



Breeding Bird Survey of Reservoir at Gondar Gardens, London

On Behalf of:

Lifecare Residencies

August 2016

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25 Years of Service, Value and Innovation

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Disclaimer

James Blake Associates Ltd have made every effort to meet the client's brief. However, no survey ensures complete and absolute assessment of the changeable natural environment. The findings in this report were based on evidence from thorough survey: It is important to remember that evidence can be limited, hard to detect or concealed by site use and disturbance. When it is stated that no evidence was found or was evident at that point in time, it does not mean that species are not present or could not be present at a later date: The survey was required because habitats are suitable for a given protected species, and such species could colonise areas following completion of the survey.

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EXECUTIVE SUMMARY

Breeding bird surveys were carried out at the Reservoir at Gondar Gardens, in Greater London on the 20th July and 16th August 2016.

Twenty-three bird species were recorded on or close to the site. These included two species of principle importance (SPIs) in England, which were recorded using the site. These are either relatively common and/or widespread species in London or it is recommended that they are provided for through the mitigation of lost scrub and grassland.

It is recommended that the proposed development is located in the centre and to the west of the site, and that the majority of trees and scrub along the boundaries should be retained. Grassland and scrub to the east of the site should be retained and managed appropriately for foraging and nesting birds. It was considered unlikely that any nesting or foraging habitat would be significantly impacted by the proposed development if recommendations within this report are adhered to.

Recommendations are detailed that will compensate for loss of grassland habitat, and enhance the site for birds, post development.

Any thinning or removal of scrub, shrubs, ruderal areas or trees should be undertaken outside the breeding bird season, (March to September). Should vegetation removal be required during the nesting season, it is recommended that a nesting bird survey be undertaken by a suitably qualified ecologist no more than three days prior to works.

1 INTRODUCTION

Background to the study

- 1.1 James Blake Associates Ltd, formerly JBA Consultancy Services Ltd, was commissioned by Lifecare Residences to undertake breeding bird surveys of Reservoir at Gondar Gardens in Greater London (grid reference TQ 248 853, taken from the centre of the site).
- 1.2 Previous surveys were carried out by James Blake Associates in 2011 and JBA Consultancy Services Ltd (now James Blake Associates Ltd) in 2014, during which six survey visits were undertaken between late-March and early-June, and early-July and early-August, respectively.
- 1.3 Nesting birds are protected under the Wildlife and Countryside Act (1981, as amended), and some bird species are also priority species under Section 41 of the NERC Act (2006). All protected and priority species are material considerations for individual planning decisions under the National Planning Policy Framework (NPPF) 2012, which places responsibility on Local Planning Authorities to aim to conserve and enhance biodiversity and to encourage biodiversity in and around developments.

