BIODIVERSITY NET GAIN REPORT:

LAND AT BP GARAGE, 104A FINCHLEY ROAD, LONDON NW3 5EY

For: **Lance Trevellyan**

Estate Management Office
Greenhills Estate
Tilford Road
Tilford
Surrey
GU10 2DZ

Issued by: **Wychwood Environmental Ltd**

www.wychwoodenvironmental.com

June 2022

Table of Contents

EXECUTIVE SUMMARY

Proposed development

- Development proposals involve the construction of a new block of flats that will be four storeys of residential accommodation comprising 31 units of one, two and three bedroom flats, above a lower ground area of 719 sq. meters (GEA) of commercial space. The proposals will involve the demolition of the existing buildings present at the site.

Biodiversity Net Gain

- The site supports no habitat units prior to development as it consisted entirely of hardstanding and buildings which is classed as developed land, sealed surface and has no habitat unit value in the Biodiversity Metric 3.1.
- The proposed development meets the required minimum 10% net gain in Habitat Units with small areas of planting provided on the first, fourth and fifth floor roof.
- To maximise the biodiversity and value to local wildlife it is recommended that the planting scheme uses plants which have value to pollinators.

Report completed by: Nadine Clark MSc BSc MCIEEM

Verified by: Dr. Craig Turner MSc FRGS FLS MCIEEM

Date of issue: June 2022

Contacts: Dr. Craig Turner - E: craig@wychwoodenvironmental.com
T: 07760234934, W: www.wychwoodenvironmental.com

1.0 INTRODUCTION

1.1 Wychwood Environmental Ltd was instructed to undertake a Biodiversity Net Gain Assessment to determine the biological impact of the proposed development site at: 104A Finchley Road, London, NW3 5EY

1.2 Wychwood Environmental has previously completed a Preliminary Ecological Assessment (Wychwood Environmental, 2022) at the site.

1.3 Best practice guidelines require that this report be completed by a suitably qualified ecologist as defined in BS42020:2013. The author of this report meets that definition.

1.4 The development proposal involves demolition of the existing petrol filling station and associated infrastructure to accommodate a residential development for approximately 31 apartments.

1.5 Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity in a better state than it was before. The process relies on the mitigation hierarchy, which sets out that everything possible must be done to firstly avoid, secondly minimise and thirdly restore and rehabilitate losses of biodiversity on site.

1.6 This report was completed uses Defra Metric (Natural England, 2022)[1] to quantify the biodiversity baseline for the site and calculate the post-development biodiversity unit for the proposed scheme following the best practice guidelines as set down by CIRIA (2019).

1.7 Section two of this report describes the methodologies used for determining Biodiversity Net Gain. Section three and four provides the results of the assessment, section five provides discussion and implications for development.

[1] https://www.gov.uk/government/news/biodiversity-30-metric-launched-in-new-sustainable-development-toolkit

2.0 METHODOLOGY

Baseline Condition

2.1 Baseline condition of the site was established from data collected during the Preliminary Ecological Appraisal (PEA) of the site undertaken by Wychwood Environmental Ltd on 16th June 2021 and the use of historical aerial imagery from Google Earth, following national guidelines (JNCC, 2010).

- **Habitat Units** - All habitats (excluding hedgerows and watercourses) within the footprint of the development, were assessed during the EA following the Habitat Condition Assessment (HCA) guidelines (Natural England, 2021b).
- **Hedgerow Units** - Any hedgerow or line of trees on site was assessed during the PEA following Hedgerow Regulations best practice methodology.
- **River Units** – Any water course on site was assessed during the EA following the HCA guidelines (Natural England, 2021b).

2.2 Habitat area or length, condition and distinctiveness were used to calculate baseline Biodiversity Units, providing a measure of the biodiversity pre-development. This calculation is in accordance with Defra's technical paper, guidance for developers and guidance for offset providers (Defra 2012 a, b and c). This is the standard metric used for calculating BU and LU in the UK.

2.3 Habitat Area and Hedgerow Length – The size of each habitat or hedgerow is calculated using a georeferenced Google Earth image of the site and QGIS Open-Source software.

2.4 Habitat Distinctiveness – A pre-assigned value is given by the Biodiversity Metric 3.1 when inputting the specific Habitat Type using the UK Habitat Classification System (UKHab, 2020).

