends and bird strikes provide long-term performance indicators. At least one internal audit per year of the Bird Control system will be carried out by the OSCM or other suitably nominated individual.

1.1.13 Training of Staff for Wildlife Control Duties

- All staff and personnel involved in bird control are currently trained in house by the OSCM in line with industry accepted standards. This initial training is backed up with maintenance of competence on the job training and annual refresher and proficiency checks.

Training is currently provided by the OSCM, who holds qualifications relevant to this area:

- ICAO Trainair Plus Wildlife and Habitat Management at Aerodromes Course
- Qualified Instructor
- Qualified Assessor

Additional specialist training or services will be arranged as required.

The wildlife operator training content supports EASA's Guidance Material at GM3 ADR.OPS.B.020 and meets the recommendations of CAP772 which includes the following general areas:

1. Roles and responsibilities within the WHMP
2. The nature and extent of the aviation wildlife management problem, and local hazard identification for Blackpool Airport;
3. Background to wildlife strike hazards Nature and definition of wildlife strikes, nature and extent of the aviation wildlife management problem; characteristics of the aerodrome
4. An understanding of the national and local regulations, standards, and guidance material related to aerodrome wildlife management programs (use of best-practice models);
5. Appreciation of the local wildlife ecology and biology, including the importance of airfield grass management policies, and the benefits they can deliver to wildlife management;
6. The importance of accurate wildlife identification and observations, including the use of bird recognition guides;
7. Local and national laws and regulations relating to rare and endangered species, and species of special concern, and the aerodrome operator's policies relating to them;
8. Wildlife strike remains collection, and identification policies and procedures;
9. Long-term (passive) management measures, including on and off aerodrome habitat management, including identification of wildlife attractions, vegetation policies, air navigation aids protection, and drainage system, and water body management practicalities;
10. Short-term (active) tactical measures, using well established effective wildlife removal, dispersal, and management techniques;

11. Documentation of wildlife activities and management measures, and reporting procedures (the aerodrome wildlife management plan);
12. Safety, including the use of personal protective equipment; and the use of lasers and cartridge firing pistols (non firearms license)
13. Wildlife strike risk assessment and risk management principles, and how these programs integrate with the aerodrome's safety management system.

Personal Protective Equipment (PPE)

All staff members conducting wildlife management duties for live firing of rockets will wear company issued PPE which consists of:

1. Hi visibility jacket or vest.
2. Ear defenders.
3. Gloves.
4. Suitable foot wear.
5. Full face shield mask and head protection.

1.1.14 Bird Hazard Safeguarding

Safeguarding directions require Local Planning Authorities to consult civil aerodromes on relevant development proposals, explosives establishments and technical (radar/radio) sites. Virtually all land types and land uses (including 'natural' habitats) attract birds in some way and, in theory; a case could be made to exclude virtually *anything* from the vicinity of an aerodrome. However, this is both unrealistic and unattainable in practice, and all aerodromes operate with an on-going background level of bird hazard. However, the safeguarding process targets new developments that, individually or as part of a cumulative process, could become major attractants with the potential to cause significant problems. In terms of risk assessment, the existing situation and the current disposition of local bird populations must be included in the assessment of a proposed development. The principle aims of the safeguarding policy are as follows

i) To guard against new or increased hazards caused by new developments.

ii) Blackpool Airport encourages developments that reduce hazards. For example, an LPA may consult over a number of potential replacement sites for an existing landfill - some of which may reduce the hazard, whereas others would increase it.

iii) Similarly, continuation of operations at some sites may require renewed planning permission, or re-permitting. This enables the safe guarder to exploit opportunities to terminate or reduce existing hazards by objecting to the continuation of an operation that has proven to be hazardous or, at least, seeking mitigation measures.

Local Safeguarding Policy (Birds)

- The Airport is advised of planning applications for potentially hazardous developments by the relevant Local Planning Authorities. Local bird safeguarding issues are complicated by the existence of Sites of Special Scientific Interest (SSSI's), Special Areas of Conservation (SACS) and nature reserves.
- Special Protection Areas (SPA). These are classified under the Birds Directive, under which European Legislation Identifier (ELI) Member States are required to take special measures to protect migratory, rare and vulnerable species of birds. Among these measures is the

classification of Special Protection Areas. It is Government policy that any such site on land is first notified as a Site of Special Scientific Interest.

- Sites of Special Scientific Interest (SSSI). These are areas notified under section 28 of the Wildlife and Countryside Act 1981 (as amended) as being of nationally important as wildlife habitats, geological features and landforms.
- Special Areas of Conservation (SAC). These are designated under the Habitats Directive, which requires Member States to set up a series of sites whose purpose is to contribute to the maintenance or restoration of favourable conservation status of habitats or species listed in Annexes I and II of the Directive.
- Local bird safeguarding policies must operate with sensitivity to the high conservation value of the area, but must strive to avoid any increase in the bird hazard to aircraft operating at Blackpool Airport and, where possible, to reduce existing hazards. The main bird hazard concerns affecting bird safeguarding policy at Blackpool are:

  i) Developments that would be likely to increase the number of waterfowl crossing the airport and/or its immediate airspace (generally, new ponds, lakes, etc., near the airport and, particularly, to the north south and west of the airport). Water features on the adjacent golf course are of concern.

  ii) Developments that could increase the number of gulls settling on the airport or in its immediate vicinity or crossing the airport and/or its immediate airspace (generally, landfill operations or the creation of a water body large enough to be adopted as a gull roost).

  iii) Developments that could lead to the establishment of a breeding gull colony near the airport (large rooftops, large islands on nearby lakes).

  iv) Developments that could lead to the creation of a new starling roost that affected the airport (e.g. extensive reed beds, dense conifer plantations, plantings of *Cupressocyparis leylandi.*

- This list is not exhaustive, and other concerns may arise over time.
- A safeguarding map is held by the Safeguarding Officer and delineates the circle, of 15km radius, within which the bird safeguarding process normally operates. It should be borne in mind that landfill or large wetland creations beyond this boundary may also have the potential to significantly increase the bird hazard at Blackpool Airport if they were to generate significant gull traffic through the local airspace.
- Although, in theory, all potential bird-attracting developments within this circle should be assessed for any related birdstrike risk, local amendments and understandings are appropriate. These are outlined as follows:

Tree Planting and Landscaping Schemes beyond 6km from the airport will not attract conditions or objections unless:

- They involve the creation of coniferous plantations larger than 2 ha (potential starling or woodpigeon roost).
- They involve the creation of significant areas of reedbed - cumulative area larger than 1 ha (potential starling roost).
- They involve the creation of any associated areas of open water.

Wetland Creation Schemes will require consultation within the entire 13 km circle. Significant items of concern would include the creation of:

- Lakes or reservoirs large enough (in excess of 10ha) to create a new gull roost in a hazardous location.

- Incorporation of features designed to, or likely to, create or increase local breeding populations of large gulls or nesting geese (islands of various designs).
- Incorporation of reedbed areas larger than 1 ha (this would not attract an objection from the airport, but the facility to disperse any hazardous starling roost may be requested).
- Supplementary feeding of wildfowl on a scale likely to increase local concentrations and generate significant commuting traffic, particularly of swans and geese, through local airspace.

The airport will assess the bird hazard potential of proposed developments, formulates appropriate responses to consultations and negotiates with the planning authority/applicant as appropriate, in accordance with the guidance in CAP 772.

Where necessary, additional technical support will be sought from a suitable qualified consultant.

1.2 THE QUEENSWAY SCHEME HOUSING DEVELOPMENT

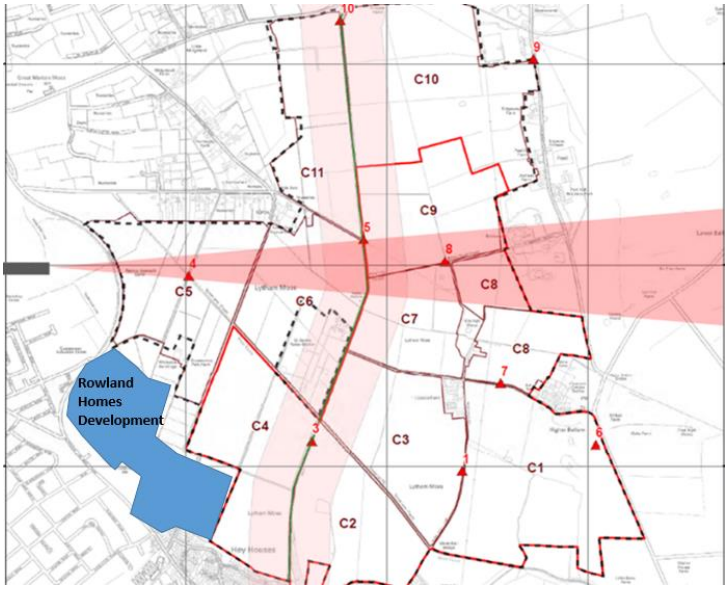
In respect of bird control, there are three distinct areas within the Queensway scheme:

a) The residential area-Rowland Homes

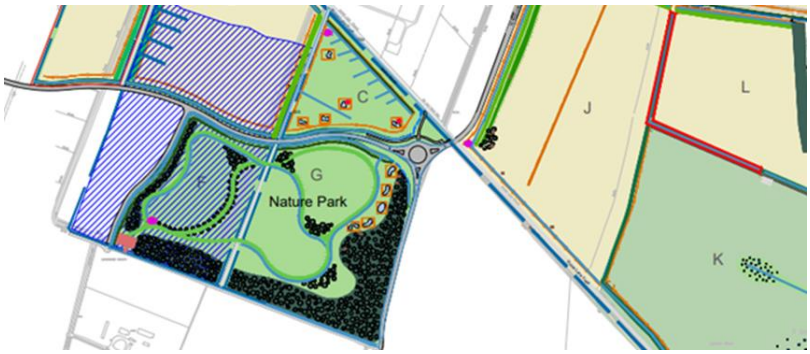
b) The Nature Park

c) The Farmland Conservation Area or “FCA”.

The Rowland Homes residential area includes the houses, a school building and playing fields as well as landscape proposals for tree planting, paths and ditch water features.The Nature Park is an area of naturalistic grassland, woodland and small ponds accessible to the public. The Nature Park



is located at the southern end of the site a considerable distance from the airport approach and departure path.



