



LAND AT FALLING LANE AND OTTERFIELD ROAD YIEWSLEY LONDON

BIRD HAZARD MANAGEMENT PLAN



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Revision	Date	Details	Revised
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1.0 INTRODUCTION

- 1.1 In October 2024, ACD Environmental Ltd commenced ecological inputs for Land at Falling Lane and Otterfield Road. The address of the site is Land at Falling Lane and Otterfield Road, Yiewsley, London.
- 1.2 The land is divided into two areas and is subject to a single planning application for demolition of the existing Yiewsley Library building and the erection of a new five storey residential building comprising 50 dwellings (Falling Lane) and the erection of a new mixed use five storey building comprising 45 dwellings and a replacement library on the former Yiewsley Swimming Pool site (Otterfield Road). Planning consent was granted by London Borough of Hillingdon on 14th September 2023 (Application No: 76795/APP/2023/250 3). This report relates to both areas, which is hereafter referred to as 'the Approved Development Site', but 'the Falling Lane Site' and 'the Otterfield Road Site' are also referred to separately as applicable.
- 1.3 The Falling Lane Site measures 0.2371 hectares and the Otterfield Road Site measures 0.4228 hectares (making the Approved Development Site 0.6599 hectares).¹ The Approved Development Site is located within an urban context in the large village of Yiewsley in the London Borough of Hillingdon. The immediate surroundings are built environment with a Yiewsley Recreation Ground to the east and west of the Falling Lane Site and the Otterfield Road Site respectively.
- 1.4 According to a Preliminary Ecological Appraisal prepared by ECOSA Ltd (September 2023)², the Falling Lane Site comprises buildings and hardstanding; a small area of amenity grassland; a small number of scattered trees; and short sections of well-managed species-poor defunct hedgerows. The Otterfield Road Site was noted as being dominated by scattered scrub with poor semi-improved grassland and an area of hardstanding by the entrance. However, a subsequent visit to the Otterfield Road Site by ACD Environmental Ltd for badger and reptile inputs on 27th November 2024 noted that it had been cleared (note that any clearance should have been carried out after these inputs).^{3 4}
- 1.5 It is noted that ring-necked parakeet was recorded active by ACD Environmental Ltd at the Otterfield Road Site on 27th November 2024, which is an invasive species listed under Schedule 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended) and is listed under

¹ Hunters (August 2023). *Yiewsley Housing and Library Sites Design & Access Statement*.

² ECOSA Ltd (September 2023). *Otterfield Road and Falling Lane, Hillingdon, London Preliminary Ecological Appraisal*.

³ ACD Environmental Ltd (29/11/2024). *Otterfield Road, Yiewsley Road, Borehamwood Badger Technical Note*. Ref: BUG24699_BTN.

⁴ ACD Environmental Ltd (18/12/2024). *Otterfield Road, Hillingdon, London Reptile Mitigation Strategy*. Ref: BUG24699_Reptile_Mitigation_Strategy_DR.

the London Invasive Species Initiative (LISI). Buddleia has also been found onsite and is listed under LISI.

- 1.6 This report is a Bird Hazard Management Plan (BHMP) in relation to Heathrow Airport to address Condition 15, which states:

“Prior to superstructure works commencing within the relevant phase of the development, a Bird Hazard Management Plan shall be submitted to and approved in writing by the Local Planning Authority, in consultation with the Ministry of Defence and Heathrow Airport Ltd. The submitted plan shall include details of:

- management of any flat/shallow pitched roof on buildings within the site which may be attractive to nesting, roosting and "loafing" birds. The management plan shall comply with Advice Note 8 'Potential Bird Hazards from Building Design'.

The roof terrace and other public access areas are to be provided with lidded bins, and an approved method to maintain the accumulation of waste, to ensure that no food waste is available for the attraction of hazardous birds.

The Bird Hazard Management Plan shall be implemented as approved on completion of the development and shall remain in force for the life of the building. No subsequent alterations to the plan are to take place unless first submitted to and approved in writing by the Local Planning Authority.

REASON

It is necessary to manage the roofs in order to minimise their attractiveness to birds which could endanger the safe movement of aircraft and the operation of Heathrow Airport, to accord with the requirements of Policy DMAV 1 of the Hillingdon Local Plan: Part 2 - Development Management Policies (2020).”

- 1.7 This report will address bird hazard management during the site preparation, construction phase and operational phase of the development as appropriate to birds (and their habitats) within the Approved Development Site. The aim is to implement and maintain measures to disperse birds considered a hazard to aviation and to prevent bird strikes (bird - aircraft collisions) in close proximity to the aerodrome. This report does not extend to any other potential environmental impacts.
- 1.8 It is important to note that this report relates to the Approved Development Site only and includes recommendations to deter hazardous birds from the construction site (e.g. preventing

exposed areas of soil, puddling and water within excavations) and completed development (e.g. limiting provision of fruit/berry-bearing tree/hedgerow species) and is not related to any active bird deterrence (e.g. bird scaring).

