


<p><b>Coram Pavilion, Camden.</b></p> <p>Bat and Bird Box Placement Strategy</p> <p><b>July, 2014</b></p> <p><b>Job No. 140349</b></p>	 <p>The Ecology Consultancy</p>
<p>Contact:</p> <p>Richard Cohen</p> <p>Contract Surveyor, Thomas-Sinden</p> <p>T: 01708 335 350</p> <p>M: 07720 497 621</p> <p>E-mail: <a href="mailto:richard.cohen@thomas-sinden.co.uk">richard.cohen@thomas-sinden.co.uk</a></p>	<p>The Ecology Consultancy</p> <p>1<sup>st</sup> Floor Becket House</p> <p>72 Borough High Street</p> <p>London, SE1 1XF</p> <p>Tel: 0207 378 1914</p> <p>Email: <a href="mailto:kareem@ecologyconsultancy.co.uk">kareem@ecologyconsultancy.co.uk</a></p>
<p>Client: Thomas-Sinden</p>	<p>Cc: Daniel Simmons; Sarah Yarwood-Lovett</p>
<p>Date : 7<sup>th</sup> July 2014</p>	
<p><b>1</b></p>	<p><b>INTRODUCTION</b></p>
<p>1.1</p>	<p>The Ecology Consultancy was commissioned by Thomas-Sinden in May 2014 to produce a bat and bird box installation strategy for the proposed development at Coram Pavilion, Camden, London.</p>
<p>1.2</p>	<p>The strategy is required to inform an environmental management plan which, in accordance with the requirements of the London Plan (Consolidated with Alteration Since 2004) and Camden Planning Guidance 2006 and Policy CS15 of the London Borough of Camden Local Development Framework Core Strategy, states that a number of bird and bat boxes are to be installed around the site by the main contractor, Thomas-Sinden (<i>Pers com.</i>, Gleed, 2014).</p>
<p>1.3</p>	<p>The specifications include information on the locations (Appendix 1, Figure 1) for the bat and bird boxes and the rationale for these locations being selected in order to maximise the likelihood of boxes being used by the target species, together with confirmation that these were installed in line with these requirements.</p>

1.4	For birds, an assessment of habitats locally present will inform the type of boxes to be installed. For bats, an activity transect will be carried out to determine what species use the site and immediate environs for foraging and commuting, as well as what flight lines across the site are used and additional factors such as lighting. These data will inform the selection and placement of the boxes to maximise their chances of uptake by the target species.
2	<b>METHODOLOGY</b>
2.1	<p><b>Bat Activity Transect Survey</b></p> <p>A bat activity transect survey of the Coram Pavilion was carried out on 12<sup>th</sup> May. The objectives of the survey were to:</p> <ul style="list-style-type: none"> <li>• Determine the use of the site by bats</li> <li>• Identify the bat species using the site</li> <li>• Ascertain the nature of activity for different species, for example foraging, commuting and roosting; and,</li> <li>• Identify the habitats within the site that are of value to bats (i.e. by being frequently used; used by high numbers of bats; or comprise habitats that provide connectivity to other suitable habitats in the wider landscape).</li> </ul>
2.2	The dusk activity survey commenced at least 15 minutes before sunset and finished at least 90 minutes after sunset.
2.3	The survey was carried out by two ecologists experienced in carrying out bat activity surveys. The surveyors walked around the site separately, stopping at six observation points in order to provide suitable coverage of the site.
2.5	Each surveyor used a BatBox Duet bat detector to pick up any echolocation calls. All bat activity was recorded using Roland Edirol 24bit 96KHz Wave/MP3 recorders attached to each bat detector. Recordings were later analysed using BatSound to aid the identification of species according to Russ (1999), see Appendix 3, Table 1 for details.
2.6	The survey methodology followed the Bat Conservation Trust <i>Bat Survey – Good Practice Guidelines 2<sup>nd</sup> Edition</i> (Hundt, 2012)
2.7	<p><b>Limitations</b></p> <p>It should be noted that, whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and</p>