The Farmland Conservation Area (FCA) is agricultural land which will be managed to provide habitat for populations of whooper and Bewick's swans and pink-footed goose and various farmland species of nature conservation value which already use the area in important numbers. The design of the FCA has taken account of comments from Blackpool Airport in that no new large water bodies are proposed, and the proposed wildfowl refuge is located as far south-east as possible, at least 500m south of the flightpath.

1.2.1 Biodiversity Action Plans

The aim of the Lancashire biodiversity action plans are to address some of the decline in number of species and to take appropriate opportunities to enhance degraded habitats and populations and where resources allow, develop new habitats that are characteristic of the county.

The land will be managed for bird friendly agriculture with no public access other than existing public rights of way. The purpose of the FCA is:

a) To mitigate the impacts, on whooper and Bewick's swans and pink-footed geese associated with the Ribble and alt estuaries and martin mere spa and Ramsar and of the development at Queensway.

b) To mitigate the impacts of the above developments on other features of biodiversity priority, including the proposed Lytham moss biological heritage site, water voles and farmland birds; and

c) To enhance biodiversity on Lytham moss.

There are several priority species and habitats (known as s41 species and habitats under the Natural Environments and Rural Communities Act, 2006), the Lancashire BAP and the Lancashire Biological Heritage Site guidelines) which will be sustained within the FCA:

- Pink-footed Goose
- Mute Swan, Whooper swan, Bewick's swan;
- Grasshopper warbler;
- Tree sparrow;
- Reed bunting;
- Lapwing; Curlew;
- Grey partridge;
- Corn bunting;
- Linnet;
- Skylark;

In addition, other species may be drawn to the location due to the habitat, specifically in relation to:

- Availability of water source(s)
- Available food- crops by type, insects, intentionally laid out food sources such as potatoes to attract key species, small mammals etc.
- Shelter- hedgerows, trees (rookeries), buildings.

Secondary Target Species - Waders-Curlew, Black Tailed Godwit, Oystercatcher, Lapwing.

Other Common Species within the FCA and Airport 13km area include:

- **Gulls-** Herring, Lesser Black Backed, Black Headed, Common.
- **Corvids**- Mainly Crows, Rooks, Magpies, Jackdaws
- Pigeons, Starlings.

The airport in partnership with The Environmental Partnership (TEP) work closely together to ensure the risk to aircraft by birds in the area is minimised as far as is reasonably practicable. This is achieved in a number of ways, such as:

- Regular site visits by the airport and TEP to monitor bird activity and numbers during the Winter months (Sep-Apr);
- Gathering and sharing data on the locations within the FCA where hazardous species are present;
- Taking action (via bird attractants, food sources, cropping plans and when required scaring action) to ensure hazardous species are kept to the South and North of the approach and departure paths for Runway 10/28.

1.2.2 Queensway FCA - Provision of Bird Control and Dispersal Unit

Rowland Homes will continue to appoint Blackpool Airport to supply a Queensway Bird Control Unit (QBCU) for the period of the plan. The appointment will be for an average 3.5 days (28 hours) per week, although it is expected that actual attendance will vary based on levels of risk. The Plan covers a twenty -year period, from the Commencement of Development in 2016.

The role of the QBCU is to carry out:

a) Surveillance and Monitoring of bird activity;

b) Ongoing surveillance of the airports approach and departure path from the end of the runway observation point/airport boundary fence/Queensway road observation points

c) On site visits to the FCA, especially during Winter months, periods of increased activity and during construction works which are identified as providing attractants to birds

d) Monitor and Advise on Site Management during construction and landscape establishment stages

e) Provide Active Bird Control and dispersal when periods of high bird activity in the flight path are observed or reported.

f) Reporting to the Airport's Bird Control Co-ordinator to ensure an auditable management trail.

g) Monitoring and recording data in relation to the Winter Bird survey of key species, numbers and locations.

The greatest need for attendance will occur during the following periods:

a) During any Construction and Site clearance; as soils are exposed and gulls/corvids are attracted

b) Establishment of new landscapes; to identify and deal with emerging patterns of hazardous bird activity e.g. feral geese attempting to occupy parkland, gulls attempting to form loafing areas on playing fields

c) Ploughing of the FCA, especially under the Airport flightpath

d) Detailed arrangements for the QBCU, including his/her duties and lines of reporting are set out later.

The QBCU will operate within a framework which recognises the need for safeguarding the Airport flightpath and also recognises the existing ornithological value of Lytham Moss.

1.2.3 Surveillance and Monitoring

The purpose of surveillance will be to assess all flight activity of potential birdstrike priority species within or across the Airport flightpath. Surveillance will typically be undertaken in at regular intervals during the airports operational hours and will entail recording a range of information including (1) time and date (2) bird species and size of flock (3) route of flock across the Airport flightpath – location and direction (4) height of the flock when it crosses the flightpath.

It is important to record flock height since it is necessary to establish whether a flock of birds was flying at a height that could lead to a potential bird strike. Survey forms, daily wildlife log and maps will be used to record all of the required information. The BCO will vary the times that the surveillance of the Airport flightpath is undertaken to cover all periods of the day including the time immediately after dawn and the time immediately before dusk.

Although high-risk times and species can be identified, the bird hazard is ever present and liable to rapid change. Therefore, it is necessary for BCU staff to maintain a high level of surveillance and take action when needed to attend the relevant area(s) to remove priority birds on or before their arrival in the flightpath.

Surveillance falls into two categories:

Basic Surveillance – regular watching by the BCO to establish the baseline activity and to maintain awareness of bird activity across the flightpath – note: the local flying community and airport based operators are regularly encouraged to report any observed bird activity on approach or departure to the airfield.

RUNWAY 28 OBSERVATION POINT SHOWING CLEAR VIEW OF RUNWAY 28 APPROACH

Acute surveillance – additional watching at times when bird activity is at its peak, has reached higher levels than usually present or when construction work or agricultural activity is causing fluctuations in bird numbers which requires the BCO to be within the FCA.

Basic Surveillance work would be undertaken across the entire year with an equal coverage for each month. Assuming that the BCO would spend on average 6 hours a week of counts, this would provide 300 hours of data within the daily log after one year.

Acute surveillance will also be needed at times of particular bird activity, including times when fields have just been ploughed, or at times of wildfowl migration, or at times during construction when soils are exposed, there will be an additional need for surveillance of the flightpath.

Blackpool Airport may also advise of periodic build-ups of problematic species in the wider area which introduce flightlines across Queensway. For example, demolitions in the industrial areas where gulls roost may cause fluctuations in numbers.

At such times of acute surveillance, there will also be a need for direct co-ordination with Air Traffic Control who will advise the BCU of incoming flights from a 20 mile distance and request that

problematic birds are dispersed and/or situation reports are provided so that the Airport can notify Airmen (NOTAMS system). A patrolling and dispersal pattern will be agreed with the ATC.

If a potential bird hazard cannot be dispersed, or if to do so, would make the situation worse, then the BCU will inform the ATC

Monitoring

The purpose of monitoring will be to record the distribution and movement of various birdstrike priority species with the FCA, in particular observed within or crossing the flight path. To do this the BCO will take bird counts for the following species:

- Gulls (individual counts for black-headed gull, common gull, herring gull, lesser black-backed gull)
- Corvids (individual counts for jackdaws, rooks, carrion crows and magpies)
- Waders (Curlews, lapwings and other waders)
- Wildfowl (whooper swan, Bewick's swan, pink-footed geese, Canada geese, feral geese, grey herons and ducks)
- Starlings
- Hirundines

Bird counts will be undertaken on a field by field basis during the Winter months (Sep-Apr) where higher risk species are present in larger numbers or in particular areas where Rowland Homes notify of next phases of development taking place. Data obtained will be recorded on field recording forms supplied to the BCO. Each field within the FCA will have its own field reference number which will be used when recording counts. A minimum of twenty counts will be undertaken by the BCU during the Winter monitoring period, each of at least three hours duration. This will be increased if there is deemed to be a higher risk of bird activity within the flight path area along with the required dispersal actions.

1.2.4 Record-keeping

The Airport BCU maintains a continuous record of bird and wildlife activity on and around the airfield, and of bird control activity in a log diary. BCO's complete and submit online ECCAIRS report forms for all `birdstrikes'. Completed reports are passed to the airport's Bird Control Co-Ordinator (BCC) for safekeeping and trend analysis. All bird strikes occurring within the Airport boundary or in the immediate vicinity (up to 1 km outwith) are reported, the airport also records `near misses' to aid trend analysis. Strike reports submitted by pilots anywhere up to the 13km radius will also be captured.

A Bird Control Log sheet /diary system is maintained to record shift handover times, pyrotechnics/cartridges used, equipment unserviceabilities, grassland maintenance activities etc. together with any observations that the bird control operative considers to be relevant. All details are assimilated by the Airport's BCC and produced as part of the monthly report.

It is intended that the Queensway BCU will keep daily count forms and will log bird control activity, in a manner consistent with the report style used by the Airport. The QBCU will pass information.

1.2.5 **Bird Control and Dispersal**

It will be necessary, particularly during the first ten years of the implementation of the Queensway scheme, to undertake active bird control on different parts of the proposed residential area when either construction works are underway or when increased bird activity is observed or reported within the FCA. It is far preferable to prevent a potential bird hazard before it has become fully established rather than attempting to deal with the problem afterwards.

1.2.5.1 Presumptions for and against Active Bird Control

In the Residential Area, the road corridors and the Nature Park and Playing Fields (not yet developed), there is a presumption that active bird control may be carried out by the BCU when required, without the need for prior consultation or permission to enter. This is not expected to be a frequent requirement for most of the listed areas due to current low numbers of hazardous bird species.

Even in these situations, the active bird control must be carried out using the most sensitive and appropriate methods bearing in mind the presence of humans and other wildlife.

The Farmland Conservation Area is established to safeguard Birds of Conservation Concern (SPA and UKBAP birds).

Active bird control measures are implemented within parts of the Lytham Moss by the Airport BCU when a bird hazard is identified. Landowners or those involved in any works are not encouraged to disperse birds themselves but to inform Air Traffic Control or the Duty Bird Officer (Duty Fire Station officer) who will take the appropriate action. See contact details for those listed.

