

Oriel

Response to technical queries on biodiversity

February 2021



Oriel
Creating the centre for
advancing eye health



Moorfields
Eye Hospital
NHS Foundation Trust



Moorfields
Eye Charity



Oriel – Response to technical queries on biodiversity– 26th February 2021

1. Introduction

Moorfields Eye Hospital NHS Foundation Trust, on behalf of Oriel¹ (the ‘Applicant’), submitted a planning application on 16th October 2020 (Application Ref. 2020/4825/P) to the London Borough of Camden (LBC) for a new facility that would allow the existing Moorfields Eye Hospital at City Road (Moorfields at City Road) and University College London (UCL) Institute of Ophthalmology (IoO) services at Bath Street to relocate into a single building at the existing St. Pancras Hospital site (hereafter referred to as the ‘Proposed Development’).

The Proposed Development will be located at part of the existing St. Pancras Hospital site (hereafter referred to as the ‘Site’). The Proposed Development comprises a single building, between seven and ten storeys in height (including Ground Level and Lower Ground Level, as well as plant at Roof Level), as well as provision of public realm at ground level, blue badge parking, and a vehicular drop off point on St Pancras Way.

A biodiversity net gain assessment and preliminary ecological appraisal was completed for the Proposed Development (Document Refs. ORL-INF-XX-XX-RP-PL-160-Metric 2.0 Biodiversity Net Gain Assessment and ORL-INF-XX-XX-RP-PL-320-Preliminary_Ecological_Appraisal respectively) and submitted with the planning application.

The LBC Nature Conservation Team reviewed the documents submitted and raised two comments in relation to biodiversity on 8th February 2021, as provided in section 2 of this note.

AECOM, as the authors of the biodiversity net gain assessment and preliminary ecological appraisal, have provided responses to the comments raised by the LBC Nature Conservation Team, on behalf of the Applicant, which are also provided in section 2 of this note.

¹ Oriel is a joint venture between Moorfields Eye Hospital NHS Foundation Trust, University College London Institute of Ophthalmology and Moorfields Eye Charity.

2. Responses

Comment 1:

There is a potential conflict between the stated biodiversity benefits from the planters within the ground floor public realm and the use of uplighters. Clearly, these lights serve a purpose in terms of safety and ease of access, but can these lights be kept to a modest level and specified to minimise their impact for wildlife? Ultimately, we can secure final lighting scheme details via condition but could you please provide some commentary on how you propose to address this potential conflict so as to ensure that your stated biodiversity gains are realised?

Applicant Response

An indicative layout for the proposed external lighting was provided and assessed within the External Lighting Assessment submitted with the planning application (Document Ref. ORL-INF-XX-XX-RP-PL-280).

The final lighting scheme will continue to be developed as part of the detailed landscape design for the external public realm at ground level, as well as the roof terrace, secured through an appropriately worded condition.

With respect to the queries raised:

- The uplights will help to vertically define exterior areas and are intended to be directed at the landscape elements (mainly plants and trees). The uplights would not be the same as high power projectors that would be used as architectural lighting and they can be specified to have a minimal output as needed for the desired effect, and will be adjustable – allowing them to be directed toward (or away from) trees or other planting as necessary. The uplights can also incorporate the use of hoods or shields to further control the distribution of light, where needed.*
- The design would also include a lighting control strategy for exterior spaces and how uplights perform during different times of the year. This is of particular relevance where deciduous species are used. As an example, during winter where there could be less canopy density uplights may still be desired for use, and directed toward a tree / tree canopy generally, but this can be dimmed to take into account the reduced canopy whilst still allowing for the form of the tree to be articulated.*
- Ground level uplights are expected to be a bit brighter than those on the terrace where smaller uplights may be used appropriate to scale an mix of planting.*

Comment 2:

Most of the recommended biodiversity measures proposed in your in the Preliminary Ecological Assessment / Landscape Design Report appear to be allocated to the 'brown roof' (p40 of the LDR). However, this may not be the most appropriate location for some of these features (it is hard to see how swift boxes could be incorporated at sufficient height, for example). Again, whilst final details of bird and bat boxes can be secured via condition, it would be useful to know if you thought that there might be other locations that would be more suitable for these features for birds and bats (preferably incorporated into the fabric of the building) for bird and bat boxes), which could also be more ambitious with given the size of the building.

Applicant Response

The location of bird and bat boxes can be secured as part of the detailed landscape design for the external public realm at ground level, as well as the roof terrace, through an appropriately worded condition.

Section 6.8 of the Design and Access Statement submitted with the planning application (Document Ref. ORL-INF-XX-XX-RP-PL-100) provides further details on the design development of the façade. However, key considerations in the development of the façade design for the Proposed Development include:

- A façade that is both generic and specific, allowing internal change and flexibility while responding to site and context; this is to allow for change both in the short and the long term such as movement of departments, partitions and change in use, and still maintain optimal daylighting conditions.
- The façade, the building envelope, is by far the largest element of the building. It therefore needs to have optimal thermal performance and daylighting qualities. The proportion of glazing to solid has been calibrated to allow sufficient daylight for the range of different activities inside while controlling overheating and glare, while providing sufficient solid area for thermal insulation.

This has resulted in a façade design which utilises a mix of terracotta infill panels, aluminium louvres and glazed panels.

Unfortunately, the façade material is not considered appropriate for the installation of hanging bat or bird boxes. However, there are locations where bat and bird boxes can be provided as part of the Proposed Development and Site as discussed below.

