MURPHY'S YARD

AN APPLICATION BY FOLGATE ESTATES LIMITED

BIODIVERSITY NET GAIN ASSESSMENT

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Murphy's Yard, Kentish Town, London / Biodiversity Net Gain Assessment / Report for Folgate Estates Ltd



Murphy's Yard, Kentish Town, London

Biodiversity Net Gain Assessment Report for Folgate Estates Ltd

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Executive Summary

The Ecology Consultancy was commissioned by Folgate Estates Ltd to produce a Biodiversity Net Gain Assessment for the proposed development of land to the south of Gordon House Road bounded by railway lines to the east, west and south, known as Murphy's, Kentish Town, London. The main findings are as follows:

- The site is not subject to any statutory or non-statutory nature conservation designations. The closest statutory designated site is Belsize Wood Local Nature Reserve, located 0.9km south-west of the site. The nearest non-statutory designated site is Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve Site of Borough Importance for Nature Conservation (SBINC), located adjacent to the site on the northern, north-eastern and south-western boundaries.
- The site comprised several industrial buildings and an office block, mostly surrounded by hardstanding with small areas of landscaping around the office block, and tall ruderal and ephemeral vegetation on the margins of the site. Semi-mature scattered trees have been planted along the boundaries of the site. Habitats present are considered of local importance. The biodiversity value of the site prior to clearance was calculated as 0.14 total habitat units. In addition, the biodiversity value of the linear habitats on site prior to development was calculated as 3.08 total hedgerow units..
- The current proposals include new areas of biodiverse green roof, tree planting, woodland glade, rain gardens, flower rich planting, heathland planting, species rich acid grassland, and native hedgerows. Provided the recommendations outlined in section 5 of this report are followed, the biodiversity value of the current landscaping proposals is predicted to be 8.84 biodiversity units for habitats calculated by area, and 4.09 for linear habitats (hedgerows).
- As such the proposed development is predicted to result in a net gain in area habitat biodiversity of **8.70** habitat units and a net percentage change of **6211.47**%.
- Additionally, the proposed development is predicted to result in a net gain in linear habitat biodiversity of **1.01** hedgerow units and a net percentage change of **32.86**%.

1 Introduction

BACKGROUND TO COMMISSION

1.1 The Ecology Consultancy was commissioned by Folgate Estates Ltd to produce a Biodiversity Net Gain Assessment, providing specialist advice on how the proposed development at the Murphy's Yard site will impact biodiversity, including identification of opportunities for net gain. A Phase 1 habitat survey of the site was previously carried out in 2019 (The Ecology Consultancy, 2019a) and an update Phase 1 habitat survey was carried out in May 2021 by the Ecology Consultancy to establish whether any significant changes to the site had occurred since 2019. The results of this update survey are presented within this report and within the accompanying Ecological Impact Assessment (The Ecology Consultancy, 2021a) and have been used to inform this Biodiversity Net Gain Assessment. A bat survey report was also produced in 2019, outlining the results of bat surveys on several buildings within the site (The Ecology Consultancy, 2019b).

SITE CONTEXT

1.2 The proposed development site is 6.23 hectares (ha) in size and is centred on Ordnance Survey National Grid reference TQ 2859 8544. The site lies within the urban area of Kentish Town, to the south of Gordon House Road and west of Sanderson Close. It is not subject to any nature conservation designations, but it is bordered by railway lines to the north, north-east, south-west and south, which make up part of the Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve Sites of Borough Importance for Nature Conservation (SBINC grade I). The wider landscape is dominated by urban development to the west, east and south, comprising residential and industrial use, with scattered trees and amenity greenspaces. The Site of Metropolitan Importance for Nature Conservation (SMINC) of Hampstead Heath, which is a large greenspace with ponds, grassland and woodland, is situated approximately 220m to the north-west of the site.

PROPOSED DEVELOPMENT

1.3 The current development proposals involve "Outline planning permission with all matters reserved for the demolition of existing buildings and structures and redevelopment to be carried out in phases (with each phase being an independent act of development) comprising the following mix of uses: residential (Use Class C3),

residential institution (Use Class C2), industrial (Use Class B2 and/or B8), commercial floorspace (Class E), flexible commercial and Sui Generis floorspace (Use Class E and/or Sui Generis Use), Community (F1 and/or F2), Sui Generis, and cycle and vehicle parking, refuse and recycling storage, plant, highway and access improvements, amenity space, landscape and public realm improvements, and all associated works."