Within the FCA, there is a presumption that active bird control will only take place below the flightpath or very close to it (fields D, E, H and I).

If the BCU wishes to undertake active bird control in any other part of the FCA they will be required to follow a strict protocol to avoid the unnecessary disturbance of whooper swans and Bewick's swans as well as other SPA and UKBAP bird species. This protocol is provided in section 3.3 of this document.

Only certain types of bird control method will normally be acceptable on the FCA to ensure that swans are not disturbed as a consequence of controlling other birds near the flightpath. It is envisaged that bird control measures in the FCA including the wildfowl refuge will be restricted to the use of a lure, arm waving, trained raptors and bio-acoustic methods (such as gull and corvid distress calls and selective shooting to scare or kill in accordance with the protocol). It is not envisaged that non-selective bird scaring methods will be used on the FCA unless no large flocks of SPA birds are present on the Lytham Moss. It is not envisaged that it will ever be necessary to employ bird-scaring measures during winter within the permanent wildfowl refuge (fields K and M) unless exceptional circumstances are encountered.

Exceptional circumstances can be recognised as follows. In normal circumstances, there is low potential for goose flightlines to develop across the airport flightpath, as extensive research and data obtained has confirmed that the main roosting areas for swans and geese using the Lytham Moss are located at the Ribble Estuary and Martin Mere to the south, so wildfowl concentrations in the refuge are expected to reduce swan and geese flights across the airport flightpath rather than increase them.

Exceptional circumstances may arise if hazardous flightlines arise into or out from the refuge, across the flightpath. In these circumstances, bird control within the refuge would be for emergencies only and would not, unlike other locations within the Farmland Conservation Area, allow preventative measures to be undertaken within an area that has already been identified for goose mitigation and where management practices will actively encourage non-hazardous usage by geese.

The use of shooting as a last resort cannot be ruled out. In some cases, it may be less disturbing than other methods such as repeated rocket firing. However, the protocol sets out the situations where shooting may be used. Shooting is in any case covered by licences issued by Natural England.

1.2.5.2 Methods of Active Bird Control

The following measures may be used, subject to legal restrictions and the protocol to avoid impacts on SPA species. The choice of method depends on its effectiveness for the target species, considerations of health and safety for operators and the public, impacts of neighbours and impacts on other wildlife. These are listed in (increasing) order of impact, with the intention that an escalation of techniques should be used by trained staff, with the lowest impact techniques being tried first. Of course, not all techniques are appropriate for all species or situations, and sometimes it may be less disturbing to use a high-impact method sparingly rather than repeatedly use a low-impact method. Nevertheless, the principle is one of escalation.

- Arm-waving
- Lure
- Bio-acoustics (e.g. distress calls)
- Use of bird scaring lasers
- Falconry
- Use of ‘raptor’ decoys, Hawk kites (proven to be very effective for Geese deterrence)
- Radio-controlled “falcons”
- Trapping and humane disposal
- Bird-scaring rockets and cartridges

- Shooting

Appendix 2 contains details of the precautions and restrictions and limitations associated with each method.

1.2.6 Active Bird Control in Different Areas of the Queensway Scheme

It will be necessary to vary the approach to passive and active bird control across the Queensway Scheme for a variety of reasons. Different parts of the Queensway scheme will attract different types of birds and will encourage different types of behaviour by those birds such as loafing, feeding and roosting.

As noted earlier, in some parts of the Queensway scheme there will be a presumption in favour of active bird control whilst in other areas there is a presumption against active bird control. For these reasons the Queensway Bird Hazard Control Plan (QBHCP) has been broken down into five separate sections: the playing fields and school grounds; the Nature Park; FCA fields D,E,H,I below the Blackpool Airport flightpath; the FCA fields A,B,C,J, L ; and the wildfowl refuge (fields K and M).

Playing fields and School Grounds

This area includes the playing fields located to the west of the Nature Park as well as the school grounds located directly to the south of the Playing fields (pending development)

The playing fields will be managed by the Nature Park land manager who is responsible for undertaking general habitat management on at least a weekly basis. There are currently no proposals for habitat management specifically to control birds on the playing fields. Both the land manager and the BCO will be required to undertake active bird control on the playing fields. The following bird control measures will be implemented within this location:

Landscape Manager:

- Surveillance of gull, corvid and wader activity on the playing fields will be undertaken once a week – bird numbers will be recorded once in the morning and once in the late afternoon. Surveillance recording sheets will be transferred to the survey logbook.
- The land manager will normally be expected to displace all flocks of gulls using a lure and arm waving methods.
- The land manager will inform the BCO prior to undertaking any active bird control on the playing fields.

Bird control Officer (BCO):

- Surveillance of gull, corvid and wader activity on the playing fields and school grounds will be undertaken at least twice a week – bird numbers will be recorded once in the morning and once in the late afternoon. Surveillance recording sheets will be transferred to the survey log book.
- The BCO will displace all flocks of gulls using a lure, raptor and bioacoustic methods. There is a presumption in favour of active bird control in this location.
- The land manager will inform the BCO prior to undertaking any active bird control on the playing fields.
- The BCO will obtain the necessary licences to use lethal methods to prevent gull breeding on the school building if they are informed of high numbers of gulls creating a significant risk.

BCO Co-ordinator:

- The BCO will inform the Bird Control Co-ordinator if gull control methods on the playing fields are not effective identifying a need for shooting of gulls.

The Nature Park

The Nature Park is an area of Open Space accessible to the public to the northeast of the Queensway residential development. The Nature Park has Nature Conservation Objectives to benefit various species including freshwater invertebrates and nesting tree sparrows.

The playing fields will be managed by the land manager who is responsible for inspecting the Nature Park on at least a weekly basis. Both the land manager and the BCO will be required to undertake active bird control on the playing fields. The following bird control measures will be implemented within this location:

NP Land Manager:

- Dense stands on trees will be managed so that they do not exceed 18 feet in height and grassland will be managed to maintain it at a height of between 15 and 30 cm in accordance with the Nature Park Management Plan.
- Surveillance of gull, corvid, small passerine and wildfowl (grey heron) activity on the Nature Park will be undertaken once a week – bird numbers will be recorded once in the morning and once in the late afternoon. Surveillance recording sheets will be transferred to the survey log book.
- The land manager will normally be expected to displace all flocks of gulls and grey herons using a lure and arm waving methods, with the express written agreement of the QBCU.
- The land manager will inform the BCO prior to undertaking any active bird control on the Nature Park.

BCO:

- Surveillance of gull, corvid and small passerine and wildfowl (grey heron) activity on the Nature Park will be undertaken at least twice a week – bird numbers will be recorded once in the morning and once in the late afternoon. Surveillance recording sheets will be transferred to the survey log book.
- The BCO will displace all flocks of gulls using a lure, raptor and bioacoustic methods. There is a presumption in favour of active bird control within the Nature Park.

- The BCO will inform the land manager prior to undertaking any active bird control on the playing fields.
- The BCO will obtain the necessary licences to use lethal methods to prevent gull/corvid/goose breeding on the Nature Park.

BCO Co-ordinator:

- The BCO will inform the Bird Control Co-ordinator if gull control methods on the playing fields are not effective identifying a need for shooting of gulls.

FCA - land located under the Airport Flightpath

Fields located either under the Blackpool Airport flightpath or close to it include fields D, E, H and I. These fields will be managed by the FCA land manager.

The FCA has Nature Conservation Objectives to benefit various species including whooper swans, Bewick's swans, pink-footed geese and black-tailed godwit. There is a secondary Nature Conservation objective for the FCA to benefit farmland birds in general.

It is recognised that pink-footed geese can represent a significant birdstrike hazard therefore it is envisaged that some active control methods may occasionally be needed when necessary to displace this species. It is unlikely to enter fields D and E. Nevertheless, control may be needed in fields D, E, H and I. The emphasis on pink-footed goose bird control will be on habitat management and surveillance of goose movements. All active pink-footed goose control should be surveillance driven at all times. The protocol is set out in section 3.3.

Only the BCO will be required to undertake active bird control on fields D, E, H and I unless the BCO specifically instructs the FCA land manager to employ active bird control. The following bird control measures will be implemented within this location:

FCA Land Manager:

- Hedgerows will be managed so that they do not exceed 15 feet in height in accordance with the FCA Management Plan.
- Potatoes will be harvested from fields D, E, H and I no later than 15th September to ensure that pink-footed geese are not attracted to these fields. All potato remains will also be carefully removed from fields D and E also prior to 15th September. These wastes may be taken to the Wildfowl refuge under the FCA Management Plan.
- The FCA Land Manager will liaise with the QBCU and ATC (Air traffic Control) to inform them when ploughing operations are planned which could attract gulls.
- The land manager will inform the BCO immediately of any large concentrations of birdstrike priority species within fields D, E, H and I.

BCO:

Surveillance of gull, corvid, geese and wildfowl activity on the FCA within the flight path area will be monitored throughout the airports operating hours from the runway observation point –further on-site visits to the FCA will take place where increased activity is observed and during the Winter months where geese will be present along with an increase in gulls and wading species.

Where required, the BCO will displace all flocks of gulls using a laser, lure, raptor and bioacoustic methods. There is a presumption in favour of active bird control in this location, using these methods.

- The land manager will inform the BCO prior to undertaking any active bird control on the playing fields.
- The BCO will obtain the necessary licences and provider to use lethal methods to prevent corvid breeding within fields D, E, H and I.
- The BCO will inform the Bird Control Co-ordinator if gull/corvid/goose control methods on fields D, E, H and I are not effective identifying a need for shooting of birdstrike priority species.

BCO Co-ordinator:

- The Bird Control Co-ordinator will be required to consult Natural England if surveillance indicates a need to shoot habitual occurrences of pink-footed geese on fields D, E, H and I. However, this is thought to be exceedingly unlikely as displacement can take place and the current cropping plan has proven to be successful over a number of years..

FCA – fields A,B, C,J,L

These fields will be managed by the FCA Land Manager.

The FCA has Nature Conservation Objectives to benefit various species including whooper swans, Bewick's swans, pink-footed geese and black-tailed godwit. There is a secondary Nature Conservation objective for the FCA to benefit farmland birds in general.