1.9 The following reports/plans have been consulted during the preparation of this report:

- Preliminary Ecological Appraisal prepared by ECOSA Ltd in relation to the Approved Development Site (September 2023).
- Badger Technical Note prepared by ACD Environmental Ltd in relation to the Otterfield Road Site to address Condition 28 (November 2024).
- Reptile Mitigation Strategy prepared by ACD Environmental Ltd in relation to the Otterfield Road Site to address Condition 27 (December 2024).
- Proposed Landscape Plan by Hunters in relation to the Falling Lane Site (July 2023).⁵
- Proposed Roof Plan by Hunters in relation to the Falling Lane Site (July 2023).⁶
- Soft Landscape Proposals prepared by ACD Environmental Ltd in relation to the Otterfield Road Site (October 2024).⁷
- Roof Landscape Proposals prepared by ACD Environmental Ltd in relation to the Otterfield Road Site (October 2024).⁸

⁵ Hunters (July 2023). *Yeiwsley Library Site Proposed Landscape Plan*. Ref: M9534- APL105, Rev: B.

⁶ Hunters (July 2023). *Yeiwsley Library Site Proposed Roof Plan*. Ref: M9534- APL111, Rev: B.

⁷ ACD Environmental Ltd (October 2024). *Otterfield Road, Yiewsley Soft Landscape Proposals*. Ref: BUG24699-11.

⁸ ACD Environmental Ltd (October 2024). *Otterfield Road, Yiewsley Roof Landscape Proposals*. Ref: BUG24699-13.

2.0 AIMS AND OBJECTIVES

Aims

2.1 The aims and objectives of this BHMP and how this relates to specific sections are as follows:

- Detail the context of the Approved Development Site in relation to Heathrow Airport (**section 3.0**).
- Detail the ecological baseline in terms of birds and the corresponding bird strike risk evaluation (**section 4.0**).
- Detail bird hazard management measures to be implemented (**section 5.0**).

3.0 SITE CONTEXT IN RELATION TO HEATHROW AIRPORT

- 3.1 The UK was signatory to the Chicago Convention on International Civil Aviation (CCICA, signed on 7th December 1944) and the UK is signatory to Annex 14 to the CCICA (July 2018)⁹, which includes a commitment to control birds 'in the vicinity of aerodromes' and 'wildlife strike hazard reduction' commitments respectively.
- 3.2 Most bird strikes are recorded below 2,000ft and an aircraft on a standard approach enters this height at a distance of c.13km from a runway. The internationally accepted safeguarding area with reference to bird hazards is defined by International Civil Aviation Organization (ICAO) as this 13km radius around the aerodrome (starting from the middle of the runway) and that bird hazards are a planning consideration for proposed development within this area. The 13km radius is specified in guidance from the Airport Operators Association in Association with the Civil Aviation Authority (CAA)¹⁰ and separate guidance from the CAA.^{11 12}
- 3.3 The Approved Development Site is located c.4km from the closest edge of the closest runway at Heathrow Airport (exact distances are 4.002km from the Falling Lane Site and 3.955km from the Otterfield Road Site). The habitats in-between are summarised as follows:
- Built environment - comprising residential/commercial areas (including those associated with Yiewsley and West Drayton); the Elizabeth Line railway; roads (including the M4 and Bath Road); and Heathrow Airport buildings and parking.
 - Amenity areas - the built environment has some associated green areas with parks (including The Closes), gardens, school/sports provision (including a playing field at Laurel Lane Primary School), West Drayton Cemetery and roadside verges.
 - Farmland - arable and pasture with areas of built environment between the M4 and Bath Road. There is a field south of Harmondsworth Quarry (as below) that appears to have previously been pasture and although it is currently a green field, its current use is not clear.
 - Harmondsworth Quarry - sand and gravel quarry adjacent to Saxon Lake for which the

⁹ International Civil Aviation Organization (July 2018). *Annex 14 to the Convention on International Civil Aviation Aerodromes Volume I Aerodrome Design and Operations Eighth Edition*.

¹⁰ Airport Operators Association in Association with Civil Aviation Authority (August 2016). *Safeguarding of Aerodromes Advice Note 3 – Wildlife Hazards round Aerodromes*. Available at: <https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-3-Wildlife-Hazards-2016.pdf>

¹¹ Civil Aviation Authority (January 2022). *CAP 168 Licensing of Aerodromes Edition 12*. Available at: [https://publicapps.caa.co.uk/docs/33/CAP%20168%20Licensing%20of%20Aerodromes%20v12%20c0123%20\(004\).pdf](https://publicapps.caa.co.uk/docs/33/CAP%20168%20Licensing%20of%20Aerodromes%20v12%20c0123%20(004).pdf)

¹² Civil Aviation Authority (October 2017). *Wildlife hazard management at aerodromes CAP 772 second edition*. Available at: https://publicapps.caa.co.uk/docs/33/CAP772_Issue2.pdf

excavations may hold water.

- Open water - there are a number of water bodies and water courses (including Saxon Lake and the Grand Union Canal). The closest water body from the closest edge of the runway is adjacent to British Airways Head Office at c.649m and the closest water course from the closest edge of the runway is the Duke of Northumberland's River at c.18m (note that only features in-between are considered here).