SCOPE OF THE REPORT

- 1.4 This report has been written to assess the potential impact of the proposed development on biodiversity, and whether the proposed plans will meet the target of a net gain for biodiversity. In line with current best practice (Natural England, 2019), this is specifically in relation to the habitats present, but also involves consideration of any populations or species associated with the habitats at the site.
- 1.5 This assessment has been completed in line with the established mitigation hierarchy (as set out in BS42020:2013 and CIEEM, 2019), whereby impacts are first avoided, then mitigated or reduced and, as a last resort, compensated for. Consideration has been made to existing habitats that will be retained and protected as part of the design process, with compensatory habitats proposed where losses are unavoidable. Recommendations for creating new habitats on site to meet the target for biodiversity net gain are provided where required.

2 Legislative, Policy and Planning Background

NATIONAL PLANNING POLICY

- 2.1 The revised National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2019) requires local authorities to contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity. To protect and enhance biodiversity and geodiversity, plans should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- 2.2 It is anticipated that the 2019-2021 Environment Bill will mandate Biodiversity Net Gain on most development projects. This is not yet in force, but is being considered by the Public Bills Committee at time of submission. The Environment Bill recommends the establishment of Nature Recovery Strategy areas by Local Planning Authorities to seek strategic improvements for biodiversity, which may be utilised to deliver biodiversity compensation for developments that cannot avoid biodiversity net loss, through the purchase of biodiversity credits (Department for Environment, Food and Rural Affairs, 2020).
- 2.3 Defra have developed a metric for assessing Biodiversity Net Gain, and published a calculator tool to standardise the approach (Natural England, 2019a). Consultations undertaken to inform the development of this metric were in favour of setting a minimum target of a 10% Biodiversity Net Gain, although this is not specified in the NPPF or Environment Bill.

LOCAL PLANNING POLICY

2.4 The new London Plan (GLA, 2021) emphasises the importance of green infrastructure and proposes that developments should incorporate elements into the design of their schemes. Policy G5 encourages Local Boroughs to develop their own 'Urban Greening Factor¹ to identify the appropriate target for urban greening, based on the proportion of surface cover that contributes to ecosystem services. In the interim, the target score is 0.4 for residential developments and 0.3 for commercial developments. Policy G6 states

¹ <u>https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan</u>

that 'development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain'.

2.5 The Camden Local Plan (Camden, 2017) includes policy on protecting and enhancing biodiversity through development proposals by incorporating urban greening, retaining and protecting features of ecological value and contributing to tree provision. Camden Local Plan Policy A3 Biodiversity is intended to support the London Biodiversity Strategy and the Camden Biodiversity Action Plan (BAP) by ensuring Camden's growth is accompanied by a significant enhancement in the borough's biodiversity. The Council aims to maximise opportunities for biodiversity in and around developments in order to deliver a net gain in biodiversity and a range of wider environmental benefits.

3 Methodology

BIODIVERSITY NET GAIN CALCULATION

- 3.1 The Biodiversity Net Gain Assessment has been based on the Biodiversity Net Gain Good Practice Principals for development (Baker *et. al.*, 2019), the Defra Technical Supplement (Natural England, 2019b) and calculated using the Defra Biodiversity Metric 2.0 Calculation Tool Beta Test (Natural England, 2019a). Using this approach, the value of a site is quantified in Biodiversity Units, calculated based on extent and quality of the habitats present.
- 3.2 Habitat biodiversity unit scores are influenced by:
 - distinctiveness² the rarity and importance of the habitat to biodiversity at a national scale;
 - condition³ the quality of a habitat at a point in time based on management, disturbance and other environmental factors;
 - strategic significance⁴ whether the location of the development and/ or off-site work has been identified locally as significant for nature; and
 - connectivity⁵ proximity of the habitat parcel to similar or related habitats.
- 3.3 These factors are attributed numerical scores and multiplied by the extent of the habitat in hectares (ha) to calculate the Biodiversity Unit score for each habitat parcel.
- 3.4 Linear habitats, including hedgerows and vegetated walls, are assessed separately to those that represent areas. Instead of area measures in ha these habitats are measured in length (kilometres). The number of units are calculated in the same way to habitats areas, multiplying the length by weighted scores for distinctiveness, condition, connectivity and strategic importance.

² Distinctiveness is automatically determined by the Biodiversity Metric 2.0 Calculation Tool for different habitat types, and allocated an appropriate weighted score.