Only the BCO will be required to undertake active bird control on fields A, B, C, J, L unless the BCO specifically instructs the FCA land manager to employ active bird control. Active bird control will generally target gulls and corvids. There will be no active bird control affecting pink-footed geese unless the BCO can demonstrate the need to undertake pink-footed goose control on the basis of aircraft safety using surveillance results. As noted earlier, it is very unlikely that pink-footed geese will flock in these fields anyway because of their relatively small size and the extent of disturbance.

The following bird control measures will be implemented within this location:

FCA Land Manager

- Surveillance of gull, corvid, small passerine, wader and wildfowl activity on the primary swan feeding areas will be undertaken once a week – bird numbers will be recorded once in the morning and once in the late afternoon. Surveillance recording sheets will be transferred to the survey log book.
- After receiving written permission from the BCO, the land manager will normally be expected to displace all flocks of gulls and grey herons using a lure and arm waving methods.

BCO:

Surveillance of gull, corvid and small passerine, waders and wildfowl activity on primary swan feeding areas will generally be required at least three times a week – bird numbers will be recorded once in the morning and once in the late afternoon. Surveillance recording sheets will be transferred to the survey log book.

During summer months when wild swans are not present, the BCO may enter this area to displace gulls and corvids.

There is a presumption against active bird control in this location, unless there is a risk to aircraft safety. Therefore all active bird control will be undertaken in accordance with the protocol in section 3.3.

Active bird control, when authorised, is likely to target gulls and might entail the BCO using a lure, raptor and bioacoustic methods.

The land manager will inform the BCO prior to undertaking any active bird control on the playing fields.

The BCO will inform the Bird Control Co-ordinator if gull/corvid/goose control methods on fields A, B, J, C are not effective identifying a need for shooting of birdstrike priority species.

FCA – the wildfowl refuge

The wildfowl refuge includes fields K and M. These fields will be managed by the FCA Land Manager.

There will be a general assumption against undertaking active bird control which might disturb whooper swans, Bewick's swans, pink-footed geese and black-tailed godwit in the wildfowl refuge. The intention is that the refuge will be undisturbed so that no birds will be pushed into the flightpath.

FCA Land Manager:

- Water levels associated with swan scrapes will be managed to ensure that no large permanent water bodies are created at any time whilst ensuring that the swan scrapes do provide small shallow pools of water for the swans during the period 15th September to 15th April.
- Surveillance of gull, corvid, small passerine, wader and wildfowl activity on the wildfowl refuge will be undertaken once a week – bird numbers will be recorded once in the morning and once in the late afternoon.
- Surveillance recording sheets will be transferred to the survey log book.
- There is a presumption against active bird control in this location, unless there is a risk to aircraft safety.
- The FCA Land Manager should consult Natural England if a need to undertake active bird control in the wildfowl refuge is identified. The regular six weekly management meetings would also be an appropriate time to discuss a matter such as this.

BCO:

- The BCO will not be required to undertake daily surveillance duties or active bird control duties within the wildfowl refuge. However, he will undertake weekly visits and may visit the wildfowl refuge at any time provided care is taken not to disturb swans and other SPA birds.
- If active bird control is needed on any species which are not of conservation priority, the BCO may carry this out in accordance with the protocol to avoid disturbing species of conservation concern.
- If active control is needed on pink-footed geese, this will be referred to the BCO Co-Ordinator and the FCA land Manager

- BCO Co-ordinator:
- The BCO co-ordinator may visit the wildfowl refuge at any time provided care is taken not to disturb swans and other SPA birds.
- The BCO co-ordinator will agree with the FCA Land Manager if active bird control is needed
- If active control is needed, in accordance with the protocol, the BCO Co-ordinator will ensure that the protocol is followed and any licensing restrictions on lethal means of control are followed and documented
- Will provide a quarterly report of active bird control to Fylde BC, Natural England etc.
- If emergency access for active bird control is needed, the BCO Co-ordinator shall be informed and shall visit to ensure that the protocol is followed.

1.2.7 Protocol for Managing Birdstrike risk from pink-footed geese and species of nature conservation priority at Lytham Moss

Pink-footed geese are one of the wintering bird species which are “qualifying features” for the Ribble and Alt Estuaries SPA. UK policy is to conserve the species. Its population has been increasing rapidly in the UK and in Lancashire, with a threefold increase since 1980. The recent population estimate for the south-west Lancashire area is around 35,000 birds.

Risks associated with geese

Unfortunately, the species can pose a risk to aircraft safety. Blackpool Airport considers the three highest priority species-groups to be gulls, corvids and geese.

Geese pose a risk because their flight pattern can be erratic, particularly when disturbed or when prospecting for a place to land and feed. They can fly in large flocks. There are established goose flightlines northwards from the Ribble Estuary over the M55. These flightlines cross the Blackpool Airport flightpath.

Geese pose a risk to aircraft because of their size, the height at which they fly and their flight patterns. Geese are considered to be higher priority in birdstrike risk management than swans for several reasons:

Swan flocks tend to be much smaller (e.g. the entire West Lancashire and Fylde population of whooper swans is about 1,700 birds, compared to pink-foot flock of 35,000, and the species feeds in much smaller flocks)

Swans tend to fly at lower altitudes during daily commuting between roosts and feeding grounds

Swans are less vulnerable to disturbance, and thus take flight less often

Swans flight patterns tend to be direct and predictable, whereas geese will circle and loop and sometimes “drop” from the sky

Existing Patterns of Pink-footed Goose activity at Lytham Moss and elsewhere on the Fylde

At Lytham Moss, there are seasonal problems with geese flightlines across the approach to Runway 28. However, the geese do not usually land close to the runway, so there has not yet been a particular problem with pink-footed geese in terms of aerodrome safeguarding. This is because pink-footed goose flocks have been infrequent and normally occupy the large fields south-west of North Houses Lane. The geese do not use land closer to the runway, because field size is smaller and there is generally more disturbance from human activity. Geese on Lytham Moss tend to fly in from the Ribble estuary and rarely move northwards across the airport flightpath.

Larger concentrations of geese moving across the airport flightpath do occur further to the east of Lytham Moss, where aircraft are normally higher in the air on approach to Runway 28. Although this is a matter of concern to the Airport, the situation can normally be managed through Notifications to Airmen as and when major goose flight activity occurs.

1.2.8 Other Birdstrike priorities which are of Nature Conservation importance

Other nature conservation priority species may use the FCA but also considered to be birdstrike priority species.

It is most likely that lapwing and curlew will be regularly encountered. The other species rarely visit Lytham Moss in any numbers.

This is with the exception of whooper swan and Bewick's swan which will be subject to full protection on the FCA since they do not currently pose a significant birdstrike risk.

1.2.9 The Farmland Conservation Area (FCA) proposal

The proposed mitigation strategy for SPA birds associated with the Queensway scheme is primarily targeted at whooper and Bewick's swan conservation, since these species are important on Lytham Moss. The strategy may have an additional consequence of benefitting pink-footed geese and other protocol birds because, in the proposed Farmland Conservation Area, a large undisturbed area of short grass will be created which will be attractive to both swans and geese. This short grass will be situated where the geese already graze, and will not extend the existing range of the geese on Lytham Moss.

1.2.10 Protocol to Manage Pink-footed Goose/other protocol bird Birdstrike risk

Blackpool Airport has requested a protocol to monitor and manage pink-footed goose if their flight patterns on Lytham Moss change and endanger the airport flightpath.

Although the design and layout of the Farmland Conservation Area is intended to maintain the status quo for geese, there can never be certainty in relation to behaviour of wild birds. Other external factors may result in new goose flightlines developing – for example if geese are disturbed on other Fylde feeding grounds, they may start to use Lytham Moss and fly in from the north-east; across the airport flightpath

The Airport recognises that pink-footed geese are a species of conservation priority. They also recognise that it is important to minimise disturbance to wild swans on Lytham Moss as an unintended consequence of managing pink-footed geese.

Accordingly the following protocol is proposed as a stepped approach to managing birdstrike risk from geese and other species

1.2.11 Surveillance and Monitoring

The airport's existing Bird Control Unit (BCU) already monitor the flightpath east of runway 28 and observe flightlines of pink-footed geese and other protocol species. They will note the emergence of new flightlines.

The BCU will also inspect the FCA during the winter, and will maintain records of flight activity of pink-footed goose and other protocol birds. The records will take note of flightlines. Reports will be incorporated into the Winter Bird Survey Data Annual Report.

1.2.12 Notice to Aviation (NOTAM)

If new flightlines for geese or other protocol birds emerge, the QBCC will advise the aircrew of the emerging flightlines. Aircrew will then adjust flight activity accordingly. Clearly this is not sustainable over long periods, but is an appropriate response if problematic flightlines are short-term.

1.2.13 Disturbance to geese and other protocol birds when swans are not present

If problematic flightlines emerge, it may be necessary to discourage geese and other protocol birds from settling in particular areas of the FCA. This will be most appropriate close to the flightpath. If swans are not present, the mere presence of a human, arm-waving or with a lure should cause geese to move. Falconry can also be effective.

This needs to be carried out by the QBCO or another trained person in communication with the Airport BCU, to minimise the risk of putting birds up into the flightpath.

This will not be needed if pink-footed goose or other protocol bird activity remains consistent with historical trends (i.e. the birds fly in from the south and settle in the south-eastern fields)

1.2.14 Low-level disturbance to mixed flocks of geese/other protocol birds/swans

If the geese or other protocol birds are in mixed flocks with swans, it may be possible to undertake low-level disturbance which disturbs the geese but not the swans. This is possible, since geese are much more alert than swans. This would take the form of human activity on the periphery of the flock. It may not be effective if the goose flocks are small relative to the swan flocks, but by definition, this form of goose control is only likely to be needed if large numbers are present.

1.2.15 Short-term Habitat Management to discourage geese but sustain swans

Pink-footed geese require much greater visibility than swans and will not settle within 200m of an enclosed field boundary. They are also more dependent than swans on short grass.

If there is a problem with pink-footed goose or other protocol bird numbers building up and causing inward flightlines, then it may be possible to plough grassed areas to reduce the area attractive to the problematic species.

Subdivision of a large field using a temporary high-visibility mesh fence may also discourage pink-footed geese but not swans. Such ploughing or subdivision will not apply to the wildfowl refuge.

