

Technical Note

Project Mayfield
Subject Nesting Bird Strategy
Project no 0046688
Date 30 March 2021

Revision	Description	Issued by	Date	Approved (signature)
00	Nesting Bird Strategy	JR	30/03/2021	CG

1 Introduction

This nesting bird strategy has been produced to support the discharge of condition 72 in relation to planning permission 124972/FO/2019. The condition states:

Prior to commencement of Phase F...a bird nesting strategy for the entire site shall be submitted to and approved in writing by the City Council as Local Planning Authority. This shall include:

- a) Target species to include but not restricted to kingfisher, dipper, grey wagtail, sand martin, black redstart and birds typical of urban environments;*
- b) A range of nest box designs and locations; and*
- c) A five year monitoring plan to be supplied to the LPA.*

The agreed Strategy and Monitoring Plan shall be adhered to and implemented in full.

This strategy, therefore, outlines the types and numbers of bird nesting boxes proposed within the Mayfield Park area. It is acknowledged that the condition relates to the 'entire site', however at this stage, it is not possible to know the extent, number or type of boxes that may also be included within the building plots across the wider Mayfield site. Therefore, it is suggested that this remains a live document, through the lifespan of the project design and implementation. As built plots come forward for design, inclusion of bird nesting features will be added to the document and included within the proposed monitoring plan going forwards.

A plan is provided in the Appendix of this document, to identify the proposed locations of the boxes. This plan should be updated and amended, as required, should locations or types of boxes change over time due to unforeseeable problems such as tree and/or fixing failures where boxes have been installed. As built plots are completed, additional plans should be added to the appendix to indicate any other bird nesting features that have been incorporated within the wider Mayfield site.

2 Nesting Strategy

Formal nesting provision for breeding birds has been provided across the Mayfield Park area of the proposed development site. Several different types of nesting boxes have been proposed to support a variety of bird species including more specialist birds that are typically associated with water courses as well as more generalist bird species that would typically be found within an urban park setting. Table 2-1 provides a list of the box types, numbers and species they are designed to support. The proposed locations of the nesting boxes can be seen on the plan provided in Appendix 1.

Table 2-1 Nest boxes included within the Mayfield Park design

Box type	Number	Plan ref	Description	Specification
Dipper, wagtail and black redstart				
1N Schwegler Deep Nest Box 	6no.	R02	The 1N Schwegler Deep Nest Box is suitable to support a range of bird species including black redstart, spotted flycatcher and pied wagtail, as well as more generalist birds such as robins and wrens. These boxes will be placed on the north facing river wall to provide nesting habitat in proximity to the water course. Boxes fixed to the river wall will be located at least 1-1.5m above the high water level, and at least 30 cm below the top of the wall.	External dimensions: 20 x 20 x 30cm Nesting chamber: 15 x 21cm Entrance hole (twin): 30 x 50mm Weight: 5.6kg Material: Woodcrete
Kingfisher				
Vivara pro Woodstone Kingfisher Tunnel 	2no.	R03	The kingfisher tunnel will be placed within the new gabion-wall style river wall on the south of the river in the east of the park. Two kingfisher tunnels will be placed in proximity of each other to allow for multiple broods in a year, if required. Perches for kingfishers have also been incorporated along the river where the water is slower moving and deeper to facilitate hunting. Trees within the park planting will provide future additional perches as they mature.	Tunnel dimensions: Height: 150mm Width: 150mm Length: 550mm Weight: 5.5kg Nesting chamber dimensions: Height: 165mm Width: 275mm Depth: 275mm Weight: 6.3kg
Generalist bird boxes				
BarkBoxes Willow tit/ tree creeper nesting box 	3no.	HC05	This narrow chambered box is designed to be fitted onto smaller willow and birch trees and low to the ground to encourage willow tits and tree creepers to nest. The box is filled internally with damp sawdust, shavings and rotting wood, to provide excavating opportunities for nesting birds that prefer to do this.	Height 430mm Width 60mm Depth 70mm Typical Weight 4.3kg