Surveyors

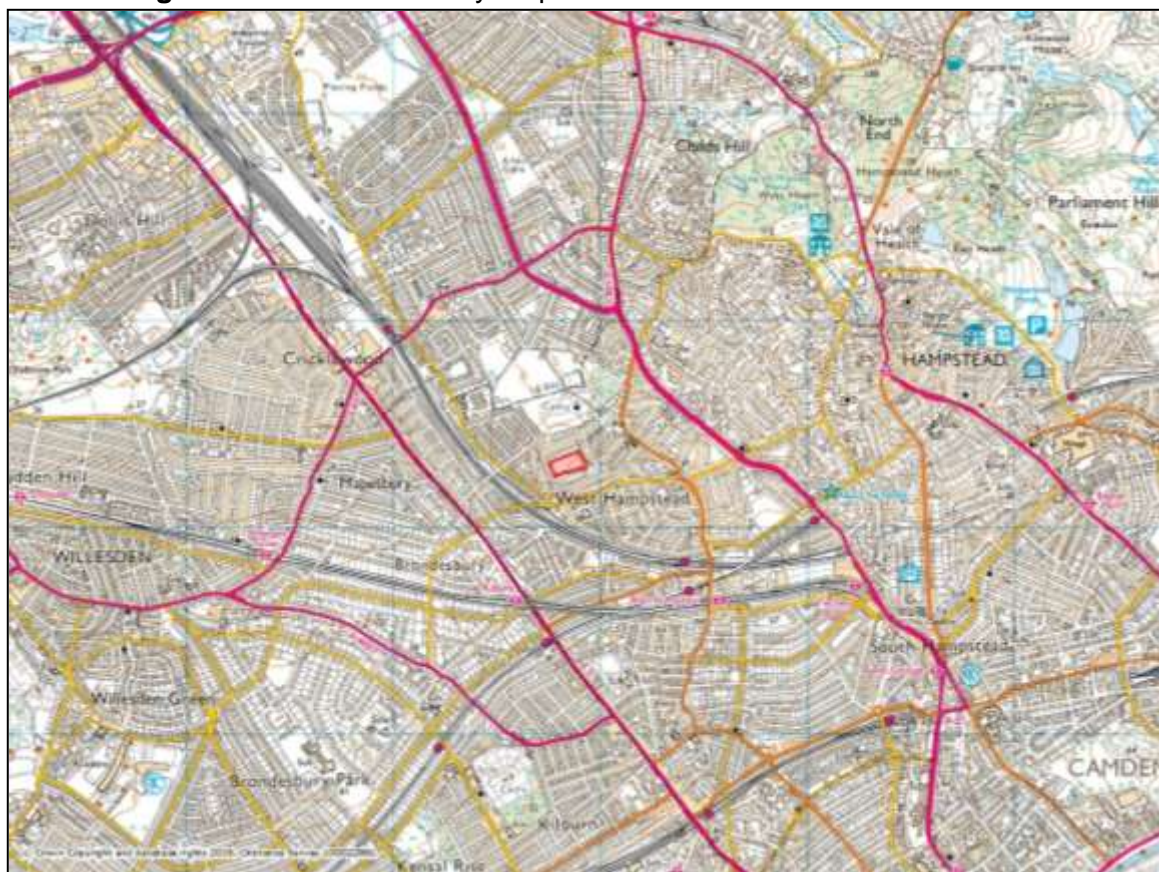
- 1.4 Surveys in 2016 were carried out by suitably experienced ornithologist Emily Costello BSc (Hons) MSc Grad CIEEM.

Geographical scope

- 1.5 The site consisted of a disused underground water reservoir (now drained) with a neutral rough grassland covering and some shrubs and trees located to the site boundaries. The area is designated a site of Borough Grade II Importance for Nature Conservation.
- 1.6 Residential properties with mature gardens were located directly adjacent to the south, north and east of the site. To the west was Gondar Gardens Road, beyond which were further residential properties. The surrounding habitats were mostly urban with the parkland habitats of Hampstead Cemetery

approximately 120m north of the site with playing fields beyond. A railway and associated vegetation was located approximately 170m south west of the site. Golders Hill Park lies approximately 1.35km north east of the site and Hampstead Heath is situated approximately 1.9km east of the site (see Figure 1).

Figure 1: Ordnance Survey map of site location



Reproduced from Ordnance Survey map data by permission of Ordnance Survey,
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Aims and objectives

- 1.7 The aim of the survey was to determine if significant bird species or populations were using the site for nesting or foraging at the time of the survey; and,
- 1.8 This information was used to determine the likely risk of impact on birds and local bird conservation from the proposed development, and to recommend precautionary measures, compensation of habitats or mitigation to prevent harm to birds, if necessary.

2 METHODOLOGY

Methods

- 2.1 Greenspace Information for Greater London (GiGL) was consulted for records of bird species within a 2km radius (GiGL data provided on the 23rd June 2016).
- 2.2 Surveys were conducted in optimal weather conditions (dry, with little/moderate wind) and during the bird nesting season (March to September). The duration of each survey was approximately an hour and a half.
- 2.3 Surveys were undertaken on the 20th July and 16th August 2016, within three hours of dawn, when territorial behaviour is usually at its peak.
- 2.4 The survey was based on a registration mapping methodology adapted from the BTO Breeding Bird Survey: during each visit, all birds seen or heard were recorded on a plan along with any significant behaviour, particularly regarding breeding activity e.g. territorial singing, display, carrying food or nesting material, active nests etc.

Limitations

- 2.5 Access was available to the whole site. However, due to internal hoardings around the footprint of the reservoir structure, it was not possible to observe the entire site at all times during the surveys. However, the transect route enabled visual observation of all areas of the site during the surveys and birdsong and calls were also used for identification. The surveys were undertaken outside the optimal season for breeding bird surveys (April to June); therefore, early migrants and breeders may have been under recorded or missed during the surveys.