2.5 Habitat Condition Assessment (HCA) – Using "The Biodiversity Metric 3.1 - Auditing and Accounting for Biodiversity - Technical Supplement" (Natural England, 2019b), the condition of each habitat was assessed. Where there were gaps in primary HCA data, for example from limited access to land, professional judgement was applied to, retrospectively, assess the habitat condition.

Post-development Condition

2.6 Post-development biodiversity units are calculated in a similar way to baseline biodiversity units. However, in addition to area, condition and distinctiveness of the proposed habitats, the key risks to delivery are taken into account through the incorporation of risk factors. The Defra metric sets out three risk factors: distance from the Scheme (Spatial Risk); time taken for created or enhanced habitats to reach target condition (Temporal Risk); and how difficult it is to create or enhance any given habitat (Delivery Risk).

Limitations

2.7 An initial site assessment such as this is only able to act like a 'snapshot' to record any flora or fauna that is present at the time of the survey. It is, therefore, possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats were assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found. The absence of biological records does not preclude the presence of a particular species, as record coverage is often patchy due to access restrictions placed on surveyors by private property and trespass laws.

2.8 It is important to note that a scheme-wide biodiversity net gain or no net loss cannot be achieved for the scheme as a whole, if there are negative impacts on irreplaceable habitats.

2.9 Defra guidance dictates that any compensation offered to address impacts on irreplaceable habitats should be agreed directly with Natural England (NE). The baseline habitat which is identified for such compensation and the biodiversity units resulting from this compensation should also be excluded from biodiversity unit calculations.

2.10 Following Defra guidance, impacts on irreplaceable habitats and their compensation have been excluded from this biodiversity unit calculation.

2.11 Biodiversity Impact Assessment only deals with habitat and as such this report does not cover any of the requirements of the proposed development arising from potential impacts on protected species and designated sites.

3.0 BASELINE

Baseline Habitats

3.1 The Biodiversity Metric 3.1 uses the UK Habitat Classification System (UKHab, 2020). Table 1 below gives the habitats identified as being present on site during the Ecological Appraisal using the Phase 1 Habitat Classification and the relevant conversion to the UK Habitat Classification System.

Table 1. Habitats on Site.

Phase 1 Category	UKHAB Category
Building/Hardstanding	Developed Land; Sealed Surface

Developed Land

Sealed Surface

3.2 Developed Land on site consists of an existing two storey shop and office with forecourt awning and hardstanding throughout the site. These areas were not vegetated.

Baseline Condition Assessment

3.3 The habitats on site were assessed against the criteria in relevant Habitat Condition Assessment Sheet, the results of which are shown in Table 2 below.

Table 2. Habitat Condition Assessment.

Habitat	Condition Criteria													Habitat Condition
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	
Developed Land; Sealed Surface	No Assessment Required – Condition N/A													**N/A**

Irreplaceable Habitat

3.4 The site does not contain any irreplaceable habitats.

Strategic Significance

Habitats

3.5 None of the habitats recorded during the Ecological Assessment are listed as Habitats of Principal Biological Importance on Section 41 of the NERC Act 2006 nor are they listed as Priority Habitats on the national BAP.

Summary of Baseline Units

3.6 The Baseline Habitat Units for the site are given in Table 3 below. No hedgerows or watercourses are present on site and as such no baseline hedgerow units or river units were calculated as their baseline would be zero units in both cases.

Table 3. Baseline Habitat Units.

UKHAB Category	Area (Ha)	Habitat Units Delivered
Developed Land; Sealed Surface	0.07	0.00
Total Habitat Units		**0.00**

4.0 PROPOSED

4.1 Proposed Block Plans in drawing D 0104 by TP Bennett (November 2021) were provided by the Client and used to calculate the Biodiversity Units post-development.

Proposed Habitats

4.2 From the Proposed Block Plan the following Habitats have been identified as being created on site post-development:

- Developed Land Sealed Surface
- Vegetated Garden
- Other Green Roof

Developed Land

Sealed Surface

4.3 This comprises of the proposed new residential building which occupies the whole site area.

Vegetated Garden

4.4 Defined as the land within the curtilage of the property managed for leisure, visual amenity etc. It is marked as intensive planted roof and is located on the 1st and fourth floor of the property.

Other Green Roof

4.5 Defines the proposed extensively planted roof on the 4th floor and blue roof on the 5th floor. These areas will be predominantly planted with sedums.

