



Kingdom Ecology

7 Speke Road • Woolton

Liverpool • L25 8QA

• • •

077 998 44249

enquiries@kingdomecology.com

www.kingdomecology.com

13th June 2025

To whom it may concern,

Ecological Mitigation and Enhancement Plan – Zochonis Building, University of Manchester, Dover Street, Manchester, M13 9GB

Planning Ref - 138176/FO/2023

1. Introduction

Planning permission has been granted for the demolition of an existing rooftop plant room wings, installation of roof mounted photo voltaic panels with edge protection, roof mounted air source heat pumps and air handling units together with elevational alterations including the installation of louvred screens and associated works. (*Application No: - 138176/FO/2023*).

Condition 5 of the above planning permission states:

Prior to the commencement of any works to the existing roof, a programme detailing final details of the measures to create potential opportunities to enhance and create new biodiversity within the development shall be submitted to and approved in writing by the City Council as Local Planning Authority. As a minimum the measures to be assessed within the programme shall include:

a) bat boxes and bricks and bird boxes, including for House Sparrows

b) appropriate planting and rainwater harvesting.

All above measures (a) & (b) shall be incorporated unless there are justified reasons not to include them. The programme shall include full details of the measures to be provided, a full justification for those that won't be provided and an implementation timeframe. The approved scheme shall be implemented not later than 12 months from the date the proposed building is first occupied.

To address the ecological elements of these planning conditions, an appropriate biodiversity enhancement scheme for the building has been devised (see below) by Richard Roe (BSc, MSc, MCIEEM, CEnv). Richard has over 25 years' experience as a professional ecologist.

The biodiversity plan includes the installation of bat and bird boxes on the building exterior; and the provision of a rain fed pond on the roof of the building which would be planted with appropriate native aquatic vegetation.

2. Biodiversity Enhancement Plan

Bat and Bird Box Proposals

It is recommended that the development is enhanced for nesting birds including house sparrow and swift. This can be achieved through the installation of appropriate bird nest boxes onto the walls of the existing building.

It is recommended that a total of 4 x Swift Nest Box (e.g. Vivara Pro WoodStone Swift Box) are attached to the north face of the building. The boxes would be located at a height of approximately 10m. Swift boxes are also used by house sparrows and other small bird species so are considered a 'universal bird box'.

It is recommended that bat boxes suitable for pipistrelle bats are attached to the south face of the building. These should comprise of 2 x Beaumaris Maxi Bat Boxes. The boxes would be located at a height of approximately 10m.

Recommended locations for the bat and bird boxes are shown on Figures 1a -1c in the Appendix. Suitable bat and bird box models are shown in the Appendix.

Any deviations from the recommended bird box models for other suitable alternatives (e.g. if preferred model is not available), should be agreed first with an appropriately qualified ecologist. The bat and bird boxes will be installed within 12 months of the start of the works.

Wildlife Pond

In order to provide wildlife pond habitat, it is proposed that 4 x small raised ponds are installed on the roof of the building and that each pond is planted up with suitable aquatic vegetation.

The proposal has been discussed with a structural engineer and the maximum safe depth of water permitted within each pond would be 150 mm. Any increase over this depth could potentially exceed safe threshold for the buildings roof beams and roof slab. Therefore, it is proposed that shallow ponds of no more than 150 mm depth are provided on the buildings roof.

The proposed ponds would comprise of 4 x Rectangular Pond Tank (large spill trays would be used) each with Dimensions: (LxWxD) 100 x 55 x 15cm. The spill trays are made from high-density polyethylene. It is large enough and strong enough to be used as a self-standing pond.

Approximately 6 x masonry bricks would be placed in each tray to create a variety of levels and pond depths, with some bricks emerging from the pond water. The pond will be rain-fed, but will be topped up during times of drought to ensure that the pond maintains a minimum depth of 12cm of water at all times.

Native aquatic plants will be provided contained within aquatic plant baskets with suitable substrate. Native pond species provided will include water forget-me-not, watermint, lesser spearwort, brooklime and marsh marigold. 18 x 11cm³ aquatic plant baskets with appropriate native species will be provided.

This rooftop ponds can provide a valuable habitat for invertebrates and birds

Recommended location for the pond is shown on Figures 1a and 1b in the Appendix. Suitable models of pond tank are also shown in the Appendix. The pond habitat will be installed between February and April within 12 months of the start of the works.