1.2.16 Longer-term Habitat Manipulation

Subdivision of larger fields using reedy ditches or hedges will also cause pink-footed geese not to settle. The size and shape of the residual field will need to be planned to ensure swans can remain. However, this method of goose management will require 2 or more years to establish, although could be used in conjunction with short-term habitat management. Any long-term habitat manipulation will require an adjustment of the FCA Management Plan in order to ensure the collective value of the FCA for SPA species is retained. Thus this measure will require consultation with the FCA Manager during the process of annual review.

Selective falconry

The successful dispersal of smaller protocol birds such as lapwings without disturbing swans can be achieved with relative ease using falcons.

Targeted culling by experts

If the above methods do not succeed in dispersing pink-footed geese that enter Lytham Moss using hazardous flightlines, then expert culling of individual geese, using a silenced rifle shot has been proven to be effective in causing flocks of geese to leave, without disturbing neighbouring species. Such culling would require licensing from Natural England, who will require demonstration of a risk to airline safety, and a clear line of reporting on the effectiveness of the activity in dispersing geese while safeguarding swans. Targeted culling, under licence as appropriate, of some other protocol birds including oystercatchers and curlews can also be effective at managing birdstrike risk associated with these species. Culling by shooting will always be kept to the minimum level required to manage an unacceptable birdstrike risk.

The local species licensing officer at Natural England responsible for the North West has been consulted regarding the matter of obtaining licences to shoot wild birds in emergency situation. This consultation has confirmed that it will be necessary to collect data of bird movements across the Blackpool Airport flightpath to establish that non-lethal methods currently being used on the FCA are ineffective at managing birdstrike hazard. However Natural England has also confirmed that they will prioritise licence applications for lethal methods of controlling birdstrike priority species where it can be demonstrated using surveillance data that a birdstrike risk is unacceptable for aviation safety.

If culling of pink-footed geese or any other bird species becomes necessary the police will be informed of the matter. All bird carcasses will be removed and the monthly report prepared by the BCO or service provider will provide details of numbers of birds shot. Details of bird shot under a Natural England licence will be promptly reported directly to Natural England.

Offsite Disruption to flightlines

It may be possible to disrupt a problematic flightline into the FCA at source or where it passes across the Airport flightpath, without the need to disturb the FCA. The QBCU will assist the Airport BCO to carry out offsite control in areas where the Airport has access.

1.2.17 Emergency Access for Management of Geese, Gulls and Corvids

The monitoring and habitat management proposals set out in this Bird Hazard Management Plan should ensure that any developing flight lines of risk species across the flight paths are addressed very early, before the problem has become an established bird behavioural pattern. It is not envisaged that emergency access will be needed to carry out bird control.

However, there may be extremely isolated occurrences of rapidly developing flight lines of problem species – for example following extreme weather conditions when birds may be forced inland, or if birds are suddenly displaced from significant roosts or feeding grounds elsewhere and start prospecting for new roosts or feeding grounds.

In such circumstances the QBCU have emergency access to control bird species that pose a threat to aircraft safety. An emergency is defined as a situation which the Airport Bird Control Officer, Air Traffic Control or aircrew using the airport consider warrants urgent action.

This emergency procedure is separate to the protocol described in paragraphs above.

The QBCU may use any method described in this Bird Hazard and Control Plan to carry out emergency bird control. The QBCU will use the a targeted method to address the problem without affecting swans (for example by using falcons), bearing in mind the need to avoid impacts on neighbours, the public and on non-target wildlife. If the targeted methods do not scare the problem

species, then more general methods (eg Lures, bird-scaring cartridges) may be used. Lethal measures against target species may only be used as a last resort.

The QBCC will endeavour to notify Rowland Homes of his intention to enter any part of the site to carry out emergency bird control. Rowland Homes will not restrict access to the QBCU to any area in the development or the Nature Park or the FCA, except as described below.

- In the wildfowl refuge (fields K and M plus a 100m buffer) between the winter months of September 15th to March 31st inclusive, the following conditions apply to access for emergency bird control:

- Access to the refuge is only permitted if the emergency relates to hazardous species (ie gulls, corvids, geese) either departing from or approaching fields K or M and crossing the approach / departure paths of runways 10 / 28 in regular and increasing numbers

- Before accessing the wildfowl refuge, reasonable endeavours should be made by the Airport Bird Control Officer (who may engage the QBCU to assist) to disrupt the flightline of hazardous birds at the point of origin, or across the airport flightpath (eg using rockets to deter birds from continuing on their flight path). If these prove unsuccessful, then access to the refuge is permitted, subject to the other conditions noted below.

- Methods and timing of emergency bird control during winter months in the wildfowl refuge will be chosen to avoid or minimise disturbance to wild swans. Methods that are indiscriminate in effect (such as bird-scaring cartridges and use of a lure) shall only be used as a last resort.

- Bird Control may only be carried out by the Queensway Bird Control Co-ordinator (QBCC). If he is not available, a deputy with equivalent experience is satisfactory.

- Bird Hazards on neighbouring land would not be controlled from the wildfowl refuge

Requests for emergency access would be referred to an independent third party specialist for review; as follows:

The third party will be a person approved by the Airport and by Fylde Borough Council (taking advice from Natural England). The third party will have:

- A thorough knowledge of the species of birds likely to use the FCA and the surrounding area

- A thorough understanding of the aims of the FCA

- A thorough understanding and experience of both active and passive bird control and dispersal

- A thorough understanding of the implications of bird-strikes.

The QBCC will notify the third party of species of birds causing concern, their numbers, their behaviour and the grid references and heights at which they have been recorded. Any specific incidents involving either bird-strikes or near-misses will also be detailed. The QBCC will advise why he feels that access to the wildfowl refuge is essential. The QBCC will advise what course of action is felt to be most appropriate to address the emergency.

The third party will make a desk assessment of the situation and, if they believe it necessary, will visit the site within 48 hours.

In the meantime, the QBCC will arrange a meeting between himself and the FCA Land Manager and the third party (if the latter wishes to attend). At the meeting, a preferred course of action will be decided. The third party may also attend the meeting, as may representatives or nominees of Natural England.

The QBCC will communicate the proposed action to the third party who will either approve the action or suggest a suitable alternative action which will achieve a satisfactory result after consultation with the Airport Bird Control Officer and Natural England. The third party's advice will be communicated by telephone to the QBCC, followed up by email/letter copied to all parties.

If the third party has not issued any advice within 72 hours of the notification, the QBCC may proceed with the proposed bird control and will notify the FCA Land Manager of his intended access to the refuge.

No more than 7 days after completion of the emergency bird control, the QBCC will issue a report detailing the actions carried out, the species controlled and advice to prevent a recurrence of the problem.

Effect on the Integrity of the SPA

In considering protocols for management of pink-footed geese and for emergency access it is important to consider whether the proposed protocol would affect the integrity of the Ribble Estuary SPA.

It is clear that neither protocol would ever result in the culling of whooper or Bewick's swans which are the primary reason why Lytham Moss is important to the Ribble estuary SPA.

By definition, the goose management protocols would only be triggered if goose numbers or activity increases above the existing baseline situation – the baseline risk assessment for geese on Lytham Moss is one of "monitor and review" rather than actively intervene. The goose management protocol is only triggered for aircraft safety reasons.

The existence of a FCA Management Plan and a long-term scheme of ecological monitoring also means that the management of the FCA can respond to changing circumstances and ensure that swan feeding remains.

The emergency protocol would only affect the Moss for short periods – as noted above, the proposed FCA management plan enables a flexible and responsive approach to management in changing circumstances.

This BHCP does not envisage the need for any culling of wild swans. This will only be required on the basis of a clear air safety justification, and when other means of bird control and habitat manipulation have been tried unsuccessfully. In this case, the Habitats Regulations tests of an over-riding public interest and lack of alternative will have been satisfied, and culling may proceed under licence from Natural England. It may be necessary to provide compensatory swan habitat elsewhere.

Backstop Provision: Bird control measures in the refuge are for exceptional circumstances, whereby the temporal and spatial overlap of goose and aircraft flight lines creates an emergency scenario. A need for ongoing bird control measures within the refuge (such as non-lethal disturbance requiring occasional lethal reinforcement) would only develop should the 'emergency' scenario no longer be deemed exceptional with respect to frequency. This would only occur if predictions about goose behaviour were proven to be flawed and geese behaved in an unexpected manner. It would, however, then not be sustainable to actively intervene to both attract birds

through feeding, whilst simultaneously seeking to disturb or even kill those same birds attracted. Under these circumstances, subject to Natural England's satisfaction that emergency measures were justified, the applicant would seek an alternative site for goose mitigation in order to discharge their planning obligations.

1.2.18 Habitat Management

Farming Patterns and Other Food Sources

Farming and Cropping Plans

Rowland Homes are committed to conservation of rare or declining bird species which depend on the farming patterns of Lytham Moss. This document sets out how Airport safeguarding and protection of birds of conservation value will be achieved.

The FCA proposal ensures that the south end of Lytham Moss continues to be managed as agricultural land. The grazed pasture in the FCA may attract gulls during the winter when livestock are not present although it is possible that swans and other wildfowl using the refuge will discourage large numbers of gulls occurring.

