The Ecology Consultancy

Kebony House, Oak Hill Park, NW3 7LP/ Ecological Enhancement Plan / Report for Black & Milk

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Ecological Enhancement Plan

Report for Black & Milk

Job Number	6801.1		
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1 Introduction

BACKGROUND

1.1 The Ecology Consultancy has been commissioned by Black & Milk to produce an Ecological Enhancement Plan for the site at Kebony House, London Borough of Camden. This report has been prepared to discharge planning condition 5 in the Planning permission ref. 2018/2166/P.

1.2 The site has received full planning permission (2018/2166/P) for the erection of an outbuilding comprised of a single storey garden room, a single storey building containing a sauna, an outdoor plunge pool, and associated ground level terrace. A Preliminary Ecology Appraisal (PEA) was completed for the site by The Ecology Consultancy in 2018.

THE SITE

1.3 The site lies on the outskirts of Hampstead within the London Borough of Camden and is not subject to any nature conservation designations. It is bordered by residential property on all sides. The wider landscape mainly consists of residential use, with Hampstead town centre located to the east and Hampstead Heath Site of Importance for Nature Conservation (SINC) to the north-east.

SCOPE OF THE REPORT

1.4 This Ecological Enhancement Scheme details the measures to protect and enhance biodiversity and ecology at the site to address planning condition 5 of Planning Permission ref. 2018/2166/P.

1.5 The Ecological Enhancement Scheme has been written based on the results of a site visit which was undertaken on the 12 March 2018 to assess the habitats present on site and provide recommendations for ecological enhancement of the site.

1.6 Landscape plans showing the location of ecological enhancements throughout the site, species composition of the rooftop wildlife blanket, and proposed location of the wildflower planting area are provided in Appendix 1.

2 Mitigation measures

2.1 The following mitigation measures, as detailed in the PEA will be implemented during the works on site, to ensure legal compliance and that there is no harm to legally protected species.

BATS

2.2 Ahead of any works commencing on site, all trees were assessed for their level of potential to support a bat roost, in conjunction with a desk study assessing the historical significance of the site for local bat populations.

2.3 No features suitable for roosting bats were observed on any of the buildings, however six trees were identified as providing potential for roosting bats. All these trees are due to be retained under existing proposals, so no further survey is necessary, but a precautionary approach with regard to lighting post development is required.

NESTING BIRDS

2.4 Any vegetation or features which could be used by nesting birds will be removed outside of the active nesting bird period, September to February inclusive.

2.5 Where this is not possible, a check for nesting birds up to 48 hours prior to vegetation clearance will be undertaken by an experienced ecologist and if any nests are found, the nests will be protected until such time as the young have left the nest, as confirmed by an ecologist. If any nesting birds are found at any time during clearance, works within the immediate surroundings of the nest will stop immediately and an ecologist consulted.

HABITATS

2.6 The external lighting scheme for the site will be controlled on site, especially around the mature trees on the site boundaries. The proposed development considers the effects that excessive and inappropriate lighting could have on the bat populations which may rely on the site for foraging purposes

2.7 To minimise indirect impacts from lighting associated with the proposed development it is recommended that artificial lighting is only directed where necessary for health and safety reasons. Lighting will not illuminate any trees on-site. Lighting will only be used for the period of time for which it is required (Jones, 2000). This can be achieved by following accepted best practice (Fure, 2006; Bat Conservation Trust 2011):

- the level of artificial lighting will be kept to an absolute minimum;
- where this does not conflict with health and safety and/or security requirements, the site will be kept dark during peak bat activity periods (0 to 1.5 hours after sunset and 1.5 hours before sunrise);
- lighting required for security or safety reasons will use a lamp of no greater than 2000 lumens (150 Watts) and will comprise sensor-activated lamps;
- lights utilising LED technology are the preferred option as these lights do not emit on the UV spectrum, are easily controllable in terms of direction/spill and can be turned on and off instantly;
- avoid the use of sodium or metal halide lamps, these gas lamps require a lengthy period in which to turn off and the diffuse nature of the light emitted makes light spillage a significant problem.
- lighting will be directed to where it is needed to minimise light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a shield/hood/cowl/ that directs the light below the horizontal plane and restricts the lit area;
- artificial lighting will not directly illuminate any potential bat roosting features or habitats of value to commuting/foraging bats. Similarly, any newly planted linear features or compensatory bat roosting features should not be directly lit.

ENVIRONMENTAL BEST PRACTICE

2.8 Best environmental construction practice measures which should be implemented include:

- adherence to best practice including CIRIA guidance (Connolly and Charles, 2015); and
- the protection of retained trees in accordance with British Standards Institution (2012) guidelines.

3 Enhancement Measures

BIODIVERSE ROOF

3.1 A wildflower blanket will be provided on top of the sauna building within the new development.

3.2 The inclusion of a biodiverse roof will create habitat for wildlife, as well as enhancing the visual appearance of the roof.

3.3 The Bauder XF118 Native Species wildflower blanket will be used. Bauder XF118 Wildflower Blanket is a broad mix of British wildflowers grown in substrate on a nylon mesh which prevents substrate compaction. The product is installed over Bauder (FLL Compliant) Biodiverse Substrate. The vegetation is a mix of hardy wildflowers, annuals and herbs. (Bauder, 2018). The vegetation contains a mixture of 24 native species at a substrate thickness of 25 mm (Appendix 2). The sedums and wildflowers will flower from April until September.