Appendix

Vivara Pro WoodStone Swift Box



Beaumaris Maxi Bat Box

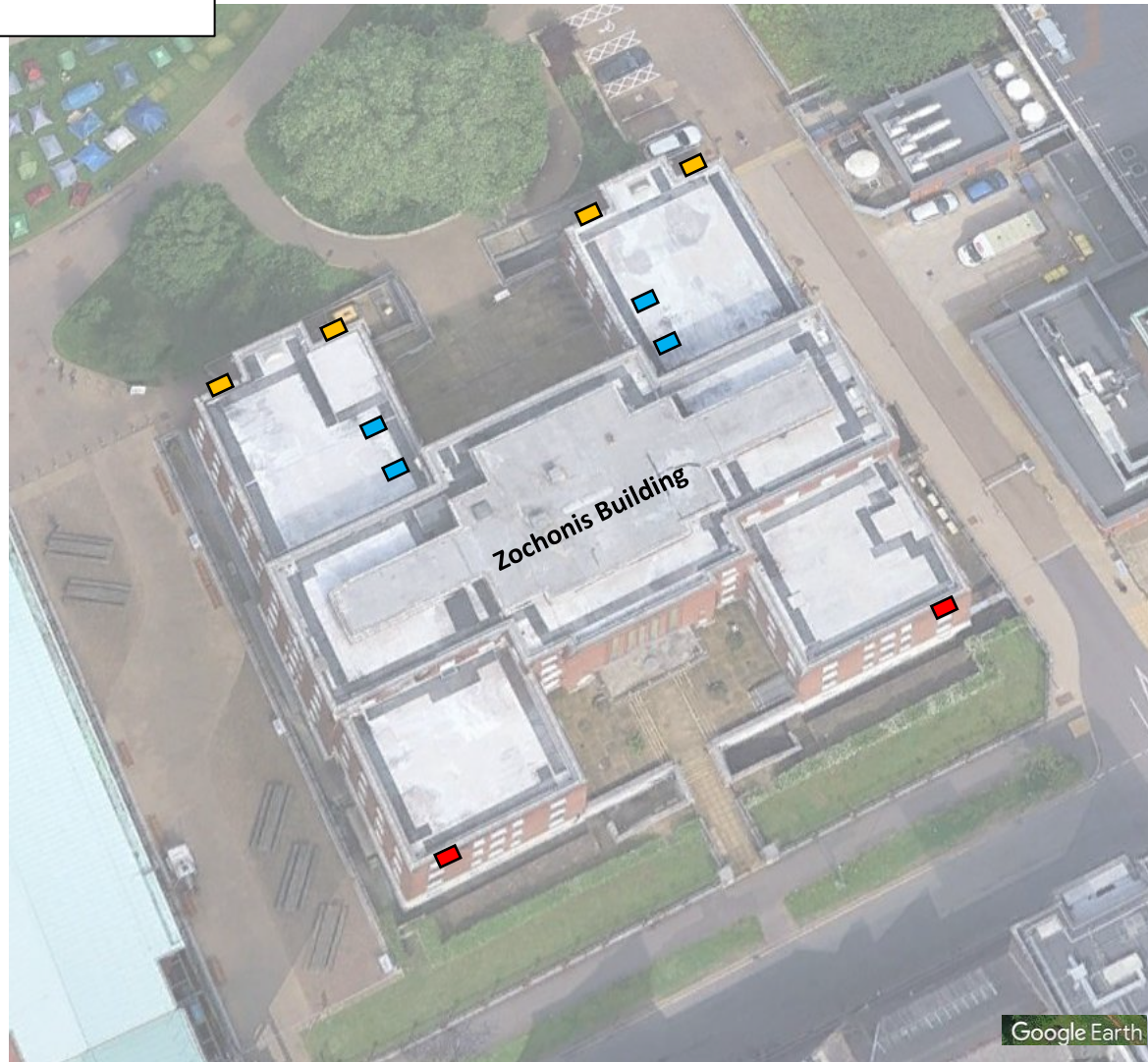


Romold Spill Trays (150 x 550 x 1000mm)