³ The condition of the habitats has been calculated based on the condition assessment tables in Defra's Technical Appendix (Defra, 2019b), and allocated a weighted score between 1 and 3. Different condition assessment criteria are used for each broad habitat type. For certain habitat types, such as hardstanding and buildings, are allocated a distinctiveness score of 0.

⁴ Strategic importance weighted scores are between 1 and 1.15.

⁵ Natural England have developed a piece of software to determine habitat connectivity on all 'High' and 'Very High' distinctiveness habitats. All other habitats are allocated a default connectivity score of low = 1.

- 3.5 When calculating Biodiversity Units for proposed habitats, negative multipliers are implemented to account for difficulty factors associated with habitat establishment, temporal delays and off-site risk.
- 3.6 The information provided by the Phase 1 Habitat survey conducted in 2021 has been used to inform the assessment for habitats present prior to the development, and information provided by the design team and client has been used to inform the assessment of habitats proposed (SEW, 2021a,b,c). The Biodiversity Unit value for the site prior to development and the Biodiversity Unit value for the site post-development were then compared to provide an assessment of the change in unit value.

ASSUMPTIONS AND LIMITATIONS

- 3.7 Defra are making ongoing updates to the Biodiversity Net Gain Beta Test calculator tool and intend to make improvements to the metric over time. Accordingly, the calculations made in this assessment may require updates to align with any future changes to the metric and best practice standards.
- 3.8 A number of habitats to be created on site are not accounted for in the UK Habitat Classification System (UKHab) and therefore assumptions have been made as to which categories in the tool best represent those habitats (UKHab Working Group, 2018). Further detail is given in the Baseline Conditions section below.
- 3.9 Assumptions have been made as to what the condition of the proposed habitats on site will be, using a 'poor', 'moderate' or 'good' condition score, to calculate the post development units.
- 3.10 This assessment is based upon the latest illustrative scheme as a development scenario which could feasibly come forward within the parameters sought for approval (SEW, 2021a,b,c).

4 Baseline conditions and on-site compensation

EXISTING SITE – PRE-CLEARANCE

- 4.1 The update Phase 1 habitat survey conducted in May 2021 by the Ecology Consultancy confirmed that no significant changes to the habitats on site had occurred since the previous survey in 2019 (The Ecology Consultancy, 2019a).
- 4.2 The site is located near to a preferred location for biodiversity, being adjacent to the Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve (SBINC grade I), and therefore all habitats were assessed as having a Medium Strategic Significance.
- 4.3 All habitats within the site prior to development and within the proposals are of medium distinctiveness or below. In line with Natural England guidance, default connectivity scores of Low (1) have been attributed to these habitats.
- 4.4 The site consists of several industrial buildings and structures, mostly surrounded by hardstanding with small areas of tall ruderal and ephemeral vegetation on the margins of the site. There are also semi-mature scattered trees that have been planted adjacent to the boundaries of the site. These habitats are shown in Appendix 1, Figure 1. A description of dominant and notable species and the composition of each habitat is provided below.

Buildings and hardstanding

4.5 The existing buildings and areas of hardstanding on the site have negligible value to biodiversity, such that it has no distinctiveness. It is therefore unnecessary to attribute this habitat a condition, as it will not affect the overall calculations. For a detailed description of these buildings, please refer to the bat survey report (The Ecology Consultancy, 2019b).

Scattered trees

4.6 *Description:* Scattered trees had been planted on site, along the boundaries of the site, comprising Leyland cypress, sycamore, poplar species, Norway maple, cherry species, silver birch and crack willow. The trees were all semi-mature.

4.7 Assessment: The scattered trees were assessed using the Line of Trees Condition Assessment. At least a third of the trees were at or near to the expected mature height. Gaps made up less than 10% of the total length of the tree line, with no gaps more than 5m. Therefore, the tree line was attributed a moderate condition score. As the tree line was composed mainly of non-native, semi-mature species, it was attributed a distinctiveness score of low. It was also therefore assessed as having low ecological connectivity, as per the Biodiversity Metric 2.0 User Guide.

Introduced shrub

- 4.8 *Description:* There were small areas of raised planters on site, but no noteworthy species present. Several butterfly bushes were located on the edges of the site, growing alongside the boundary fence.
- 4.9 *Assessment:* Introduced shrub is allocated a fixed condition score of 1 as per the Biodiversity Metric 2.0 Technical Supplement. Therefore, no condition assessment is required. The introduced shrub has a low distinctiveness, and was therefore assessed as having low ecological connectivity, as per the Biodiversity Metric 2.0 User Guide.