Box type	Number	Plan ref	Description	Specification
			Boxes are cited to the south of the river amongst tree, scrub and native grassland planting to provide a sheltered environment.	
Vivara Pro Woodstone 32mm Nest Boxes 	2no.	HC06	This type of smaller entrance hole nest boxes are suitable for a number of general birds which are well adapted to urban environments and would be expected to be seen within an urban park such as blue tits, coal tits and house sparrows. The boxes will be placed on 'large' planted trees with trunks large enough to support a box at a preferred height at between 1.5-3m. They will be sited in proximity to other vegetation, such as trees and shrubs to provide cover as well as native grassland which will provide foraging opportunities.	Entrance hole diameter: 32mm Width: 20cm Height: 31cm Length: 20cm Weight: 6.9kg
Vivara Pro Woodstone Open Nest Box 	3no.	HC07	This type of nest boxes provides nesting opportunities for larger urban adapted birds such as blackbirds, robins and wrens. The boxes will be placed on 'large' planted trees with trunks large enough to support a box at a preferred height at between 1.5-3m. They will be sited in proximity to other vegetation, such as trees and shrubs to provide cover as well as native grassland which will provide foraging opportunities.	Width: 19cm Height: 24cm Length: 17.5cm Entrance hole: Open

3 Monitoring Plan

In accordance with the requirements of the planning condition, a five-year monitoring strategy for the nesting boxes placed within the Mayfield Park is outlined below. At the time of producing this document, it is intended that the Mayfield Park will become operational in March 2022. Full completion of landscape planting across the park is not certain by this time. However it is considered that the nesting boxes on the river wall and bridge built infrastructure, large trees and within the gabion wall would be in place by March 2022 allowing monitoring to commence in spring/summer 2022. A significant delay to the park programme, and/or delivery of the nesting boxes or supporting habitat, would result in a delay for monitoring by a year, to the next spring (2023).

The monitoring plan is loosely based on the British Trust for Ornithology guidance for breeding bird surveys in that surveys will need to meet specific guidance criteria to ensure that they provide representative results. For example, surveys should be targeted during appropriate times of the year and weather conditions so that use of nesting features by birds are most likely to be recorded. Sub-optimal survey conditions may result in false negatives. Due to the potential for delays to breeding depending on annual weather and prey availability variations, and some species making multiple nests before breeding in a box, two visits each year are recommended to understand how the boxes are being used by different species. In accordance with BTO surveys, one survey should be undertaken in the 'early' window of the bird breeding season (early April-mid May) and one should be undertaken in the 'late' window of the bird breeding season

(mid-May to late June). The surveys should be staggered by four weeks, if possible. Weather conditions for the survey should avoid heavy rain, poor visibility and high winds.

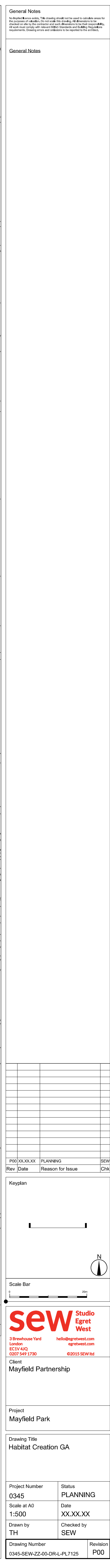
Monitoring visits should ideally start between 6am and 7am and no later than 9am. This timing will avoid the busier periods of the dawn chorus and the quieter late morning. It may also help to avoid peak rush-hour pedestrian movements, which may affect bird behaviour and/or the ability of the surveyors to monitor without disturbance.

Monitoring should be led by suitably experienced individuals who can identify urban bird species likely to be associated with the park and river corridor, as well as have a familiarity with bird nesting behaviours. Appointed ecologists, collaboration with local colleges or universities and/or establishment of a 'Friends of' group may provide opportunities to undertake the monitoring surveys. In each case, engagement with volunteers can be incorporated with the monitoring surveys to support the connection of users with the nature elements of the park.

Monitoring surveys should seek to record whether individual boxes around the park are being used by birds for breeding by:

- Making note of birds entering or exiting the boxes;
- Make notes of behaviours of those typical of breeding birds – singing and/or alarm calling, territorial behaviours etc
- Make note of activity which confirms breeding or nesting attempts such as carrying nesting materials and food (particularly where birds enter a nesting box with it), removing faecal sacks from the nest etc.
- In all cases the species of bird should be noted and a reference for the individual nest box used (for example, pied wagtail in box R02a)

As well as identifying use of boxes, the monitoring should also report back incidences of damage, loss or vandalism of the boxes and where they may need replacing for any reason. Recording should also be made of general bird activity outside of the provided boxes and whether indications of more general nesting within the vegetation provided within the park have been observed, particularly as the vegetation matures over the 5-year period.



P00	XXXXXXXX	PLANNING	SEW
Rev	Date	Reason for issue	Chk



Project
Mayfield Park

Project Number	Status
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0345	PLANNING
Scale at A0 1:500	Date XX.XX.XX
Drawn by TH	Checked by SEW

Drawing Number	Revision
0345-SEW-ZZ-03-DR-L-PL7125	P00