3 RESULTS

Desk Study

3.1 The table below shows a full list of rare, protected or SPI birds returned in the data search by GiGL.

Table 1: GiGL data search results

Birds	Protection	Approximate distance from site	Recent year within 2km
Barn owl	WCA 1	No distance available*	1998
Brambling	WCA 1	1.2km south west	1987
		Within a 1km square of the site	2010
Bullfinch	BoCC amber list; SPI	1.2km south west	1987
Dunnock	BoCC amber list; SPI	on site	2014
		Within a 1km square of the site	2010
Fieldfare	BoCC red list; WCA 1	1.2km south west	1986
		Within a 1km square of the site	2010
Firecrest	WCA 1	285m north	2010
Grey wagtail	BoCC red list	959m north	2005
		Within a 1km square of the site	2010
Herring gull	BoCC red list; LBAP	On site	2014
		Within a 1km square of the site	2010
Hobby	WCA 1	No location available*	2002
House sparrow	BoCC red list; SPI; LBAP	On site	2014
		Within a 1km square of the site	2010

Kingfisher	BoCC amber list; WCA 1	1.7km north	2001
Lapwing	BoCC red list; SPI	1.4km south west	1986
		Within a 1km square of the site	2010
Lesser redpoll	BoCC red list; SPI	1.2km south west	1987
Lesser spotted woodpecker	BoCC red list; SPI; LBAP	135m north	1987
Linnet	BoCC red list; LBAP	Within a 1km square of the site	2010
Mediterranean gull	WCA 1	Within a 1km square of the site	2010
Merlin	BoCC red list; WCA 1	Within a 1km square of the site	2010
Peregrine falcon	WCA 1; LBAP	No location available*	2006
Red kite	WCA 1	448m north	2010
Redwing	BoCC red list; WCA 1	959m north	2006
		Within a 1km square of the site	2010
Reed bunting	SPI; LBAP	Within a 1km square of the site	2010
Skylark	BoCC red list; SPI; LBAP	1.2km south west	1987
		Within a 1km square of the site	2010
Song thrush	BoCC red list; SPI	on site	2014
		Within a 1km square of the site	2010
Spotted flycatcher	BoCC red list; SPI	1.2km south west	1985
		1.7km north	1986
Starling	BoCC red list; SPI	On site	2014
		Within a 1km square of the site	2010
Turtle dove	BoCC red list; SPI; LBAP	No distance available*	1987

Yellowhammer	BoCC red list; SPI; LBAP	1.2km south west	1987
		Within a 1km square of the site	2010

** Records do not include the location of sighting and therefore the distance from site cannot be determined, however these records do indicate the presence of a species in the search area*

Previous Results

- 3.2 During the surveys carried out in 2011, twenty-three bird species were recorded on, or close to, the site. Three species were on the Birds of Conservation Concern (BoCC) red list of high conservation concern (house sparrow, song thrush and starling); and two were on the BoCC amber list of medium conservation concern (dunnock and swift).
- 3.3 The surveys carried out in 2014 recorded twenty-seven bird species on, or close to, the site. Four BoCC red listed species were recorded (house sparrow, starling, herring gull and song thrush), with four BoCC amber listed species recorded (dunnock, green woodpecker, swift and black-headed gull).
- 3.4 During the 2016 surveys two BoCC red listed species (house sparrow and starling) were observed using habitats within the site boundary. It should be noted that since the 2014 surveys the BoCC lists have been updated. It is the BoCC 4 list that has been used within this report.

Survey Results

Table 2: Summary of survey results

Species	BTO code	London BAP	Schedule 1	NERC SPI	BoCC	Survey dates & summary of results	
						20.07.16	16.08.16
Blackcap	BC					✓	
Blackbird	B.					✓	✓
Black-headed gull*	BH				Amber	✓	✓
Blue tit	BT					✓	✓
Buzzard*	BZ						✓
Carrion crow	C.					✓	✓
Chaffinch	CH						✓
Feral pigeon	FP					✓	✓
Goldfinch	GO					✓	✓
Great tit	GT					✓	✓
Greenfinch	GR					✓	
<i>Green woodpecker</i>	G.						✓
Grey heron*	H.					✓	
Herring gull*	HG	✓		✓	Red	✓	✓
Jay	J.					✓	✓
Magpie	MG					✓	✓
Ring neck parakeet*	RI				No status	✓	
Robin	R.					✓	✓
<i>Starling</i>	SG	✓		✓	Red		
Swift*	SI				Amber	✓	✓
<i>Tawny owl**</i>	TO				Amber		✓
Whitethroat	WH					✓	
Woodpigeon	WP					✓	✓
Wren	WR					✓	✓

NERC SPI= Species of Principle Importance in England under Section 41 of the NERC Act (2006)

Essex BAP = Local Biodiversity Action Plan.