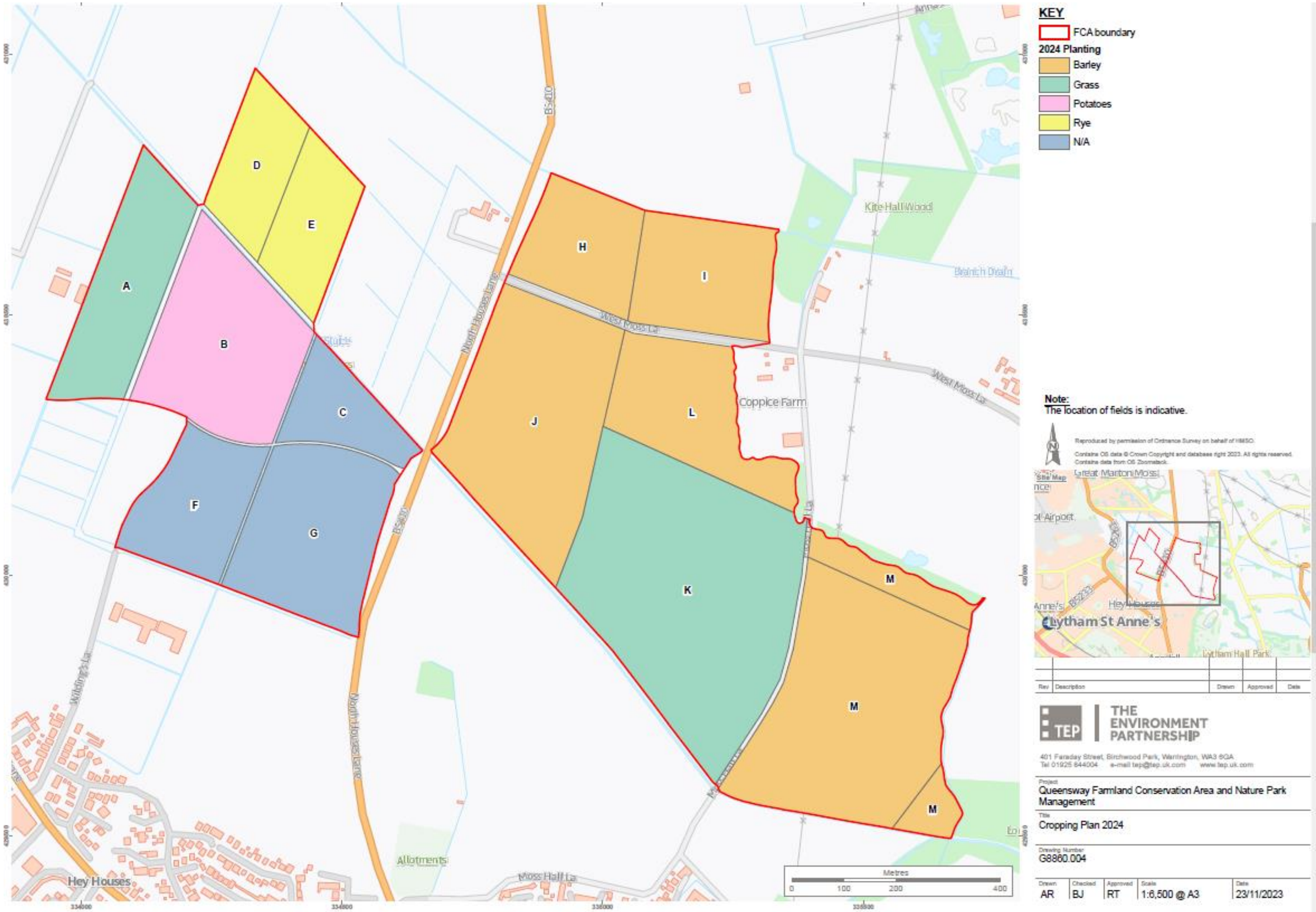
The creation of the permanent grazed pasture will result in ploughing practices being reduced on the Lytham Moss, which will mean less frequent soil exposure. In addition, ploughing actions and times for ploughing are planned to minimise effects within the approach and departure path. This has proven to be extremely effective in reducing hazardous species within the flight path considerably over the past few years.

The airport receives an annual cropping plan from the farmer for the following year for review and approval. The cropping plan is designed to restrict crops from the flight path and surrounding area which will attract birds, particularly in the Winter months.

In the unexpected event that a particular crop type is causing a problem, there is opportunity through the process of review of the FCA Management Plan to vary the cropping pattern.

- Potatoes will be harvested from fields within the flight path no later than 15th September to ensure that pink-footed geese are not attracted to these fields. All potato remains will also be carefully removed from fields D and E also prior to 15th September. These wastes may be taken to the Wildfowl refuge under the FCA Management Plan.
- The FCA Land Manager will liaise with the airport to inform them when ploughing operations are planned which could attract gulls.
- The land manager will inform the BCO immediately of any large concentrations of birdstrike priority species within any fields that are within or near the flight path.

1.2.19 2024 Cropping Plan


KEY
FCA boundary
2024 Planting
Barley
Grass
Potatoes
Rye
N/A
A
B
C
D
E
F
G
H
I
J
K
L
M
M
M
B5410
North Houses Lane
West Moss La
Coppice Farm
Kite Hall Wood
Branch Drain
Wilding's La
Hey Houses
Allotments
Moss Hall La
Metres
0
100
200
400
Note:
The location of fields is indicative.
Reproduced by permission of Ordnance Survey on behalf of HMSO.
Contains OS data © Crown Copyright and database right 2023. All rights reserved.
Contains data from OS Zoomstack.
Site Map
Great Marton Moss
Lytham St Anne's
Hey Houses
Lytham Hall Park
Rev
Description
Drawn
Approved
Date
THE ENVIRONMENT PARTNERSHIP
TEP
401 Faraday Street, Birchwood Park, Warrington, WA3 6GA
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com
Project
Queensway Farmland Conservation Area and Nature Park Management
Title
Cropping Plan 2024
Drawing Number
G8860.004
Drawn
AR
Checked
BJ
Approved
RT
Scale
1:6,500 @ A3
Date
23/11/2023

1.2.20 Other Food Sources

The Nature Park will be of limited value for gulls due to the enclosed nature of the Nature Park, the ceasing of current agricultural activities such as ploughing, the predominant long grass which will restrict gull feeding and the presence of people using it as recreational open space. However, there is a risk that there may be temporary aggregations of gulls after mowing in the Nature Park. Feeding of gulls by humans is also possible.

During any new construction phases, there will be exposure of soils which may attract feeding gulls for short periods, particularly after the soil is exposed. Construction sites can attract gulls, particularly if large pools develop after periods of rain. Disturbance from building activity can help control numbers, but there may be quiet and holiday periods when disturbance is lower. Ongoing meetings with Rowland Homes to provide information and timings for such works will assist in monitoring and controlling risk.

The main area of soil-stripping and disturbance will be the residential footprint, which will take several years to develop, with a phased programme, moving broadly west-to-east. The creation of the Nature Park and the vegetation-stripping for the new roads (T5 and T6 across Lytham Moss) will also see a spike in gull activity. Part of T6 (the M55 Link Road) lies under the Airport flightpath, it will be expected for these works that the assigned project manager keeps the airport informed of each phase of work and appropriate timescales, particular when being undertaken within the flight path area.

1.2.21 Supplementary Feeding

Supplementary feed within the FCA outside of the approach and departure path for aircraft (SE Corner of FCA) will be restricted if weekly bird counts indicate that peak count targets are achieved or bird day numbers are ahead of the FCA target, which was not the case in 2020/21. Supplementary feed has been minimal over the last 2 years due to poor take up by geese and swans and due to the M55 Link Rd construction not yet starting.

The FCA Management Plan stipulates that a total of 144 tonnes of potatoes can be distributed in the wildfowl refuge each winter in response to bird count data. Increased supplementary feeding of potatoes grain may be applied this coming winter due to continued low numbers below target levels.

1.2.22 Grasslands

Grassland within the Nature Park will be managed as long grassland to avoid creating an area which will attract large numbers of gulls and other birds. The wildflower grassland mix to be used within the Nature Park will include certain types of grass species which stay erect throughout the year, which helps to minimise attractiveness to gulls for feeding.

1.2.23 Open Water Sources

The small size of the wetland scrapes (4 x 4 metres) and the steep banks of the ditches will not attract gulls or wading species in any numbers. All scrapes within the wildfowl refuge will be shallow temporary water bodies of approximate dimensions 3 x 3 metres. Taking a design approach such as this avoids creating an attractant for gulls whilst providing important habitat for wild swans

Areas at the southern end of the FCA are liable to standing water in the Winter months attracting gulls and waders, however they are not in excessively large numbers and a considerable distance from the approach/departure path of the runway.

There are no proposals for pools/lakes or general wetland areas within the FCA or proposed residential area, so there will be no opportunities for gulls to congregate in large groups e.g. for bathing.

*No seasonal wet scrapes will be created within 600 metres of the Blackpool Airport flightpath.

Small ponds within the Nature Park will be fenced off to prevent ducks from accessing them from the land. All new ditches will have steep or will be too shallow to provide habitat for fish. No ponds will be deliberately stocked with fish. The majority of ditches will be planted with reed so open water will not be available to allow feeding.

1.2.24 Nesting Habitats

Building and Roof Design within the Housing Area

One concern is whether gulls might use roofs associated with the Queensway development. Flat or gently-sloping roves, particularly if they are darker in colour can attract gulls. Red-tiled and steeply-pitched roofs are much less attractive. Building and subsequent pitched roof design within the housing projects has not shown any high numbers of gull activity or evidence of nesting sites. Therefore, it is relatively unlikely that the residential dwellings will attract any major colonies in the future.

Trees

Appropriate habitat management measures will be undertaken to ensure that trees within the Queensway scheme do not become roosting sites for corvids or starlings. This will be achieved through ensuring that stands of woodland are not allowed to grow above 18 feet in height, a recognised management practice used to manage birdstrike hazard. Individual trees or small groups within the residential development and the southern edge of the Nature Park will be allowed to grow taller. If a rookery or starling roost starts to establish, this will be removed immediately, including provision for tree-pruning or felling.

Hedgerows

Hedgerows will be managed so that they do not exceed 15 feet in height in accordance with the FCA Management Plan.