Proposed Habitat Condition Assessment

4.6 The proposed Habitats were assessed against the Habitat Condition Assessment Sheet and a likely condition was assigned based those criteria that could be reasonably assumed to be achievable.

4.7 Table 5 below show the Condition Assessment for the proposed Habitat.

Table 4. Proposed Habitat Condition Assessment.

Habitat	Condition Criteria						Habitat Condition
	C1	C2	C3	C4	C5	C6	
Developed Land; Sealed Surface	No Assessment Required – Condition N/A						**N/A**
Vegetated Garden	No Assessment Required – Condition N/A						**N/A**
Other Green Roof	No Assessment Required – Condition N/A						**N/A**

Summary of Post-development Units

4.8 The Habitat Units and Hedgerow Units post-development for the site are given in Table 6 and Table 7 below.

Table 5. Post-development Habitat Units.

UKHAB Category	Area (Ha)	Habitat Units Delivered
Developed Land; Sealed Surface	0.065	0.00
Vegetated Garden	0.0106	0.02
Other Green Roof	0.0195	0.04
Total Habitat Units		**0.06**

5.0 OUTCOME

Habitat Units

5.1 The proposed development will result in +0.06 change in Habitat Units on site or a 100% net gain in Habitat Units as there were no habitat units present within the baseline as the site was entirely developed land, sealed surface.

5.2 The proposed development meets the required net gain in Habitat Units of a minimum required 10% gain in Habitat Units. It is recommended that the planting plan for the fourth floor terraces uses plants which are of value to local pollinators and provide a range of pollen and nectar sources throughout the year (See Annex 2 for examples).

Trading Rules

5.4 The Defra Metric requires that losses in habitat are compensated for on a 'like for like' or 'like for better' basis with new or restored habitats aiming to achieve a higher distinctiveness or condition than those lost. The proposed development meets the Trading Rule as set out above.

6.0 REFERENCES

CIRIA (2019) Biodiversity Net Gain: good practice principles for development.

Defra (2012a) Biodiversity Offsetting Pilots: Technical Paper- the Metric for the Biodiversity Offsetting Pilots in England.

Defra (2012b) Biodiversity Offsetting Pilots: Guidance for Developers.

Defra (2012c) Biodiversity Offsetting Pilots: Guidance for Offset Providers.

Department for Communities and Local Government (2019) National Planning Policy Framework (NPPF).

JNCC (2010) Handbook for Phase 1 Habitat Survey: A technique for environmental audit. JNCC, Peterborough.

Natural England (2022) The Biodiversity Metric 3.1 (JP039) - http://nepubprod.appspot.com/publication/6049804846366720

Natural England (2022) The Biodiversity Metric 3.1 - Auditing and Accounting for Biodiversity - Technical Supplement

Natural England (2022) Habitat Condition Assessment Sheets with Instructions.

UKHab (2020) UK Habitat Classification.

Wychwood Environmental Ltd (2022) Ecological Appraisal Report: Land At BP Garage, 104a Finchley Road, London NW3 5EY

Annex 1 – Figures

Figure 1 – Baseline Habitats on Site.

Figure 2 – Proposed Habitat 1st Floor.