BoCC = Birds of Conservation Concern 4.

Schedule 1 = protected (while breeding) under Schedule 1 of the Wildlife and Countryside Act.

Black text: Observed using habitats within the site boundary.

Black italic text: Observed using habitats adjacent to the site boundary.

Text with a star*: Observed flying over the site only.

Text with a double star**. Recorded offsite, likely in Hampstead Cemetery over 100m north of the site boundary.

3.5 Twenty-three bird species were recorded on or close to the site, of which 16 used habitats within the site boundary (see Appendix A for plans showing bird activity).

Weather conditions

Visit	Date	Weather conditions
1	20 th July 2016	23°C, <5% cloud cover and Beaufort 2 to 3
2	16 th August 2016	13°C, <5 to 25% cloud cover and Beaufort 0 to 1

- 3.6 All birds heard or seen using the site (feeding, perching and resting) were noted on the plans.

4 LEGISLATION AND EVALUATION

- 4.1 All wild birds are protected under Part 1 of the Wildlife and Countryside Act 1981 (as amended by Schedule 12 of the Countryside and Rights of Way Act 2000). The law covers all species of wild birds including common and pest or opportunistic species. Some bird species are further protected, while breeding, under Schedule 1 of the Wildlife and Countryside Act.
- 4.2 Species of principle importance in England (SPIs), listed under Section 41 of the NERC Act, are a material consideration for planning decisions.
- 4.3 Birds of Conservation Concern (BoCC) assigns species to red, amber or green lists under the following criteria:

Red List species

These are species of high national conservation concern. Species are included on this list if they meet one or more of the following criteria:

- Globally threatened;
- Historical population decline in UK during 1800-1995;
- Rapid (> 50%) decline in UK breeding or non-breeding population over last 25 years;
- Rapid (> 50%) contraction of UK breeding range over last 25 years.

Amber List species

These are species of medium national conservation concern. Species are included on this list if they meet one or more of the following criteria:

- Historical population decline during 1800-1995, but now recovering with population size having more than doubled over the last 25 years;
- Moderate (25-49%) decline in UK breeding or non-breeding population or breeding range over the last 25 years;
- Species of European Conservation Concern;
- Between only one and 300 breeding pairs, or one and 900 individuals, in the UK;
- >50% of the UK breeding or non-breeding population in ten or fewer sites;
- >20% of the European breeding population in the UK;
- >20% of the North-West European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in the UK.

Green List Species

All regularly occurring native species that do not qualify under any of the red or amber criteria are green listed. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

Overview of birds observed during the surveys

4.4 Species of Principle Importance (SPIs)

Two priority species were recorded using the site and are detailed below. Dunnock, house sparrow and song thrush were not recorded during the current survey despite being recorded during surveys in 2011 and 2014. Their absence could be due to the 2016 surveys being undertaken late in the breeding season and it is likely that these birds still persist within the area as they are common and widespread. Recommendations for these species are therefore included within this report.

- Up to fourteen starlings were recorded during the first survey, perching on adjacent residential housing aerials beyond the northern boundary. Starlings are a BoCC red listed species, SPI and London BAP (Biodiversity Action Plan) species, due to long term decline in the number of breeding pairs in Britain, reasons for which are under research. Starlings remain widespread within Britain and London and this species was the third most numerous bird recorded during the RSPB 'Big Garden Birdwatch' in 2016. The site itself, particularly the reservoir top, provided suitable foraging habitat for starlings, but limited nesting opportunities for this species. It is recommended that foraging areas are retained and/or incorporated into a POS and that green and/or brown roofs are incorporated into building designs to mitigate for any grassland that is lost within the development footprint. Retained grassland should be suitably managed for slow worms in the long term, to protect this SINC interest feature in perpetuity. If shorter areas of grassland can be incorporated into the management regime, this should enhance foraging habitat for starlings post development (Devereux, 2004). If these recommendations are followed it was considered unlikely that starlings would be significantly impacted by the proposed development. Furthermore, opportunities to enhance the site for breeding starlings, and maintain and enhance foraging areas post development, are detailed in Section 5.
- Herring gulls were recorded flying over the site during both surveys, with one carrying food during the second survey. This species is considered unlikely to be breeding at the site due to lack of suitable nesting sites and would likely use the site for foraging only. The site itself does not provide suitable