Reedbeds

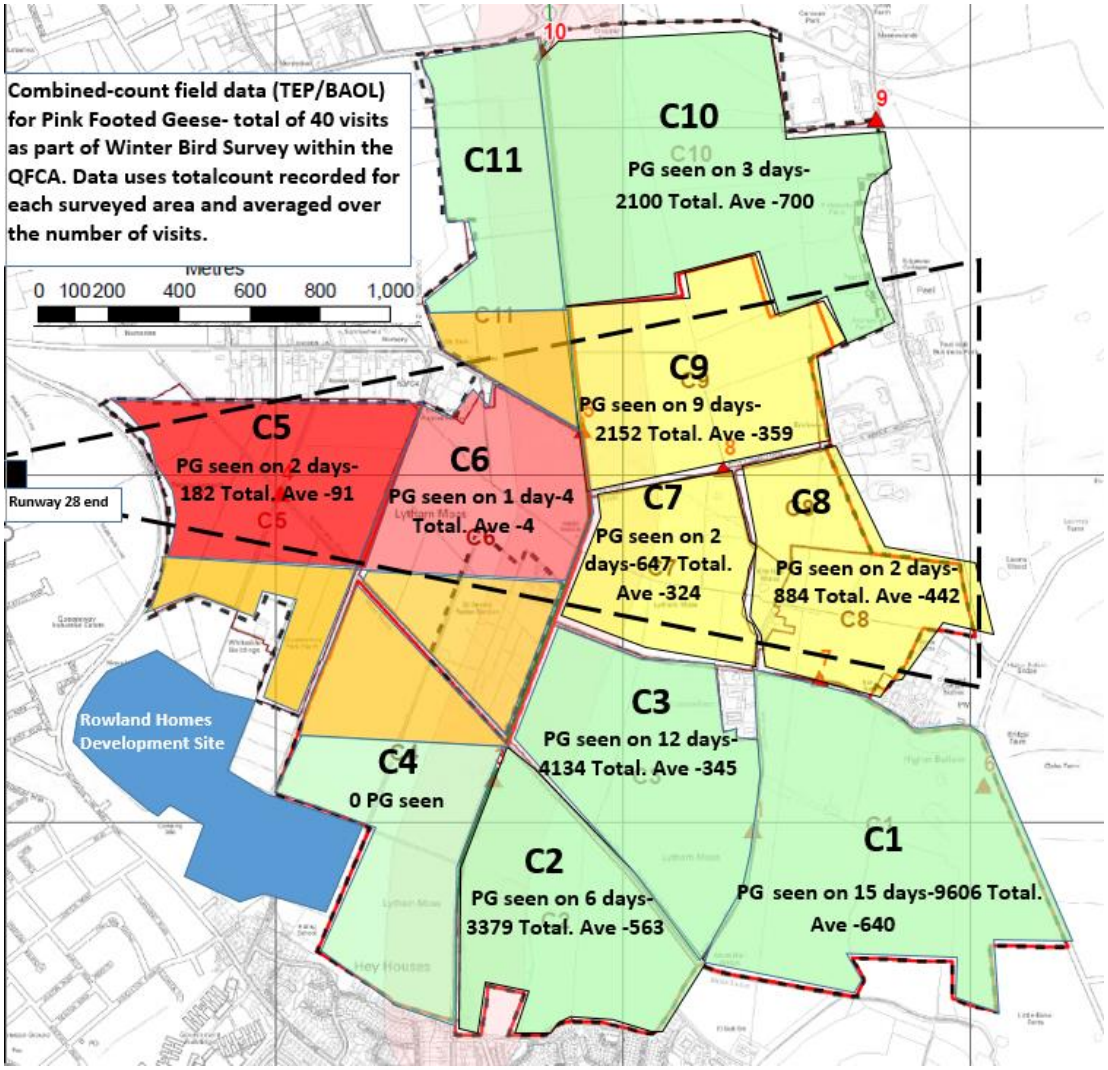
Areas of reed bed will not be more than 2 metres wide. Therefore there will be no potential for a starling roost to develop within the Queensway scheme due to the lack of cover from potential predators which might be provided by more dense blocks of reed bed.

It is predicted that there will be some variation (increases and decreases) in the number of gulls using the residential areas and Nature Park within the Queensway scheme. This variation will be influenced by the Queensway construction phase and time of year.

1.2.25 Summary

Risk continues to be reduced from that of previous years due to the airport having access rights within the FCA and a voice as to how the land is managed with regards to crops, ploughing and harvesting. This is something the airport has never had in the years before and is a vital step to reducing the bird strike risk. As a result, the large species (geese) are kept to the North and South of the approach/departure path for runway 10/28. The Winter Bird survey for 2023/4 confirms this is working with the Geese being kept in fields to the south. The only exceptions to this were on 11/10/23 and 25/1/24 when a total of 150 PG were observed in field C5 mainly (182 total), and a smaller number in field C6, also on 25/1/24 (5 total). No further observations were made in these area and no deployment of bird deterrent measures were required.

1.2.26 TEP/Blackpool Airport data showing locations of Geese 2023/4



When bird numbers do cause an issue, the scaring program and deployment of raptor type decoys works well in a short time reducing the risk to acceptable levels in a matter of days. Changes to the cropping program will continue to be monitored closely.

The new changes to the general licences brought in by Natural England will undoubtedly have an effect on pest species numbers, with Corvid and Woodpigeon numbers being of most concern in this context.

In terms of scaring, for all species apart from Swans and Geese, pyrotechnics, distress calls, lures, land lasers continue to be applied if required to reduce habituation of non-key species where numbers are prevalent and to reduce habituation. Drainage works within the FCA and airport boundary have reduced standing water during Autumn/Winter months, however 2023/4 winter period produced significantly higher levels of rainfall than seen in previous years which did create

areas of standing water to the North and South of the runway for a period of time. Consistent scaring actions by the BCO helped keep gulls away. Ongoing work continues to reduce nesting sites in the airport, in particular with the lopping of trees within the airport boundary.

No Swans were disturbed or killed at any time during the recent winter and bird surveying.

The bird strike risk has been reduced from where it used to be prior to this scheme being implemented, with control measures being implemented usually on a regular basis.

1.2.27 Monitoring, Reporting and Review

The purpose of this procedure for monitoring and review is to:

d) Provide a forum for reviewing bird monitoring data

e) Plan bird control in relation to forthcoming construction activity

f) Pro-actively address any emerging tensions between bird control and the need to minimise disturbance to people, wildlife and property.

Liaison Group

A liaison group will be established by Rowland Homes. This will consist of a representative of Rowland Homes who has executive responsibility for site management, the Nature Park and FCA Land Managers, the QBCC, the ecological consultant appointed to monitor the FCA and the external auditor responsible for monitoring the QBHCP. Natural England, Lancashire County Council, Fylde Borough Council and the RSPB will be invited to join the liaison group. During the first two years of the implementation of the QBHCP, the liaison group will met at least every three months. During the following eight years of implementation, meetings will be held every six months. In years 11 to 20, meetings will be held annually.
Prior to the liaison group meeting, the QBCC will seek advice from Rowland Homes as to what construction activity is proposed in the forthcoming period. The QBCC will, no less than 48 hours before the meeting, circulate a report on surveillance and active bird control measures implemented during the period since the previous liaison meeting. The QBCC will also advise if any bird control is needed in the forthcoming period.
The liaison group meeting offers an opportunity to review recent bird flight lines and control measures, and to identify if there are any opportunities to minimise disturbance arising from bird control, particularly bearing in mind the objectives of the FCA.
One meeting each year will also consider the Annual Report
Minutes of the meeting will be circulated to all parties listed above, and to Blackpool Airport, within 14 days.

1.2.28 Current Status and Overview of Rowland Homes Development Bird Strike Risk

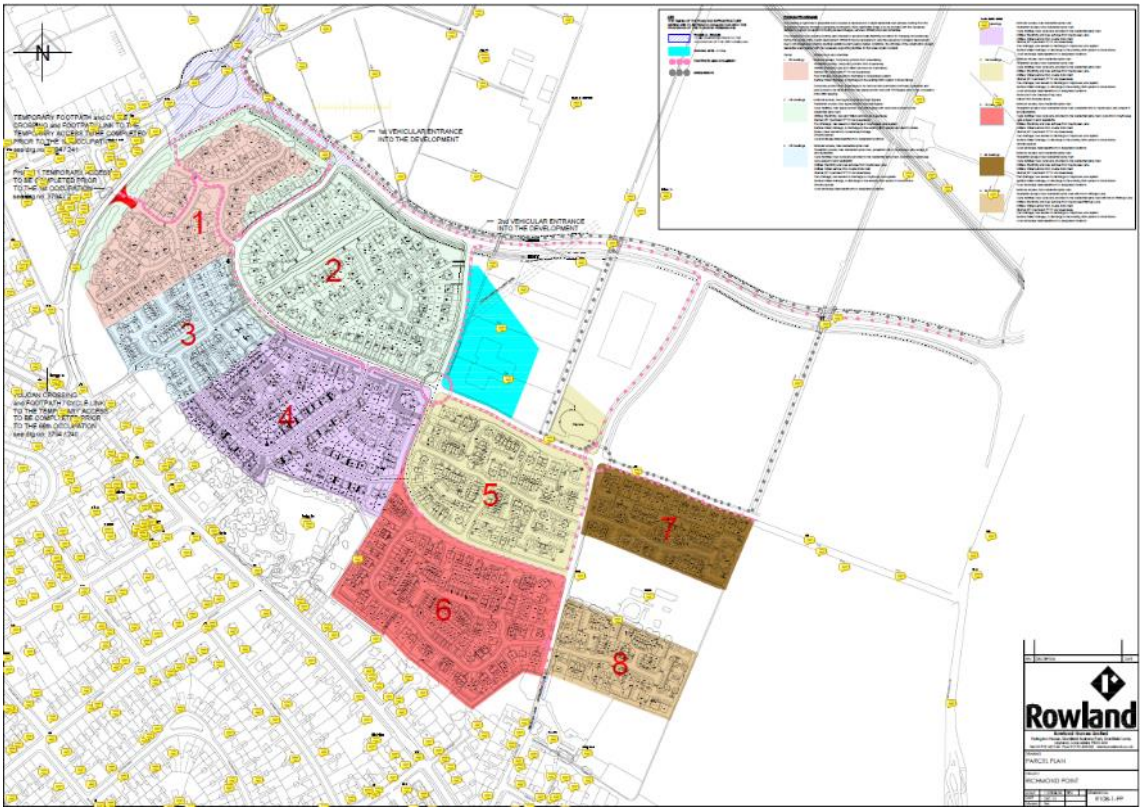
Bird activity within the construction area (see below image) has been negligible during the 2023/24 season as observed during Winter Bird Surveys. As a result risk of birds transiting into the area through the flight path is relatively low risk.

In addition, the dispersal of Pink Footed Geese within the QFCA is generally remains within the target areas outside of the flight path in the fields listed previously, mainly to the north and south.

This pattern also applies for other higher risk bird species such as corvids, gulls and wading species as recorded within 2023/4 BAOL/TEP Winter Bird Survey data.