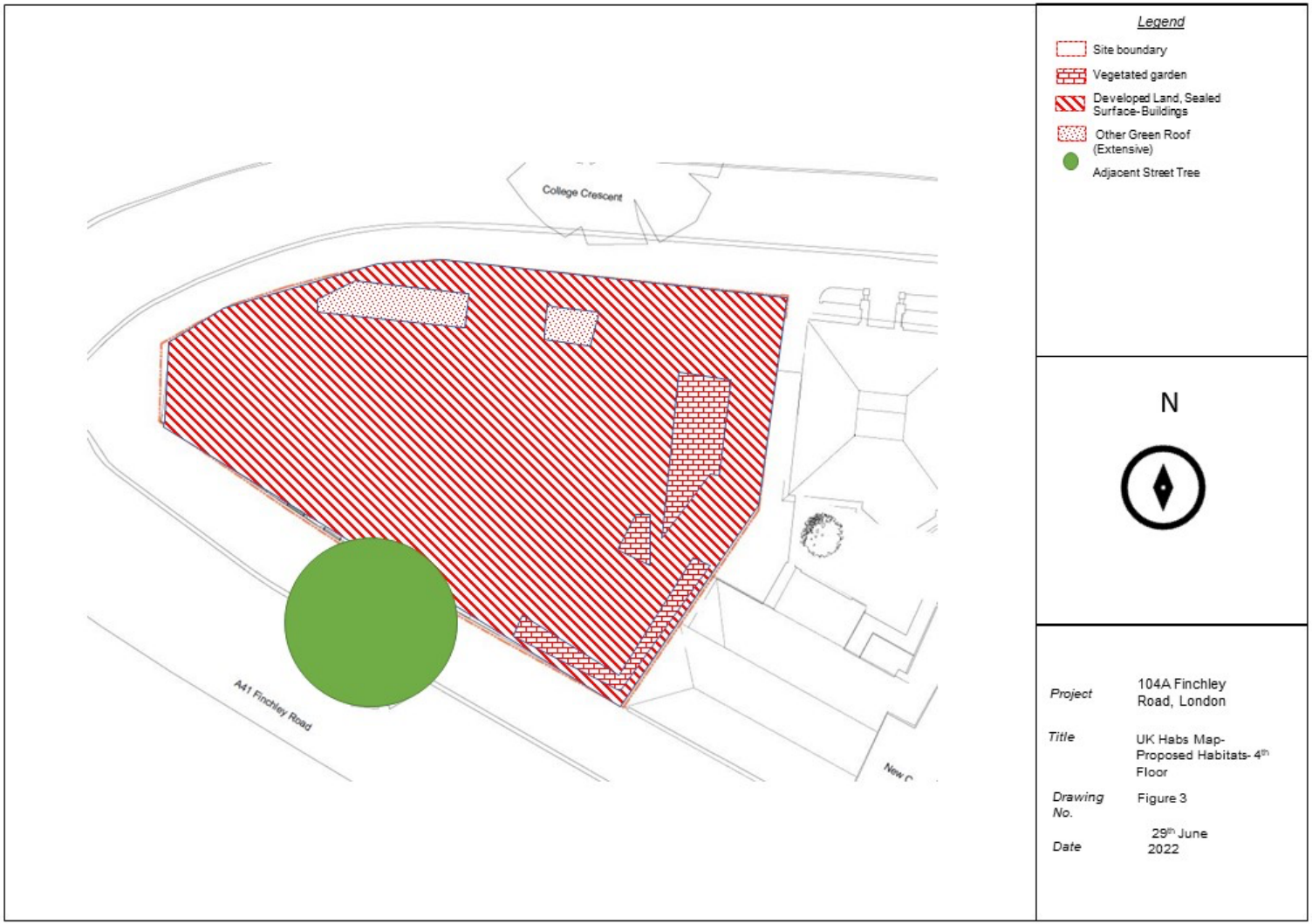

Figure 3 – Proposed Habitat 4th Floor.

Figure 4 – Proposed Habitat 5th Floor.

Annex 2 – Plants of Value to Local Wildlife

Hedging/shrubs (60cm whips)	
Blackthorn	*Prunus spinosa*
Hawthorn	*Crataegus monogyna*
Common Dogwood	*Cornus sanguinea*
Guelder Rose	*Viburnum opulus*
Holly	*Ilex aquifolium*
Elder	*Sambucus nigra*
Field Maple	*Acer campestre*
Hazel	*Corylus avellana*
Spindle	*Euonymus europaeus*
Firethorn	*Pyracanthus*
Trees (regular standard size)	
Apple	*Malus spp.*
Cherry	*Prunus spp.*
Field Maple	Acer campestre
Hornbeam	*Carpinus betulus*
Rowan	*Sorbus aucuparia*
Wild Service	*Sorbus torminalis*
English Oak	*Quercus robur*
Shrubs/Herbaceous plants (formal beds)	
Use species attractive to pollinators e.g bees, butterflies, moths. See this selection of RHS plants for pollinators https://www.rhs.org.uk/wildlife/plants-for-bees & https://www.rhs.org.uk/wildlife/flowers-for-butterflies : Examples include Lavender *Lavandula angustifolia* Chives *Allium schoenoprasum* Scabious *Scabious* spp. Catmint *Nepeta mussinii* Salvia *Salvia* spp. Thyme *Thymus* spp. Vipers Bugloss *Echium vulgare* It is also beneficial to provide a range of plants that provide pollen and nectar throughout the year. Examples can be found here- https://www.gardenersworld.com/how-to/grow-plants/nectar-and-pollen-throughout-the-year/	
Note – all specimens should be of British native stock from reputable suppliers.	