3.4 This is shown in **Appendix 1**.

4.0 ECOLOGICAL BASELINE AND BIRD STRIKE RISK EVALUATION

4.1 CAP 772 from the CAA (2017)¹³ states the following regarding specific species:

“...priority should be given to reducing the presence of large and/or flocking birds and, where practicable, to managing other congregations of birds that present a threat to aircraft safety whether on or off-aerodrome.”

4.2 Guidance on Biodiversity and Aerodrome Safeguarding for London City Airport, and of relevance to this context, states the following under the heading of ‘Concerning species’:¹⁴

“Almost all species are a threat to aircraft, but medium to large size birds and those exhibiting flocking behaviour are particularly concerning.”

4.3 The CAA publish data on reported bird strikes including a ‘Top 20’ list of species, which represents the 20 most reported species.

4.4 There is a recording period from the CAA from 2012 - 2016 where there was a total of 8,011 confirmed bird strikes. The highest number of bird strikes occurred between the months of June and September with the highest numbers within that period recorded in July. The Top 20 list comprised: gulls (c.1,100, 20%), barn swallow *Hirundo rustica* and martins (c.900, 17%), pigeons and doves (c.650, 12%), common swift *Apus apus* (c.400, 7%), larks (c.400, 7%), falcons and allies (c.350, 6%), pipits and wagtails (c.340, 4.2%), crows (c.250, 3.1%), owls (c.250, 3.1%), starling *Sturnus vulgaris* (c.150, 1.9%), hawks and eagles (c.150, 1.9%), plovers and lapwing *Vanellus vanellus* (c.150, 1.9%), chats and thrushes (c.100, 1.3%), swans, ducks and geese (c.50, 0.6%), sandpipers and allies (c.50, 0.6%), sparrows (c.45, 0.5%), partridges, quails and pheasants (c.35, 0.4%), finches (c.35, 0.4%), terns (c.10, 0.1%) and bittern *Botaurus stellaris* and herons (c.10, 0.1%).¹⁵

4.5 There is also a recording period from the CAA for the period 2017 - 2021 where there was a total of 5,460 confirmed bird strikes. Again, the highest number of bird strikes occurred between the months of June and September with the highest numbers within that period recorded in July. The Top 20 list comprised: gulls (349, 6.4%), barn swallow (197, 0.4%), woodpigeon *Columba palumbus* (179, 3.3%), pigeons (173, 3.2%), herring gull *Larus*

¹³ Civil Aviation Authority (20/10/2017). *Wildlife hazard management at aerodromes CAP 772 second edition*. Available at: https://publicapps.caa.co.uk/docs/33/CAP772_Issue2.pdf. p13.

¹⁴ London City Airport. *Guidance on Biodiversity and Aerodrome Safeguarding*. pp.1-2. Available at: https://assets.ctfassets.net/gqj4kbqgcch2/5RSakrIKBXk4kdyGJypbul/9ff825e061e27ca4796aa1433efe1533/Guidance_on_Biodiversity_2022.pdf. pp.2.

¹⁵ Civil Aviation Authority (2016). *Reported birdstrikes 2012-2016*. Available at <https://www.caa.co.uk/media/ynyhgvh0/20170316-reported-birdstrikes-2012-2016.pdf>. Note that the data is read from a table and total numbers are approximate.

argentatus (137, 2.5%), kestrel *Falco tinnunculus* (131, 2.4%), black-headed gull *Chroicocephalus ridibundus* (124, 2.3%), skylark *Alauda arvensis* (127, 2.3%), common swift (112, 2.1%), barn owl *Tyto alba* (76, 1.4%), starling (76, 1.4%), house martin *Delichon urbicum* (68, 1.2%), crows (67, 1.2%), buzzard *Buteo buteo* (66, 1.2%), meadow pipit *Anthus pratensis* (65, 1.2%), wagtails (63, 1.2%), shore birds (55, 1%), hares (38, 0.7%) and hawks, eagles and vultures (37, 0.7%).¹⁶ This data is likely influenced by reduced air travel as a result of COVID-19 in 2020 and 2021.

4.6 The latest recording period from the CAA is for 2022 where there was a total of 1,395 confirmed bird strikes. The highest number of bird strikes occurred between the months of June and October with the highest numbers within that period recorded in July. The Top 20 list comprised (excluding the 'unknown' category from the data): gulls (c.95, 6.8%), woodpigeon (c.55, 3.9%), pigeons (c.54, 3.9%), skylark (c.45, 3.2%), swallow (c.44, 3.2%), herring gull (c.37, 2.7%), kestrel (c.36, 2.7%), black-headed gull (c.28, 2%), starling (c.25, 1.8%), barn owl (c.15, 1.1%), crows (c.15, 1.1%), swifts (c.15, 1.1%), buzzard (c.14, 1%), house martin (c.13, 0.9%), wagtails (c.13, 0.9%), meadow pipit (c.12, 0.9%), rook *Corvus frugilegus* (c.11, 0.8%), common swift (c.10, 0.7%), perching birds (c.10, 0.7%), pigeons/grouse (c.9, 0.6%) and shore birds (c.9, 0.6%).¹⁷

4.7 The 'most common birds at Heathrow' are noted as¹⁸:

- Corvids - rook, carrion crow *Corvus corone* and jackdaw *Coloeus monedula*.
- Gulls.
- Starlings.
- Pigeons.
- Geese.