3.4 A biodiverse roof will provide additional benefits such as protecting and prolonging the life of the roof membrane, reducing building energy use by insulating the building in winter and keeping it cooler in summer, providing a SuDS function by reducing storm water run-off from the roof, reducing the urban heat island effect and local air/noise pollution.

3.5 Maintenance of the biodiverse roof will follow the guidance provided in the Bauder Wildlife Blanket Green Roof General Maintenance data sheet (Bauder Building Products, 2018), including removing the dead seed heads twice a year, removal of debris, removal of any unwanted vegetation (e.g. excessive moss and grasses) and irrigation when necessary.

LANDSCAPE PLANTING

Flowering Lawn

3.6 The area of bare ground on the right side to the path leading to the garden will be planted with a flowering lawn mixture (Appendix 1, Figure 1 / Appendix 3, Photograph 1).

3.7 The plant mix used will include native species or species of known wildlife value, as listed by the RHS website. It is recommended that the ‘EW1 Woodland Mixture’ from

Emorsgate Seeds will be used, as it contains a mixture of shade tolerant species appropriate for the allocated planting area. https://wildseed.co.uk/mixtures/view/11.

Good horticultural practice

3.8 Good horticultural practice will be utilised during the establishment of the landscaping scheme and the following methods to minimise off-site ecological impacts will be employed:

3.9 The use of peat-free composts and soil conditioners to reduce the loss of important peat bogs.

3.10 The use of mulches to lock moisture into the soil as 'water-wise gardening' helps reduce consumption of water which is especially important during drought periods.

3.11 The use of pesticides (herbicides, insecticides, fungicides and slug pellets, etc.) will be minimised in order to avoid directly toxic and cumulative effects to animals via the food chain, particularly invertebrates and/or birds. Ideally, any pesticides used should be non-residual.

3.12 All thinning/ pruning works are to be undertaken outside of the bird nesting season which runs from February/ March to August/ September.

BATS

Bat boxes

3.13 New opportunities for roosting bats will be provided in the form of a bat box located on retained mature trees along the northern edge of the site (Appendix 1, Figure 1). This will consist of the Bat Box 1 FF model from Schwegler. This model is made from woodcrete, and as such, is long lasting compared to wooden boxes and insulates occupants from extremes of temperature and condensation.

3.14 The bat box will be positioned at least 3m above the ground facing a south westerly, southerly or south easterly direction on a retained mature tree. The bat box will not be directly lit by artificial lighting and their entrances will not be obscured by vegetation.

Photograph 1: 1FF Bat box closed © Schwegler.

BIRDS

Bird boxes

3.15 New opportunities for nesting birds will be provided in the form of a bird box to be installed on one of the larger trees to be retained at the north of the site (Appendix 1, Figure 1). The type of bird box which will be utilised is the Schwegler Nest Box 1MR. This model is made from woodcrete, and as such, is longer lasting compared to wooden boxes and insulates occupants from extremes of temperature and condensation. This model provides a range of suitable conditions for a variety of garden bird species, such as blue tits, great tits and house sparrows.

3.16 The bird box will be secured using galvanised nails/screws, at a height of 2-4m above ground level and be accessible for maintenance.

Photograph 3: 1MR Bird box with 32mm hole © Schwegler.

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Appendix 1: Ecological Enhancement Plan

Figure 1: Bird and bat box placement plan

Appendix 2: Species List for Biodiverse Roof

BAUDER

Bauder WB wildflower blanket

Scientific name	Common name
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Aquilegia vulgaris	Columbine
Bellis perennis	Daisy
Campanula glomerata	Bellflower; Clustered
Campanula rotundifolia	Harebell
Centaurea cyanus	Cornflower
Centaurea nigra	Knapweed; Common
Chicorium intybus	Chicory
Clinipodiem vulgare	Basil; Wild
Daucus carota	Carrot; Wild
Dianthus deltoides	Pink; Maiden
Dipsacus fullonum	Teasel
Echium vulgare	Viper's-bugloss
Feoniculum vulgare	Fennel
Geranium pratense	Crane's-bill; Meadow
Linaria vulgaris	Toadflax; Common
Lotus corniculatus	Bird's-foot-trefoil; Common
Lythrum salicaria	Purple; Loosestrife
Malva moscahta	Mallow; Musk
Origanum vulgare	Marjoram; Wild
Papaver rhoes	Poppy; Field or Common
Pilosella aurantiaca	Fox-and-cubs
Ranunculus acris	Buttercup; Meadow
Rumex acetosa	Sorrel; Common
Salvia verbenaca	Clary; Wild
Scabiosa columbaria	Scabious; Small
Scorzoneroides autumnalis	Hawkbit; Autumn
Silene dioica	Campion; Red
Silene flos-cuculi	Ragged-Robin
Silene uniflora	Campion; White
Tanacetum vulgare	Tansy
Thymus polytrichus	Thyme; Wild
Trifolium pratense	Clover; Red
Viola tricolor	Pansy; Wild or Heartsease

Appendix 3: Photographs

Photograph 1
Area of bare ground beside the footpath designated for wildflower planting. View looking south-east.

The Ecology Consultancy

The Ecology Consultancy is part of the Temple Group.

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