1.2.29 Next Phases of Rowland Homes Development

Planning permission has been applied for by Rowland Homes for the next phases of the housing development (SR 24 069 24 – 0272). Taking into account the existing agreement for this project and the planning submission along with assessment of the landscaping proposal, the airport has raised no objection. As per the current agreement the development phases will be monitored for any bird strike risk along with the existing QFCA fields for geese activity and dispersal. Images below show the areas of the development and their status.



1.2.30 Annual bird control report

The QBCC will prepare an annual report which will provide a detailed account of all surveillance and active bird control undertaken during the previous year. The annual report will cover bird hazard priority species by groups (gulls, corvids, small passerines, waders, wildfowl).

The report will have a separate chapter covering species of nature conservation importance; the focus of this chapter being to demonstrate how disturbance of whooper and Bewick's swans was avoided, and how disturbance of other species of nature conservation importance was minimised in accordance with the protocol described above.

Rowland Homes will ensure that the timing of the annual bird control report is synchronised with the annual report on Management of the FCA.

1.2.31 Review of BHCP

The Annual Report may identify a need for review of the QBHCP. Should the QBCC identify that particular crops in the FCA cause hazardous species to cross the flightpath of Runway 10 / 28 on a regular and increasing basis, the QBCC will work with the FCA Manager to ensure cropping practice is modified to address this problem in such a way that the FCA remains in a favourable condition for conservation. This will be carried out in consultation with Natural England, Lancashire County Council and the RSPB. Any revisions to the BHCP will be deposited with Fylde BC.

1.2.32 References

Civil Aviation Authority (2008) Birdstrike Risk Assessment for Aerodromes.

Personal communications:

Civil Aviation Authority Publication (CAP) 772 Wildlife Hazard Management at Aerodromes

Civil Aviation Authority Publication (CAP) 738 Safeguarding of Aerodromes

Blackpool Airport (doc GT 011) Safety Management System

Blackpool Airport (doc AO 002) Wildlife Hazard Management Plan

Other information:

Fylde Bird Club ornithological records for Lytham Moss (covers the last 5 years).

TEP winter bird survey data.

Blackpool Airport winter bird survey data

Blackpool Airport Bird Control Log and annual strike data.

1.2.33 Contact Numbers for Key Personnel

Role / Function	Names Person(s)	Contact	
BLK Air Traffic Control (for reporting bird hazard)	N/A- Various	[redacted]	
Airport Bird Control Unit (via duty station manager)	N/A- Various		
BLK Airport Bird Control Co-ordinator	[redacted]		
Local Farmer			
Associate Landscape Manager- TEP			
Principal Ecologist - TEP			
Technical Manager – Rowland Homes			
Consultant Ecologist-TEP			

APPENDIX 1. EQUIPMENT AND SAFETY PRECAUTIONS

The following text is taken from the Blackpool Airport Wildlife Hazard Management Plan

General

Prior to undertaking bird control duties, all staff engaged in active bird control receive appropriate training in the principles and use of specialist bird dispersal equipment.

Equipment and Dispersal Methods

Bird Control Vehicle

Four-wheel drive vehicles with good all-round visibility are provided for the purposes of performing bird control duties on the airport. The vehicles are fitted with the necessary radio equipment, portable distress call broadcast equipment and suitable storage and security facilities for equipment.

Bird Scaring Blank Firing Pistol

The RFFS is supplied with bird scaring blank firing pistols, (non-lethal bird scaring). All personnel are trained in the efficient and safe use of the blank firing pistols, and supplementary information is contained in the relevant Departmental Instruction Manual. A range of Personal Protective Equipment (PPE) is issued to all staff. The practical use of bird scaring blank firing pistols is described in detail in the training material provided. However, as with distress calls, certain considerations should be borne in mind when using, or intending to use, bird scaring pistols:

All safety procedures must be followed carefully, and are not to be fired in the designated prohibited areas including fuel stores, passenger areas, etc.

Blank firing pistols are very effective for rapid dispersal, and when time is short they are normally to be preferred over distress calls.

Because the scaring stimulus can be directed, it is often possible to control dispersal direction and 'herd' flocks away from movement areas. Similarly, transiting birds can be turned back, and 'held' when they conflict with aircraft movements (taking care not to distract or alarm pilots). This directional control cannot normally be achieved by the use of distress calls.

Attempting to `push' birds into a strong wind is rarely successful; they almost always break away and depart downwind eventually. Whenever possible birds should be encouraged to depart in the direction they appear to want to go.

Blank firing pistols should not be used to hasten departure of birds put to flight by distress calls until the broadcast has been terminated, and should never be fired before the use of broadcast distress calls - it will cause a confused response.

Bird scaring rockets are not to be fired over the perimeter fence unless the landowner has given written permission, and never over public rights of way, livestock (particularly horses), members of the public or ripe cereal crops or other flammable substrates. Fields adjacent to the airfield may be cleared of birds by firing high in the air near, or parallel with, the boundary fence where necessary. They will not be used for off-airfield bird control operations.

Portable Distress Call Unit

The use of distress calls is effective as long as the birds are correctly identified to species and the right distress calls are then used.

Their effectiveness is well proven in the case of gulls, for example.

Birds normally react to distress calls in the following manner:

- They are alerted and take flight;
- They approach the source of the sound and circle overhead;
- Certain birds dive to assess the source of the threat.
- When the calls cease, the birds very often leave the area.
- When calls are associated with a dead or distressed bird, the reaction of most birds is to leave the area.

Some guidelines for the use of bird distress calls are as follows:

- The vehicle should be stationary;
- The vehicle should be upwind of the flock of birds;
- The vehicle (and loudspeakers) should face the flock of birds;
- The ideal distance between the vehicle and the birds is less than 100 meters;
- The broadcasting of distress calls should last for around 90 seconds

According to expert opinion, when distress calls alone are used, birds cannot precisely identify the threat or the predator and the safest action for them is to disperse. In view of this, the dispersal of birds through the use of distress calls may take time.

The use of distress and alarm calls are one of the most challenging control methods to use. Not only is their effect somewhat subtle, the proper application of the method is challenging. As a result, few controllers use the method appropriately and effectively and as a result tend to abandon using the method all together. Repeated training by individuals who have successfully mastered the use of alarm and distress calls and the effective use of models should be used to provide controllers with expertise in the use of this method.

Hand Held Bird Scaring Laser (Agrilaser)

Used and operated in accordance with laser safety directive EN 60825-1:2014, the Bird control Vehicle/operator is supplied with a class 3B, dedicated bird control hand held laser device, only those who have undertaken the training course are permitted to use this device. Permission must be sought from ATC at all times prior to use.

Lures

A lure is a leather pad with an attached wing on a string. Waving it can be effective, but throwing it high into the air so that it falls to the ground with wings ‘fluttering’ will cause target flocks to fly up and directly away. This can work at ranges of several hundred metres. Birds react as if the lure is an individual 'in trouble' and may even approach to investigate and it also

enhances responses to distress call broadcasts. Traditional falconer's lures, dead bird effigies, and even a tennis ball fastened in the corner of a black or white bin bag can prove useful tools.

Falcons

Currently Falcons are not being used at Blackpool airport this is under constant review and will be implemented if required.

Raptor Decoys/Hawk Kites

Raptor Decoys and Hawk Kites have proved effective within the QFCA when Geese have been observed in fields near to the airport. The use of these however will be restricted to occasions where a bird hazard is identified as placing them in fields regularly will be counterproductive as the birds will get used to them and lead to them being ineffective.

Shooting and Trapping

Shooting is a small, but necessary part of the airport bird control programme, and this necessity is recognised in the issue of General Licences to allow the taking of certain birds and their eggs to preserve air safety.

Shooting Policy at Blackpool

This statement also incorporates other lethal control measures such as nest destruction. Shooting, using the shotgun, rifle, or air rifle as appropriate, and removal of nests and eggs will be carried out by an approved contractor within the provisions of the Wildlife & Countryside Act 1981 and associated licenses, and in accordance with the aims and policies described in CAP 772. At Blackpool, there are significant local conservation interests, and an additional degree of sensitivity is required when conducting lethal control of birds in the interests of flight safety. However, these concerns must not be allowed to endanger flight safety by adversely affecting the efficacy of bird control efforts at the airport. To achieve an acceptable balance between conservation and flight safety concerns, contractors licensed to use the shotgun or rifles, or engaged in nest destruction, should consider the following:

The health and safety of airport employees, airport users and the general public are of paramount importance. If there is any doubt as to whether shooting can be carried out with no risk to human health and safety, DO NOT SHOOT. All shooting activities on the airfield must be agreed by the OSCM (Bird Control Co-ordinator) and ATC with suitable provision of licenses, risk assessments and method statements by the contractor. Activities will be applied via airfield works and control of contractors' procedures.

- The acceptable level of nesting gulls on the airport (normally herring gulls and/or lesser black-backed gulls on rooftops) is zero. ALL gull nests discovered on the airport are to be destroyed. The same targets apply to breeding rooks on the airport, whether in trees or on man-made structures.

- If birds from a local rookery cause significant problems at the airport (usually only rookeries less than 2km from the perimeter fence), control measures are carried out where possible. This will require an assessment of safety, the permission of the landowner and may require liaison with the local police.

- Lapwings, Curlew and oystercatchers will not be allowed to breed on the airport property within 100m of the runway or taxiways, nor in the runway undershoots.

- Licenses are normally renewed annually, and the list of species and the methods allowed may vary over time. It is important that the current licenses are displayed,

and all contractors should be aware of the list of species, the methods allowed and the terms and conditions of the current licenses.

- It is the contractors' responsibility, to be CERTAIN of the identity of any "target" bird to species level before shooting takes place.
- Shooting is only to take place when non-lethal measures have been tried and have failed or are showing signs of failure.
- With the exception of starlings, small birds (such as swallows, swifts, skylarks, finches) are not to be shot. Although they are often struck by aircraft, they are generally considered too small to represent a significant risk.
- Any shooting will be carried out with discretion, and every effort made to minimise the risk of injury or unnecessary suffering to the target bird(s).
- Distress calls are NEVER to be used to bring birds within shotgun range (this is a condition of the General Licenses).
- Foxes & rabbits are to be culled regularly when numbers are seen to increase & a log kept of the numbers culled.
- Cartridges are to be kept secure at all times. They are never to be left unattended in an unlocked vehicle.