	prediction of the natural environment.
2.8	The south wing of the main building was lit by flood lights on the football ground and security lighting, located on the main Coram Pavilion building and facing the courtyard in the south of the site (Appendix 2, Photo 1), may deter bats from using the site. However, this artificial lighting is a permanent feature therefore it is considered that the survey findings are representative of the conditions on site.
<b>3</b>	<b>SURVEY RESULTS</b>
	<b>Bat Activity Transect Survey 12<sup>th</sup> May 2014</b>
3.1	The survey was conducted in suitable temperature and weather conditions over the appropriate duration, from 20.25 until 22.05, within the optimal survey period (Appendix 3, Table 1), and in accordance with survey guidance (Hundt, 2012). The survey findings are described below.
3.2	Two ecologists experienced in bat activity surveys, were present for the survey. Both surveyors circled the site, stopping at six designated surveying points to sufficiently cover the site.
3.3	The first bat recorded was a common pipistrelle at 21:10, 29 minutes after sunset. The typical emergence time for this species is approximately 20 -32 minutes after sunset (Russ, 2012). The recording is just outside of the expected emergence time for this species, suggesting that a common pipistrelle roost is located close to, but not within the Coram site.
3.4	Bat activity was low across the site with a total of 10 passes by common pipistrelle and <i>pipistrellus</i> sp. (likely to be soprano pipistrelle bats) throughout the survey. The pipistrelle bats were observed using the darker areas within the site as either a commuting route or a foraging habitat (Appendix 2, Photo 2 & 3). No other bat species were recorded during the survey.
	<b>Habitat assessment for birds</b>
3.5	The site borders Saint George's Gardens and Brunswick Square Gardens, which consist of mature trees, shrubs and a sensory garden. Collingham Gardens offers several habitat features; with the lawn providing a feeding site for thrush, robin, dunnock, magpie and other birds that feed on invertebrates, but are tolerant to disturbance. The ivy growth on the trees provides cover and allows for extra provisions such as open nest boxes. Overall the site lacks spatial variation and foraging habitats to support a more diverse range of birds

	(i.e. lack of fruit bearing trees or bushes providing berries and cover). This assessment informs the selection of bird boxes and their locations, as specified below.																						
4	BAT AND BIRD BOX TYPE, LOCATION AND RATIONALE																						
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4.1	The boxes are installed 2.5 – 3m high orientated so that they experience appropriate temperature regimes for the species and type of box. This ensures the right conditions are																						

	<p>provided for the target species. The heights specified ensures the boxes are positioned appropriately for the bat and bird species to use the boxes and also enables monitoring checks to be conducted by ecologists using ladders. Accessing boxes via a ladder also makes any maintenance easier to carry out. The type and location of boxes takes safety from predators and accessibility into consideration; requiring bat boxes in particular to be positioned in areas with uncluttered drop zones, clear flight lines and away from artificial lighting.</p> <p>Boxes are located where they are aligned with suitable foraging and commuting habitat and where lighting would not deter bats from using either roosting or foraging habitat.</p>
<b>5</b>	<b>IMPLEMENTATION</b>
5.1	The bird and bat boxes proposed for the buildings will be installed by Thomas-Sinden and the boxes proposed for the trees will be installed by The Ecology Consultancy in accordance with this guidance.
5.2	Once the installations are complete the work will be signed off by a suitably experienced and qualified ecologist.
<b>6</b>	<b>REFERENCES</b>
	<p>Hundt, L. (2012) <i>Bat Survey – Good Practice Guidelines</i>. Bat Conservation Trust</p> <p>Russ, J. (2012). <i>British Bat Calls: A Guide to Species Identification</i>. Pelagic Publishing, Exeter</p> <p>Gleed Gleeds Cost Management Ltd (2014) Excerpt of communications regarding purpose of survey.</p> <p><a href="http://www.swift-conservation.org/">http://www.swift-conservation.org/</a> - visited 14/05/2014</p>

## Appendix 1: Proposed Locations of Bat and Bird Boxes

**Proposed Location Plan**  
Scale 1:1250

Site boundary  
Boundary of planning part discharge of conditions application, 110912

The School of Pharmacy (University of London)

BT4  
BT5  
BD8  
BT1-3  
BD9  
BD1-4  
BD5  
BD6  
BD7

49 Mackenburgh Square High School Building - North Wing  
Mackenburgh Square High School Building - South Wing  
Existing Courtyard  
Nursery Center  
Proposed Entrance Building - see page CORAM-11012  
Proposed Entrance New Space - see page CORAM-11012  
Proposed Porch - see page CORAM-11012  
Location of canopy to nursery play area

Existing temporary retaining  
Existing temporary retaining  
Existing temporary retaining