4.8 The Preliminary Ecological Appraisal (September 2023) contains details of a site visit on 23rd July 2023. During this site visit, the following bird species were found onsite or passing over: feral pigeon *Columba livia domestica* and magpie *Pica pica*.

¹⁶ Civil Aviation Authority (2021). *Reported birdstrikes 2017-2021*. Available at: <https://www.caa.co.uk/media/hindyrm4/uk-reported-birdstrike-2017-2021.pdf>. Note that the dataset includes a mammal group (hares) and vultures are not wild birds in the UK.

¹⁷ Civil Aviation Authority (2021). *Reported birdstrikes 2022*. Available at: <https://www.caa.co.uk/media/xoqp1c4z/uk-reported-birdstrike-2022.pdf>. Note that the data is read from a table and total numbers are approximate.

¹⁸ Heathrow Airport (08/06/2026). *Why & how bird scaring takes place*. Available at: <https://www.heathrow.com/latest-news/bird-scaring-takes-place-heathrow>

- 4.9 A subsequent visit to the Otterfield Road Site by ACD Environmental Ltd for badger and reptile inputs on 27th November 2024 found the following: 4x ring-necked parakeets, 6x starlings, 1x carrion crow and 1x robin *Erithacus rubecula*.
- 4.10 However, these observations are only a 'snapshot' and are by no means a full bird inventory.
- 4.11 Given the context of the Approved Development Site in London and proximity to buildings and open water, it is considered that gulls will also inevitably be present in the area and fly over the Approved Development Site.
- 4.12 There is suitable opportunities for birds within buildings, amenity grassland, scattered trees and hedgerows (the Falling Lane Site) and scattered scrub and grassland before clearance (the Otterfield Road Site).
- 4.13 A breakdown of these species into those that are 'particularly concerning' (with reference to the Guidance on Biodiversity and Aerodrome Safeguarding from London City Airport) and those on Top 20 lists are shown in **Table 1**.

Table 1. Assessment of bird species recorded/assumed to fly over the Approved Development Site.

Species	Species group	Particularly concerning (medium - large)	Particularly concerning (flocking)	Top 20 species (2012 - 2016)	Top 20 species (2017 - 2021)	Top 20 species (2022)
Carrion crow	Crows	•	•	•	•	•
Feral pigeon	Pigeons	•	•	•	•	•
	Gulls	•	•	•	•	•
Magpie	Crows	•	•	•	•	•
Ring-necked parakeet	Parrots	•	•			
Robin	Passerines					
Starling	Passerines	•	•	•	•	•

- 4.14 Traditional nest sites for gulls are coastal cliffs, sand dunes, islands (both coastal and inland) and other inaccessible locations; however, some species have adopted the roofs of buildings.¹⁹ Rock dove *Columba livia*, which are the wild ancestors of the feral pigeon,

¹⁹ <https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/animal-deterrents/gulls/gull-breeding-habitats-and-nest-sites/>

traditionally nest in sea caves and steep cliffs but the feral pigeon primarily nests on and within buildings and built structures such as bridges²⁰ and they can nest at any time of the year. Carrion crow, magpie, robin and starling are associated with nesting within buildings and trees. Given the building and scattered trees at the Falling Lane Site, there are some opportunities for nesting birds of these species, although these opportunities are limited and there are many such opportunities nearby given the urban context.

- 4.15 The ring-necked parakeet is associated with nesting in tree cavities in urban parks, large gardens and orchards. These habitats are not present within the Approved Development Site. This species does not appear on the Top 20 lists and it is possible that this species does not appear on these lists because it is only resident in London and surrounds and whilst it winters elsewhere in England and South Wales, it is currently absent in large parts of the UK, and may therefore not appear on data that is prepared nationally.²¹
- 4.16 Carrion crow, feral pigeon, gulls, magpie, ring-necked parakeet and starling are all considered to be medium - large birds, albeit that starling is at the lower end of medium, and all are known to exhibit flocking behaviour. In general terms, birds form flocks for a variety of reasons such as to maximise chances of spotting potential predators or other threats; to confuse or overwhelm potential predators e.g. 'mobbing'; to gather together for warmth during colder times of the year; and to utilise food resources e.g. seeds, earthworms and other invertebrates in arable fields after ploughing and, in the case of gulls, food sources on landfill sites and fish from fishing boats hauling-in.²²
- 4.17 Robin is a small passerine and does not exhibit flocking behaviour and does not appear on either of the Top 20 lists. This species is therefore unlikely to present a significant risk of collision.
- 4.18 It is important to note that the average airspeed of medium-sized birds in still conditions is 12.5 - 15.3mps, which means that such a bird could fly between Heathrow Airport and the nearest point of the Approved Development Site at c.4km separation in 320 - 261 seconds.²³ This is, of course, theoretical but highlights the distance between the Approved Development Site and Heathrow Airport.
- 4.19 Once relevant planning conditions are discharged, the groundworks and construction will commence. The planning permission includes the creation of tall, flat-roofed buildings and

²⁰ <https://www.bto.org/understanding-birds/birdfacts/rock-dove>

²¹ <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/ring-necked-parakeet/>

²² <https://www.rspb.org.uk/birds-and-wildlife/natures-home-magazine/birds-and-wildlife-articles/features/why-birds-flock-together/>

²³ <https://www.rspb.org.uk/birds-and-wildlife/natures-home-magazine/birds-and-wildlife-articles/migration/on-the-move/>

green provision, which will present potential opportunities for birds, in the absence of avoidance/mitigation measures.