breeding habitat for herring gulls, which prefer cliffs, beaches, shingle islands, moorland and buildings, all of which were absent from site. As this species was only recorded flying over site, it was considered unlikely that the development will impact the local population status of these gulls. The incorporation of green and brown roofs into the building design would enhance the site for breeding and foraging gulls post development, by providing additional potential nest sites and foraging opportunities.

4.5 BoCC Red Listed Species

Two BoCC red listed species were recorded using habitats within the site boundary, or foraging above the site and include herring gull and starling, which have been discussed above.

4.6 BoCC Amber Listed Species

Two BoCC amber listed species were recorded commuting and/or foraging above the site. Neither of these species are SPIs and swifts are detailed below. Recommendations detailed in Section 5 are designed to mitigate the loss of foraging habitat for these species, where necessary, and provide additional breeding opportunities post development for species such as swift.

- Large numbers of swifts (approximately 30 individuals) were recorded foraging above the site during the first survey, with reduced numbers recorded during the second survey. This species was also recorded at dusk by ecologists during bat surveys. Swifts are a BoCC amber listed species, due to moderate breeding population declines over the past 25 years; cited reasons include increased use of pesticides, lack of invertebrate food, climate change and changing building styles which reduce breeding habitat and foraging opportunities. Swifts are still common and widespread throughout the UK and London. The site itself provided very limited breeding opportunities, as swifts now nest almost exclusively within buildings. However, the grassland and boundary trees provided habitat for common invertebrates which provide a food source for swifts. It is recommended that the loss of grassland at the site should be mitigated through the use of green and brown roofs to continue to encourage invertebrates. The enhancement of the retained grassland to encourage wildflowers and invertebrates to protect

the slow worm population will also benefit swifts. Opportunities to enhance the site for nesting swift are recommended and are detailed in Section 5.

- 4.7 There were no Schedule 1 species recorded during any of the survey visits.
- 4.8 All birds recorded were predominantly using boundary vegetation, trees, scrub, grassland and ruderal vegetation throughout the site, particularly along the southern and south eastern boundaries or adjacent gardens. Three species; blackbird, feral pigeon and wood pigeon, were recorded using the roof of the reservoir. A large proportion of activity recorded was singing or calling. Other breeding activity, such as carrying food and material, was noted, suggesting that a number of species use the proposed development site for breeding.

Table 2: Likelihood of species breeding on site.

Species	Breeding status on site			
	Confirmed	Likely	Possible	Unlikely
Blackcap		✓		
Blackbird		✓		
Black-headed gull				✓
Blue tit			✓	
Buzzard				✓
Carrion crow			✓	
Chaffinch			✓	
Feral pigeon		✓		
Goldfinch			✓	
Great tit			✓	
Greenfinch		✓		
Green woodpecker			✓	
Grey heron				✓
Herring gull				✓
Jay			✓	
Magpie			✓	
Ring neck parakeet				✓
Robin		✓		
Starling				✓
Swift				✓
Tawny owl				✓

Whitethroat		✓		
Woodpigeon		✓		
Wren		✓		

5 RECOMMENDATIONS

- 5.1 The development should be located within the centre, and to the western boundary, to allow retention of the grassland to the east and boundary scrub habitat, which will continue to provide breeding, foraging and commuting habitat for birds. The grassland areas to be retained should be managed as wildflower areas as appropriate for reptiles, incorporating shorter sward heights in places where possible. This will provide additional foraging opportunities for priority species, such as starlings. It is recommended that retained areas are managed appropriately for breeding birds, particularly foraging house sparrow and starling as well as breeding/foraging dunnock in the long term, to maximise the number of species and individuals that it can support, therefore enhancing the potential to absorb any individuals displaced from the construction zone.
- 5.2 An Ecological Action Plan (EAP) should be produced, detailing management objectives, procedures and likely outcomes. This should include the provision of suitable nesting and foraging habitat for all SPI and BoCC listed species discussed in this report. Retained hedgerows should have a buffer of at least 5m to the proposed construction zone, to retain existing grassland for foraging birds and ensure connectivity is maintained around the site. These should be suitably managed for foraging birds in the long term and included in the EAP.
- 5.3 Any scrub or tree clearance or management should be undertaken outside the breeding bird season (March to September). Should vegetation removal be required during the nesting season, it is recommended that a nesting bird survey be undertaken by a suitably qualified ecologist no more than three days prior to works.
- 5.4 Any trees or scrub to be retained should be suitably protected from harm throughout the duration of the works to preserve this nesting and foraging habitat for birds.