The proposed locations and details for the bat and bird boxes are as follows:

Bat Boxes

The installation of bat boxes was recommended in the Preliminary Ecological Appraisal (Document Ref. ORL-INF-XX-XX-RP-PL-320) and Bat Surveys Report (Document Ref. ORL-INF-XX-XX-RP-PL-150) for the Proposed Development. The London's Canals Site of Metropolitan Importance for Nature Conservation (SMINC), located adjacent to the northeast of the Site, acts as a corridor for bats and St. Pancras Gardens Site of Borough Importance for Nature Conservation (SBINC) (45m to the south of the Site) could provide foraging habitat for bats.





Bat boxes incorporated within the Level 6 roof terrace, or mounted on trees at ground level are proposed to provide roosting opportunities for bats.

Installation of the following is recommended for the Proposed Development:

- Three bat boxes which are suitable for pipistrelle bats and other small bat species (e.g. Schwegler 1FF Bat Box, 2F Bat Box, N27 Bat Box).
 - Bat boxes could be mounted on the walls of the elevator shaft, where climbers will be planted or could be mounted on the south/southeast elevations on the terrace (e.g. on pergolas), facing the St Pancras Gardens to the south of the Proposed Development.
- Two 2FN Schwegler Bat Boxes are recommended for noctule bats and should be mounted on trees as noctule bats roost in trees.
 - These should be at ground level, close to the St Pancras Gardens to the south of the site or along the access road on the eastern side of the building where bat flight paths could connect from St Pancras Gardens (between the workhouses to the south of the Site) to the canal habitat to the north-east of the Site.

Table 1 below provides further information on the design specifications and management requirements for bat boxes together with some example illustrations.

Table 1 Further Information on the Proposed Bat Boxes

Summary Design Specifications or Principles	Required Management
<p>The bat boxes should be installed in locations:</p> <ul style="list-style-type: none"> • Avoiding prevailing wind/rain • South, south east or south west (for daytime warming) • Potentially installed on or in close proximity to green infrastructure <p>Bat bricks/boxes should be placed as high as possible (at least three metres above ground level to deter predation and disturbance) but still allow access for maintenance. Where possible, do not use lighting in areas intended for bats. Where lighting is necessary, it should be directional, using down-lighting to avoid excessive light-spill onto bat boxes and nearby green infrastructure.</p>	<p>Roosting bats are protected from disturbance under UK and EU legislation, so if any boxes need to be removed and, or repaired this must be done immediately after the box has been checked by a licensed bat ecologist as there is a possibility of bats being present.</p> <p>Replace any damaged boxes.</p> <p>Replace any damaged or degraded fixings.</p>
<p>Example Illustrations (The bat boxes illustrated cater for a range of different species)</p>	
<p>Schwegler 1FF Bat Box</p> 	<p>2F Standard Bat Box</p> 
<p>Schwegler 27 Schwegler Brick Box for Bats</p> 	<p>2FN Special Bat Box</p> 

Bird Boxes








Three bird boxes will be erected on the Site, targeting swift, house sparrow and black redstarts, which are included as target species in Camden or London BAP. The boxes will comprise two swift or house sparrow boxes and one black redstart box, as follows:

- Two swift or house sparrow terraces.
 - Swift or house sparrow boxes should be in the form of terraces boxes, i.e. a single unit has multiple nest compartments as they live in colonies. Otherwise, multiple boxes should be installed.
 - Swifts and house sparrow live in colonies; therefore, it is recommended to mount the bird boxes, with two or three holes, in groups and in close proximity, with entrances 60 cm to 1 m apart. Two boxes (multicavity) will be installed on the Proposed Development.
 - Swift or house sparrow boxes could be installed on the northern side or northeast corner of the core of the elevator shaft on the 6th Floor Terrace.

- Other birds that can benefit from swift boxes are great tits (*Parus major*) and blue tits (*Cyanistes caeruleus*).
- One black redstart box.
 - Brown roofs are particularly beneficial to black redstarts and can provide feeding habitat for this species. However due to having low lying topographies, in order to not be affected by the wind, they often lack suitable cavities, recess or balcony-type entrances which redstarts utilise. It is therefore recommended that a black redstart nesting refuge is to be implemented to encourage the use of the green roof by black redstart.
 - It can be mounted on the wall on the brown roof on the Level 6 roof terrace, or on the wall where climbers are located, on the northern elevations.

Table 2 below provides further information on the design specifications and management requirements for bat boxes together with some example illustrations.

Table 2 Further Information on the Proposed Bird Boxes

Summary Design Specification or Principles	Required Management
<p>The bird box entrance should be in a shaded location and sheltered from the prevailing wind and rain and should not be accessible to predators, such as cats and grey squirrels.</p> <p>The front of the boxes should be angled vertically or slightly downwards so that the rain cannot enter through the hole. North and east facing elevations are preferred for bird boxes. The box should not be situated in a location which is externally lit at night.</p> <p>Galvanised or stainless steel screws or nails should be used to erect the boxes if external boxes are used, as these will not rust.</p> <p>Boxes for swift should be located more than 5 m high and away from windows, while for house sparrow and black redstart can be 2-4m in height Preferably under a roof structure, if practicable. Trees, ladders or aerials should not obstruct the entrance of the boxes.</p> <p>Swift/house sparrow boxes should be installed in groups, with entrances 60 to 100 cm apart.</p>	<p>Replace any damaged bird boxes.</p> <p>Replace any damaged or degraded fixings.</p> <p>Cleaning of boxes should be carried out outside the main breeding bird season (between September and January inclusive).</p>
Example Illustrations	
<p>No 17A Schwegler Swift Nest Box (Triple Cavity)</p> 	<p>Genesis Swift Nest Box, Triple</p>  
<p>Schwegler 1SP Sparrow Terrace</p>  	<p>Habibat Terraced Sparrow Box</p> 
<p>Schwegler 2HW Open-Fronted</p> 	<p>Schwegler Brick Box 1HE</p> 