4.20 The subsequent measures are focused on detracting larger bird species and flocking behaviour generally.

5.0 BIRD HAZARD MANAGEMENT PLAN

- 5.1 Bird hazard management measures used by Heathrow Airport are detailed below. This is then followed by construction phase and operational phase measures at the Approved Development Site.

Heathrow Airport

- 5.2 Operational Safety Instruction Wildlife Hazards and Reporting of Birdstrikes for Heathrow Airport (2023)²⁴ includes the following measures:

Wildlife Hazard Management

“HAL (Heathrow Airport Limited) employs a variety of measures designed to reduce the risks associated with wildlife activity in the vicinity of the aerodrome.

Active wildlife control is exercised at and around the airport by the HAL Airfield Operations team and its authorised contractors.

Off-airport monitoring and proactive management are carried out by a contracted organisation on behalf of HAL ...”

Disposal of Waste Products

“Food items must be properly disposed of and not left in the outside environment and/or in an opened container. Such items will act as a wildlife attractant and could potentially become FOD [Foreign Object Debris].

All waste bins, skips and/or any other waste container are required to have cover or lids that exclude birds and other wildlife. All of these MUST be closed or covered when not in use.

Feeding of birds and/or any wildlife is strictly prohibited anywhere airside ...

HAL Airfield Operations team conducts daily patrols on works sites, waste disposal areas and known areas of potential food sources within the airside areas ...

Breaches of these requirements may lead to enforcement actions taken by HAL, including

²⁴ Heathrow Airport (21/11/2023). *Wildlife Hazard Management Operational Safety Instruction Wildlife Hazards and Reporting of Birdstrikes*. Ref: ASWHM_OSI_077, Version 3.0. Available at: https://www.heathrow.com/content/dam/heathrow/web/common/documents/company/team-heathrow/airside/operational-safety-instructions/ASWHM_OSI_077%20Wildlife%20Hazards%20and%20Reporting_v3.pdf

AOT issuance and levying of fines for clearance of waste and deep cleaning of areas.”

Reporting of Wildlife Strikes

“Regulation (EU) No 376/2014 of the European Parliament and of the Council states that occurrences which may represent a significant risk to aviation safety must be reported through the Mandatory Occurrence Reporting system, also known as MOR. This includes wildlife strikes as set out in Commission Implementing Regulation (EU) 2015/1018.

Upon discovering evidence or witnessing a wildlife strike incident, the HAL Airfield Operations team must be contacted immediately...

The wildlife remains and any evidence associated with the incident must not be touched, removed or cleaned until a member of the HAL Airfield Operations team has attended and given permission to do so.

A member of the HAL Airfield Operations team will be dispatched to visit the aircraft involved, take details of the incident, and if available, recover the remains or trace evidence of the strike (forensically if necessary) for species identification.

Once approval has been given by a member of the HAL Airfield Operations team, any follow-up action deemed necessary by the airline/ground handler or engineer involved may take place, including removal of wildlife remains, clean-up and repair of the area affected.”

Reporting of Wildlife Activity

“Under any of the following activities, reports must be made to the HAL Airfield Operations team immediately...

Wildlife activity is witnessed and thought to have an immediate threat to aircraft safety;

Any unusual or excessive wildlife activity is witnessed; or

A bird's nest or evidence of nesting around the airfield is identified.

If the flight crew reported any wildlife-related activity whilst operating an aircraft into or out of Heathrow Airport, the details of which will be relayed to the HAL Airfield Operations team by ATC [Air Traffic Control]...”

Assessment of Wildlife Hazards

“A Wildlife Hazard Steering Group meets on a regular basis to review policy and active bird control measures.

A risk identification approach is taken to assessing wildlife hazards, as outlined in CAP 772. This approach takes the occurrence of a strike over the prior 5 years against its likely severity, to give an overall risk rating, against which wildlife hazard management plans are created.”

5.3 It is further noted that the following measures are used by Airfield Operations:¹⁵

- Liaison with local authorities on planning applications to minimise the risk of increased bird activity caused by new developments or changes of land use.
- Intelligence gathering on bird species, population and food sources.
- ‘Bird-proofing’ of buildings and infrastructure.
- Netting of open water sources.
- Grass is kept at 150mm - 200mm as this length deters birds (reduced visibility and increased perception of vulnerability to predation and reduced access to the soil for foraging).
- Airfield operations vehicles fitted with an electronic bird deterrent system called ‘Digiscare’, which is pre-programmed with the distress calls for various species.
- On the rare occasions that Digiscare does not work, airfield officers will use a cartridge gun, which produces only a loud sound without a projectile, to scare birds away.
- Heathrow Airport helps manage over 170 hectares of biodiversity areas around the airport, ensuring the habitats for over 2,000 species of flora and fauna are maintained. However, it is important to deter birds from the airport operations.