- 5.5 To mitigate for lost bird nesting opportunities on the site, a variety of bird boxes should be installed on mature trees or new buildings within the development. Bird boxes that should be incorporated into the structure of buildings include swift bricks (Schwegler 16S swift boxes) and should be located as high as possible and be facing north. It is recommended that boxes suitable for house sparrow (Schwegler 1SP) and starling (Schwegler 3SV), a London BAP, are used as these species had been recorded on site and are likely to use bird boxes on buildings and trees. A variety of standard bird boxes, including both open-fronted and traditional (holed), should also be installed on retained mature trees to attract a greater diversity of birds to nest. Bird box location should be conducted following the advice of an ecologist once landscape plans are complete, to ensure most appropriate locations.
- 5.6 A mixture of green and brown roofs on the new buildings would increase foraging opportunities for insect-eating birds, offsetting the loss of grassed reservoir roof, and may encourage black redstarts, a London BAP priority species which has been known to utilise brown roofs for nesting in London.
- 5.7 It is recommended that any proposed soft landscape scheme uses native and/or wildlife-attracting plants and trees such as hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), wild cherry plum (*Prunus cerasifera*), guelder rose (*Viburnum opulus*), blackthorn (*Prunus spinosa*) and field maple (*Acer campestre*), and incorporates wildflower areas wherever possible. These areas will provide foraging resources for seed-eating and insectivorous birds recorded at the site, such as house sparrow, starling and dunnock. Planting within the development will be designed to maintain connectivity through the site for birds. This should include hedgerow planting at the boundaries or along access roads, and grouped tree or shrub planting to provide 'islands' of habitat within the development.
- 5.8 A EAP should be produced for the site, and should include sensitive hedge-cutting cycles (to produce dense, tall hedgerows with a diversity of species and ground flora), management of hedgerow buffers, appropriate establishment techniques of the grassland and wildflower areas, sensitive grass cutting regimes (which should also consider reptiles present at the site)

and prevention of scrub encroachment into the grassland. An enhancement and on-going management regime for retained areas should also be included.

6 CONCLUSION

- 6.1 Similar to the surveys carried out in 2011 and 2014, the birds identified during these surveys were mostly common species, both at a National and Local level. SPIs included the herring gull and starling– both of which were found using the site, though both are common and widespread species in the London area.
- 6.2 The majority of birds heard and seen during the surveys were using the gardens and vegetation to the site boundaries. Three species, blackbird, feral pigeon and wood pigeon, were recorded using the roof of the reservoir.
- 6.3 Areas of higher quality foraging and nesting habitat (south and south eastern boundary vegetation and grassland toward these boundaries) are recommended for retention and suitable management with restricted public and residential access. Additionally, the loss of scrub and grassland at the site should be mitigated for through hedgerow planting, incorporation of amenity grassland and wildflower areas within retained POS and incorporation of green and/or brown roofs on new buildings. No significant numbers of any species were recorded using the site; therefore if recommendations in this report are followed, then any residual risk of harm to birds would likely be reduced further so that the proposed development could proceed with minimal risk of impact to birds or local bird conservation.

7 REFERENCES

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UK SPIs

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APPENDIX: PLANS SHOWING BIRD ACTIVITY

Species recorded during the two survey visits. For visual clarity, many of the birds were only seen flying over the site have been excluded. The species codes used can be found in Table 2.