**Figure 1a- Recommended
Biodiversity Enhancement
Locations**

North
↑



External bat box



External swift box



Wildlife pond

Figure 1b- Recommended Biodiversity Enhancement Locations

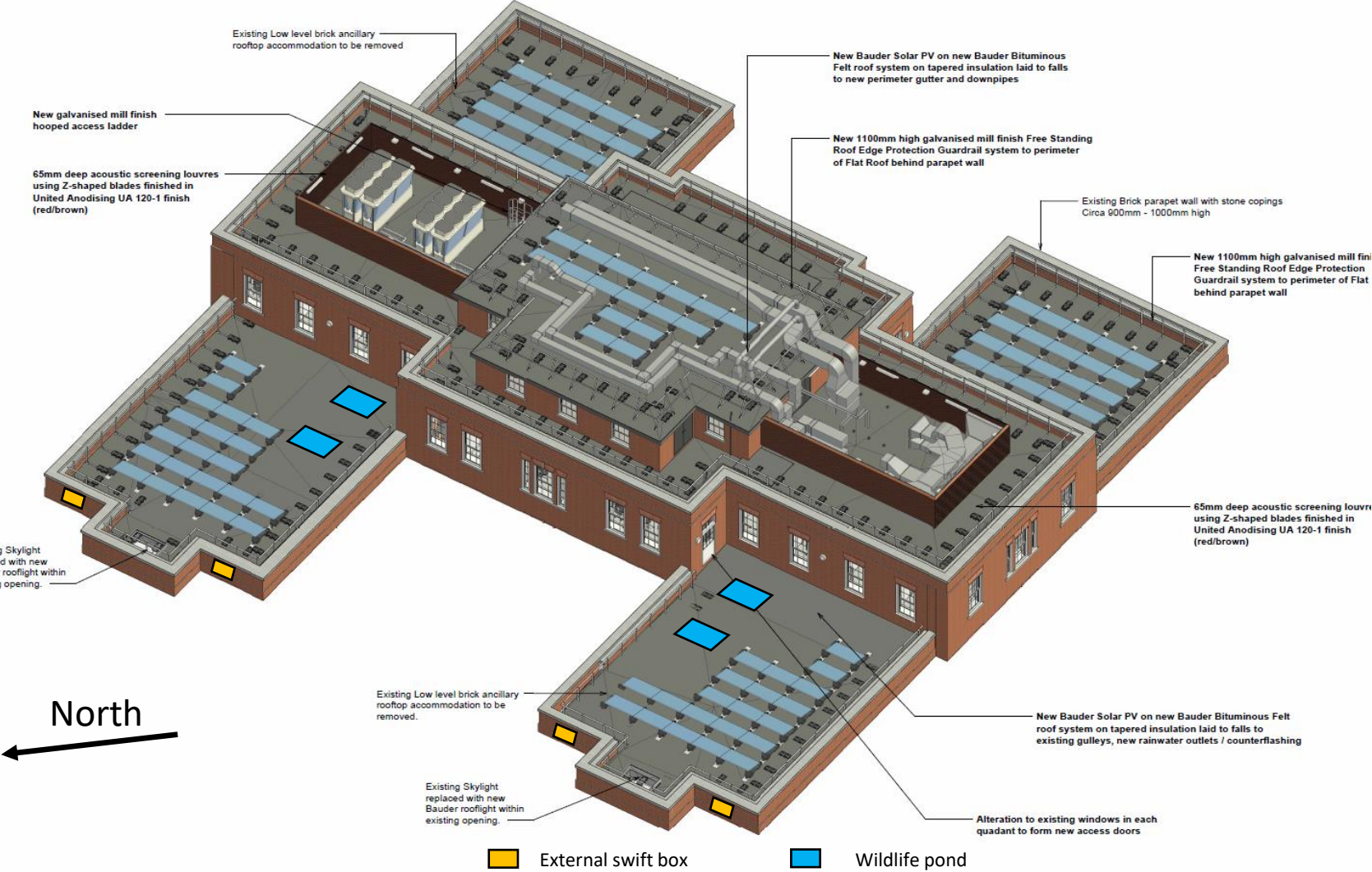
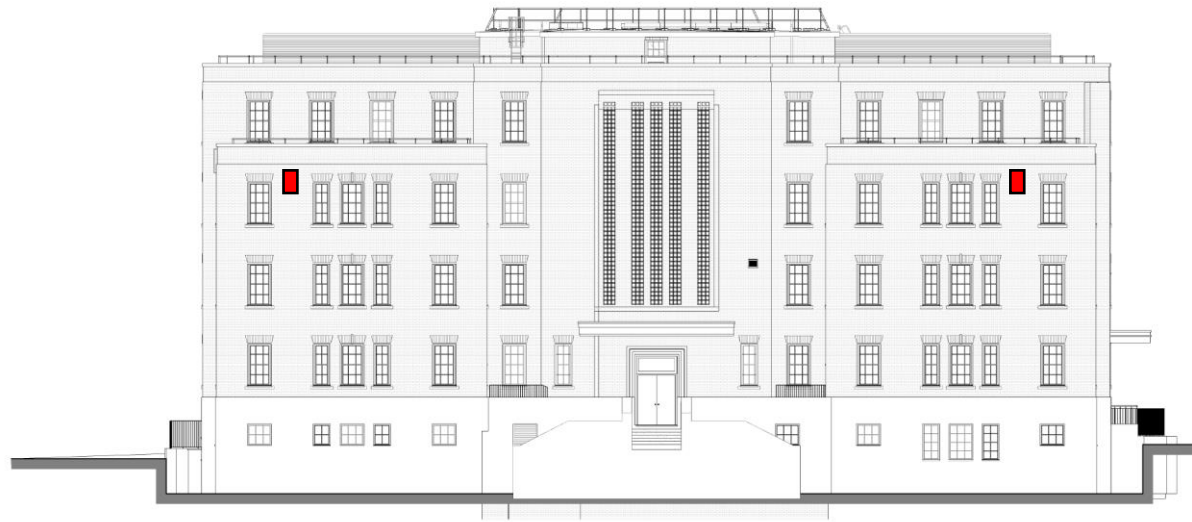


**Figure 1c- Recommended
Biodiversity Enhancement
Locations**

Northwest facing Elevation



Southeast facing Elevation



 External bat box

 External swift box