Approved Development Site - Construction Phase

5.4 The groundworks will require exposure of soil, which will in turn expose seeds, earthworms and other invertebrates, and may create puddling on uneven ground. There is also a risk that excavations for the foundations of buildings/creation of hardstanding may become filled with water. These could become attractants for birds. Furthermore, food waste and litter,

even in bin bags, can attract a range of bird species including gulls.

5.5 There is a Construction Management Plan (CMP) prepared by Liongate Construction Ltd (July 2023).²⁵ Furthermore, Condition 7 of the planning consent requires a Demolition and Construction Logistics Plan (DLP/CLP) and a Demolition and a Construction Management Plan (DMP/CMP).

5.6 The existing CMP includes the following measures:

Phased groundworks

- The proposed works are phased as follows: site setup works, demolition works, earthworks, sub-structure works, super-structure works façade works, roofing works, internal fit out & MEP, installation works, landscaping works and snagging & handover.

Site users and fencing/signage

- *“Keep the site boundary fence or hoarding in good repair.”*

“Check it regularly to make sure it is in good condition; it isn’t falling, and it hasn’t been damaged.

“Only allow authorized people on site – and keep the gate closed between deliveries. Keep vehicles and pedestrians apart while they are moving around the site. Use barriers if necessary.

“Make sure footpaths and traffic routes are firm, level, stoned up if necessary, and gritted if icy...”

Waste management

- *“A specific area shall be laid out and labelled to facilitate the separation of materials for potential recycling, salvage, reuse, and return. Recycling and waste bins are to be kept clean and clearly marked to avoid contamination of materials and minimize/eliminate the adverse impacts.”*

5.7 Additional/supplemental measures are as follows:

²⁵ Liongate Construction Ltd (25/07/2024). *Construction Management Plan (CMP) for Land at Yiewsley Library & Former Yiewsley Pool*. Ref: RP-23059, rev 0.

Phased groundworks

- Soil must only be exposed in sections to prevent large, exposed areas.
- Exposed soil must not be left over the winter as this could attract winter flocks.

Site users and fencing/signage

- Heras fencing will be installed around the site boundaries and to protect Root protection Zones (RPZs) in line with BS5837:2012. There will also be fencing/signage to establish clear pedestrian and vehicle routes; and site compound and working zones. This will help to control areas of disturbance to the ground.
- There are various measures around mud control and management including the following:

“There will be clean hard standings for vehicle entering, parking, and leaving the site...”

Where necessary a mobile Jet wash will be placed and used to remove any mud from construction vehicles. Strict traffic management on site should minimize the risk of vehicles tracking debris from the site...”

Waste management

- There will be no dumping of waste on or adjacent to the Approved Development Site under any circumstances.
- Food waste and litter, which would arise from contractors onsite, must be placed within designated recycling/refuse bins, and these bins must be animal-proof and regularly emptied. Exposed food waste, even in bin bags, can attract species such as gulls and will not be permitted.
- Contractors will be explicitly forbidden from feeding birds within or adjacent to the Approved Development Site.

Covering excavations

- Any excavations (e.g. trenches/pits) must be covered when works are not taking place to ensure that they do not fill with water.

- 5.8 Guidance on Biodiversity and Aerodrome Safeguarding for London City Airport, and of relevance to this context, states the following:

“Large unbroken blocks of planting are more likely to attract roosting, nesting or feeding birds than small blocks or widely spaced trees...”

Dense or sheltered vegetation has the potential to become a starling roost, therefore staggering plants in rows or spreading them out to prevent roosting is essential. Moreover, avoiding fruiting and berry-bearing trees, shrubs and any species with the potential to attract birds is desirable. Dispersing bird-attracting plant species within other unattractive species is another acceptable method...

Green and brown roofs are gaining popularity in larger developments as part of Planning Authorities’ green agendas, and have the potential to increase the risk level. The number of birds likely to be nesting on a roof less than 100m² are not significant, however this may not be the case if the roof is located close to the airport or under the approach...”

- 5.9 This guidance specifies berry fruit bearing planting dispersed subject to maximum 15% within 4km of London City Airport. However, no such definitive measure appears to be in place for Heathrow Airport.
- 5.10 The Falling Lane Site measures 0.2371 hectares and the Otterfield Road Site measures 0.4228 hectares and given the context of the proposed residential/library development, there will not be any large areas of any one habitat type (e.g. large areas of grassland) that are often associated with flocking birds, and planting will be in small broken-up areas interspersed around the built environment. As such, large unbroken blocks of planting, large grass covered areas and meadows are not applicable for the proposed development. Furthermore, the open spaces will be managed for amenity use and used by local residents/pedestrians/dog walkers. This will limit opportunities in terms of large numbers of seeds and aggregations of earthworms and other invertebrates and small mammals.
- 5.11 There will also be no open water within the proposed development, which can attract bird flocks.
- 5.12 There are proposals for solar photovoltaic (PV) panels to be installed on the roofs. Although this contributes to broader environmental/sustainability objectives, measures must be taken to ensure that the panels do not attract nesting birds. The issue with solar PV panels in this context relates to the niches created underneath the panels, which could provide nesting opportunities, particularly for feral pigeons and starlings. The surface of the panels

themselves are unlikely to support nesting birds; however, they could provide perches in association with nests. With reference to guidance on Biodiversity and Aerodrome Safeguarding from London City Airport London City Airport, and of relevance to this context, this must comprise either **bespoke netting over the panels (e.g. high-density polyethylene, HDPE) or bespoke wire mesh installed around the outer edge of the panels.**