Transect Route walked by surveyors during each survey

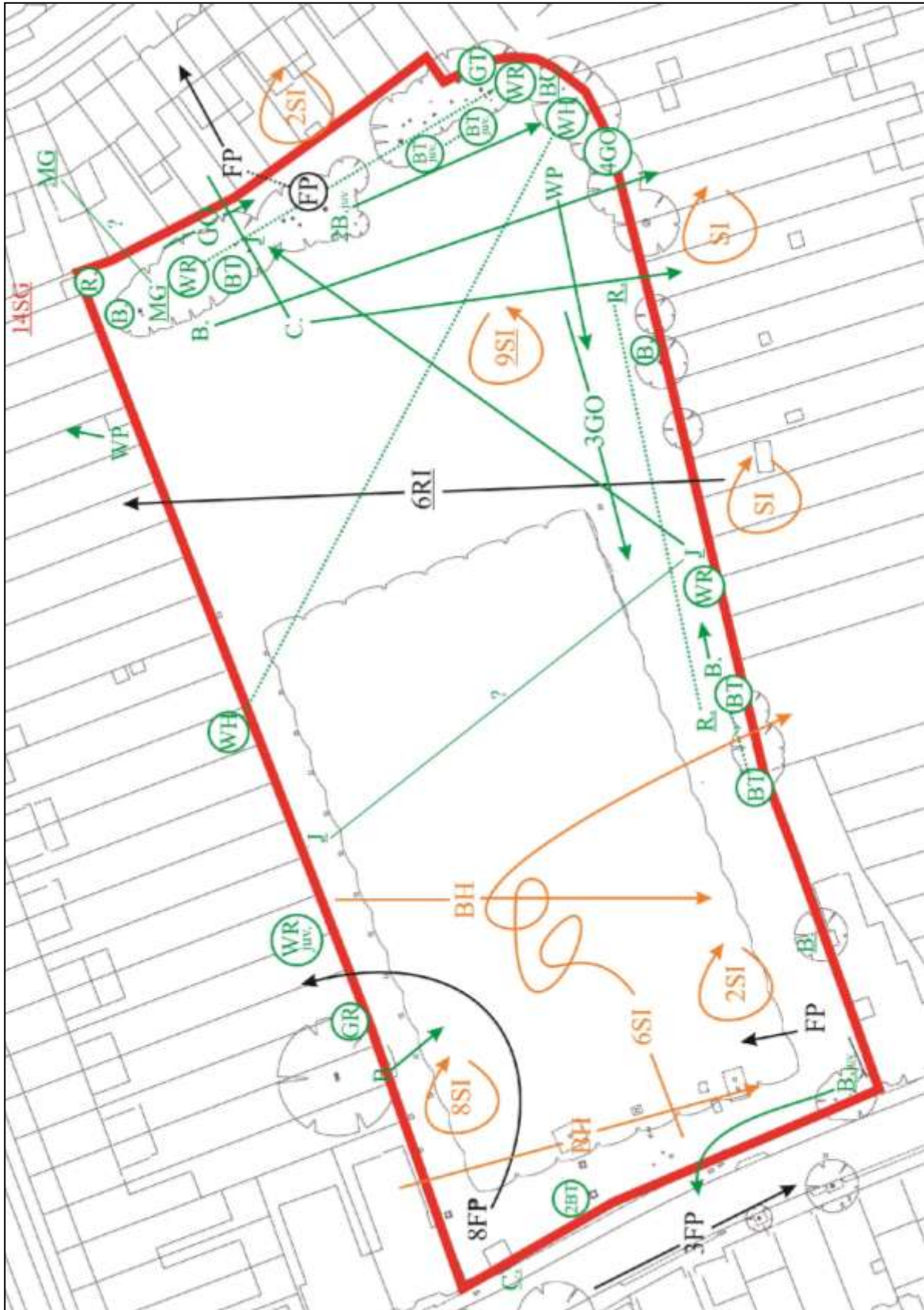


Map Key

Key			
B.	BoCC green listed species	→	Direction of flight
BH	BoCC amber listed species	(WR) — (WR)	Refers to same bird
S.	BoCC red listed species	(WR) - - (WR)	Two birds in song at the same time (definitely different birds)
GT	Calling great tit		
(2S.)	Aggression between two skylarks	★	NERC Section 41 Species of Principle Importance in England
(BC)	Singing blackcap	BH food	A black-headed gull carrying food
BT	A repeated alarm call	D. juv	A juvenile dunnock
★	Singing NERC species	★ (2S.)	Aggressive encounter between two NERC species
		BT ? BT	Probably the same bird

Visit 1: 20th July 2016

Start time: 04:38 / End time: 06:08 / Sunrise: 05:08



Visit 2: 16th August 2016

Start time: 05:00 / End time: 06:30 / Sunrise: 05:48