N

0 2.5m 5m 10m 20m

**thomasinden**  
Principal Contractor

REV DATE NOTES  
1 14-01-12 EXPLAINED REDESIGNATIONS  
2 14-01-12 CONSTRUCTION INFORMATION  
3 01-08-12 CONSTRUCTION ISSUE

**5th studio**  
Architecture & Urbanism

Project: CORAM CAMPUS: Entrance Access  
Drawing Title: Proposed Site Plan  
Scale: 1:250 @ A1 / 1:500 @ A3  
Status: CONSTRUCTION ISSUE

Coram No. **CORAM-400B**

## Appendix 2: Photographs



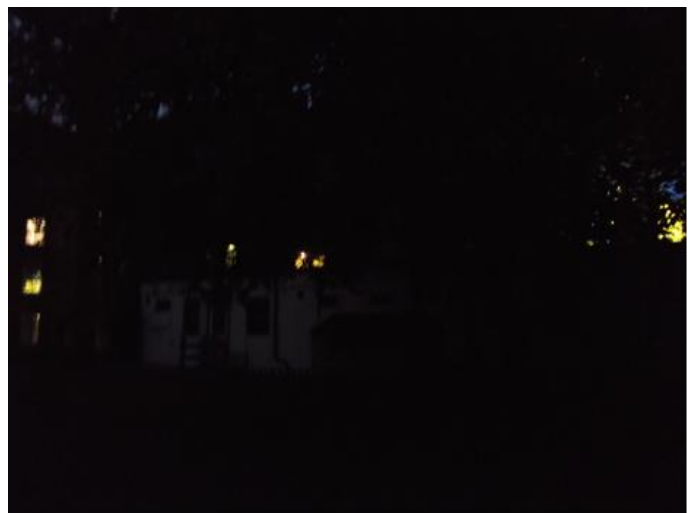
**Photograph 1**  
Court yard security lighting.



**Photograph 2**  
Listening Point 3: corridor for bats  
to commute across the site.



**Photograph 3**  
Listening point 4: dark area at by  
porta-cabin (north elevation)  
provides corridor for bats to  
commute



**Photograph 4**  
Alternative location for building  
mounted bat boxes



**Photograph 5**  
Lift shaft and chimney - alternative  
locations for installation of swift  
boxes (subject to accessibility).



**Photograph 6**  
East elevation of main building



**Photograph 7**

Dense climbing plant cover present on two trees in Collingham Gardens - location for boxes suitable to support redstart, song-thrush and other larger passerines.



## Appendix 3: Survey Data

**Table 1: Bat Activity Transect Survey – 12/05/2014**

**Sunset:** 20:41 hours      **Start time:** 20:26 hours      **End:** 22:05 hours

**Weather conditions:** 12.°C, 80 – 90% cloud cover, Beaufort 1 – 3, Wet

Surveyor 1: Points 1 – 6			
Time (hrs)	Minutes after sunset	Species	Comments
21:13	32	Common Pipistrelle	Unseen – P3
21:23	42	Pipistrelle species	Unseen – between P5 and P6
21:25	44	Pipistrelle species	Unseen – Point 6
21:40	59	Pipistrelle species	Unseen – Point 3
21:42	61	Pipistrelle species	Faint pass – Point 3
21:46	65	Pipistrelle species	Faint pass – Point 4
21:50	69	Pipistrelle species	Point 5

Surveyor 2: Points 1 – 6			
Time (hrs)	Minutes after sunset	Species	Comments
21:10	29	Pipistrelle species	Pass – Point 1 (very faint, not seen)
21:13	32	Pipistrelle species	Pass – Point 1
21:35	54	Pipistrelle species	Foraging – Garden N. of point 6 until left point 6



## Ecology Consultancy

**Experience and quality that makes a difference.**

London - Beckett House, 72 Borough High Street, London SE1 1XF T. 020 7378 1914 W. [www.ecologyconsultancy.co.uk](http://www.ecologyconsultancy.co.uk)

■ Sussex - The Old Granary, Upper Stoneham, Lewes, E Sussex BN8 5RH T. 01273 471369

■ Norfolk - Thorpe House, 79 Thorpe Road, Norwich, NR1 1UA T. 01603 628408

■ Scotland - Suite 10, 3 Coates Place, Edinburgh EH3 7AA T. 0131 225 8610