5.13 With reference to the Proposed Landscape Plan for the Falling Lane Site (July 2023), the following green habitats are proposed: mown grass; wild flower - seeded meadow grass; mixed low level security shrub planting (thorn species); new trees; new bushes; and 800mm mixed evergreen species hedge (no thorn or poisonous species). There are no large areas of any habitat (in terms of providing opportunities for flocking birds). However, detailed soft landscaping plans must be prepared that limit provision of fruit/berry-bearing tree/hedgerow species and contain columnar/fastigate trees (growing erect and parallel and non-canopy forming).

5.14 With reference to the Soft Landscaping Proposals for the Otterfield Road Site (October 2024), the following green habitats are proposed at ground level:

- Grass areas - grass areas either to receive good quality meadowmat species rich turves, as supplied by Harrowden Turf Ltd or similar; or to be seeded with EG22 Strong lawn grass seed mix as supplied by Emorsgate Seeds Ltd. There are no large areas of grass (in terms of providing opportunities for flocking birds).
- Tree/shrub planting - 21 proposed trees with only one being fruit bearing, namely crabapple *Malus* 'Evereste', and every other tree being columnar/fastigate. Proposed decorative mix shrub planting to be planted in groups of 3/5/7 of each species. There are shrubs that do provide berries. Tree positions are largely to the periphery of the proposed building. There are no large areas of shrubs (in terms of providing opportunities for flocking birds).
- Climbing plants - to be trained up adjacent wall/fence.
- Hedgerows - evergreen single species hedgerow planting to be planted in a single row at 300mm centres; hornbeam *Carpinus betulus* hedgerow planting to be planted in a double staggered row 300mm apart and at 400mm centres in each row; and mixed native hedgerow planting to be planted in a double staggered row 300mm apart and at 400mm centres in each row. The short lengths of hedgerows and

interspersed built environment reduces any habitat continuity.

5.15 With reference to the Roof Landscaping Proposals for the Otterfield Road Site (October 2024), the following green habitats are proposed at roof level:

- Decorative planting - to be planted in groups of 3/5/7 of each species. There are no large areas of decorative planting (in terms of providing opportunities for flocking birds).
- Shrub planting - specimen shrub planting. There are no large areas of shrubs (in terms of providing opportunities for flocking birds).
- Climbing plants - to be trained up adjacent wall/fence.

Operational phase measures

5.16 As above, there are no large areas of any one habitat type and the planting comprises small broken-up areas interspersed around the built environment. The open spaces will be managed for amenity use and used by local residents/pedestrians/dog walkers. This will also limit opportunities in terms of large numbers of seeds and aggregations of earthworms and other invertebrates and small mammals.

5.17 The new buildings provide potential new nesting opportunities for birds, including high-risk species such as gulls and pigeons, especially on flat roofs. However, as above, there are no large areas of any one habitat type including the green roofs. CAP772 from the CAA states the following with regards to buildings:

“Prevention systems, such as exclusion netting of the correct mesh size and installation type for the target species or ledge spikes, should be used to prevent any wildlife accessing these sites at any time and you should be able to demonstrate that this is being achieved.”

5.18 Netting/meshing is already proposed with regards to the solar PV panels.

5.19 Rubbish/recycling bins with collections by London Borough of Hillingdon will be in place once occupied.

5.20 Additional/supplemental measures are as follows:

Grassland

- The grassland within open spaces/play areas will be mown with a close sward for

amenity use and therefore provide limited structural diversity, lacking a 'thatch' layer of value for small mammals.

- Mowing will be as often as required within the growing season of March - October to maintain a short sward for amenity use at c.20-30mm.

Trees/hedgerows

- Trees could be coppiced/pollarded to limit canopy formation.
- Hedgerows will be closely managed and subject to annual cutting. At the Otterfield Road Site, the evergreen single species hedgerow planting is to be maintained at 1m height; and the mixed native hedgerow to be maintained at 1m height and 1.8m height adjacent to site boundaries. This close management minimises berry/nut/scrub development. Any hedgerows at the Falling Lane Site must be subject to similar management.
- Although this report contains measures to detract birds, nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). Any hedgerow cutting must be carried out between October and February, which is timed outside of the main bird nesting season.

Roofs

- At the Falling Lane Site, a green roof to the main building and planters to roof terraces elsewhere are shown. The green roof is shown as sedum *Crassulaceae* spp. and therefore not exposed soil or grass. Although sedum roofs can attract flocks of birds in particular contexts, the habitat will be broken-up by the built environment. This includes solar PV panels (made unsuitable for nesting with netting/meshing); a roof access hatch; lift overruns; and fan units. There are therefore no large areas of planting/exposed soil (in terms of providing opportunities for flocking birds).
- At the Otterfield Road Site, the roof terraces have planters but no green roofs. The roofscape is broken into various levels with the largest terrace being 10x14m, but only c.20% is planted and there are no proposed trees. The planters largely away from the building edge to avoid attractive ledges. There are no therefore large areas of planting (in terms of providing opportunities for flocking birds).

- Communal roof terraces are likely to be used by people during good weather, which will detract potential nesting during the main nesting bird season.
- Furthermore, other prevention systems (exclusion netting and/or bird spikes) may be installed as detailed below.

Waste management

- The Management Company would aim to prevent any fly-tipping and/or littering, so it would not cause any impacts.
- The appointed Management Company should carry out regular litter picks.
- Any communal litter bins must be securely covered.
- As an additional measure, the dumping of garden/domestic waste should be prohibited within the property deeds of the new dwellings, which would provide a legal mechanism to ensure compliance by new homeowners.

Monitoring visits

- The management company appointed by the developer must conduct weekly monitoring for nesting birds and bird assemblages during the breeding season, and fortnightly monitoring outside of it. Monitoring must also ensure compliance with this report. It should be noted that feral pigeons may nest year-round and must be accounted for accordingly. All roof inspections should be recorded and made available to Heathrow upon request. If changes to the planting palette are required then these can only be implemented in consultation with an ecologist and landscape architect. If further netting/meshing is required and/or other prevention systems (exclusion netting and/or bird spikes) then these must be installed in consultation with an ecologist.

Enhancements

- 5.21 The Guidance on Biodiversity and Aerodrome Safeguarding from London City Airport, which is of relevance to this context, states the following under the heading of 'Alternative ways to

enhance biodiversity'.²⁶

“There are many ways to increase biodiversity while not increasing bird populations and risk to aircraft.”

5.22 This guidance then lists a series of potential measures of which bird boxes (targeting specific species) and native species planting (trees and hedgerows) have been included within the proposals.

5.23 The Preliminary Ecological Appraisal (September 2023) recommends the provision of four WoodStone Swift Nest Box on each new building. However, this is not considered suitable as swifts are a high collision risk species. Bird boxes that specifically target small passerines that do not appear on the Top 20 lists erected on buildings/retained trees are considered to be suitable (targeting blue tit *Cyanistes caeruleus*, coal tit *Periparus ater*, great tit *Parus major* and wren *Troglodytes troglodytes*).

5.24 This could be achieved with the following:

- 4x 1B Schwegler Nest Boxes with a 26mm entrance hole for the Falling Lane Site.
- 4x 1B Schwegler Nest Boxes with a 26mm entrance hole for the Otterfield Road Site.

²⁶ London City Airport. *Guidance on Biodiversity and Aerodrome Safeguarding*. pp.1-2. Available at: https://assets.ctfassets.net/ggj4kbqgcch2/5RSakrIKBXk4kdyGJypbul/9ff825e061e27ca4796aa1433efe1533/Guidance_on_Biodiversity_2022.pdf. pp.4.

6.0 CONCLUSIONS

- 6.0 This report addresses bird hazard management during the site preparation, construction phase and operational phase of the development as appropriate to birds (and their habitats) within the Approved Development Site. The aim is to implement and maintain measures to disperse birds considered a hazard to aviation and to prevent bird strikes (bird - aircraft collisions) in close proximity to the aerodrome. This report does not extend to any other potential environmental impacts.
- 6.1 It is important to note that this report relates to the Application Site only and includes recommendations to deter hazardous birds from the construction site (e.g. preventing exposed areas of soil, puddling and water within excavations) and completed development (e.g. limiting provision of fruit/berry-bearing tree/hedgerow species) and is not related to any active bird deterrence (e.g. bird scaring).
- 6.2 The Falling Lane Site measures 0.2371 hectares and the Otterfield Road Site measures 0.4228 hectares and given the context of the proposed residential/library development, there will not be any large areas of any one habitat type (e.g. large areas of grassland) that are often associated with flocking birds, and planting will be in small broken-up areas interspersed around the built environment. As such, large unbroken blocks of planting, large grass covered areas and meadows are not applicable for the proposed development. Furthermore, the open spaces will be managed for amenity use and used by local residents/pedestrians/dog walkers. This will limit opportunities in terms of large numbers of seeds and aggregations of earthworms and other invertebrates and small mammals.
- 6.3 Various construction phase measures include phased groundworks where soil must only be exposed in sections to prevent large, exposed areas; exposed soil must not be left over the winter as this could attract winter flocks; use of fencing/signage/boarding for site users; covering excavations; waste management measures; and bespoke netting/meshing over solar PV panels.

- 6.4 Various operational phase measures include weekly checks through the breeding season and fortnightly checks outside the breeding season by a Management Company and if further netting/meshing is required and/or bird spikes then these must be installed in consultation with an ecologist; and waste management measures. All roof inspections should be recorded and made available to Heathrow upon request.
- 6.5 The Preliminary Ecological Appraisal (September 2023) recommends the provision of swift boxes on each new building. However, this is not considered suitable as swifts are a high collision risk species. Bird boxes that specifically target small passerines that do not appear on the Top 20 lists erected on buildings/retained trees are considered to be suitable.

APPENDIX 1 HABITAT DISTANCE PLAN