Tall ruderal/Ephemeral

- 4.10 *Description:* Areas of tall ruderal/ephemeral vegetation, dominated by mixed herbaceous vegetation, and occasional grasses occurred around the boundaries of the site and on the edges of the car parks and walkways. Species present were those typically associated with enrichment, disturbance and/or waste ground including barren brome, herb-Robert, prickly sow-thistle, groundsel, bent species, cleavers, ribwort plantain, wall barley, creeping thistle, purple toadflax, colt's-foot, wood avens and goat's rue.
- 4.11 Assessment: The ephemeral vegetation was assessed using the Sparsely Vegetated Habitat Type Condition Assessment. The habitat was small and had low biodiversity value. It was created by accident through human activity but was severely degraded. The habitat is therefore allocated a condition score of poor as per the Biodiversity Metric 2.0 Technical Supplement.

Baseline Calculation

4.12 The biodiversity value of the habitats on site prior to construction (baseline) is shown in Table 4.1 below. Full details of the calculations can be found within the Biodiversity Metric 2.0 Calculation Tool spreadsheet (The Ecology Consultancy, 2021b).

Habitat	Area (ha)	Distinctiveness	Condition	Ecological Connectivity	Strategic Significance	Biodiversity Units
Urban – Developed land;	6.16	V. Low	N/A	Low	Low	0.00
sealed surface						
Sparsely vegetated land	0.06	Low	Poor	Low	Low	0.12
- Ruderal/Ephemeral						
Urban – Ground level	0.01	Low	Poor	Low	Low	0.02
planters						
Total						

Table 4.1 – Biodiversity Unit Score Prior to Development⁶ - area habitats

Table 4.2 – Biodiversity Unit Score Prior to Development –linear habitats

Hedgerow type	Length (km)	Distinctiveness	Condition	Ecological Connectivity	Strategic Significance	Biodiversity Units	
Line of Trees	0.7	Low	Moderate	Low	Medium	3.08	
Total							

⁶ Where Biodiversity Units do not add up to the exact Total score, this is due to a rounding artifact within the Biodiversity Net Gain 2.0 Calculator. Scores presented here are the same as presented in the calculator.

4.13 Accordingly, the biodiversity value of the site prior to development, in units, has been calculated as 0.14 total habitat units. In addition, the biodiversity value of the linear habitats on site prior to development are calculated as 3.08 total hedgerow units.

ENSURING BIODIVERSITY NET GAIN THROUGH ON-SITE COMPENSATION

- 4.14 The site comprised habitats of low and very low distinctiveness that are common in the local area. It is understood that none of the existing habitats on site will be retained under the current layout, other than the line of trees, which will be enhanced. In line with the principals of Biodiversity Net Gain, the proposed habitats should include those which are of a higher distinctiveness than those that have been lost.
- 4.15 The current proposals, presented in the latest illustrative masterplan provided by Studio Egret West (SEW, 2021c, Appendix 1, Figure 2), include new areas of biodiverse green roof, tree planting, woodland glade, rain gardens, flower rich planting, acid grassland, heathland, and native hedgerows.

Post-development Calculation

4.16 A calculation has been provided to determine the biodiversity value for the proposed habitat areas and lengths for linear habitats at the site, as shown in Table 4.3 and 4.4 below, details of the proposed habitats and recommendations are provided in Section 5.

Habitat Recreation	Area (ha)	Distinctiveness	Condition	Ecological Connectivity	Strategic Significance	Time delay (years)	Difficulty	Biodiversity Units
Urban – Developed land; sealed surface (hardstanding)	4.37	V.Low	N/A	Low	Low	0	Low	0.00
Heathland and shrub – Gorse scrub	0.35	Medium	Moderate	Low	Low	5	Low	2.34
Grassland – Other lowland acid grassland	0.19	Medium	Moderate	Low	Low	10	Low	1.06
Urban – extensive green roof	0.37	Medium	Moderate	Low	Low	3	Medium	1.78
Urban – Ground level planters	0.12	Low	Moderate	Low	Low	1	Low	0.46
Heathland and scrub - mixed scrub	0.24	Medium	Moderate	Low	Medium	3	Low	1.90
Urban – rain garden	0.10	Low	Moderate	Low	Low	1	Low	0.39
Urban – vegetated garden	0.06	Low	Poor	Low	Low	1	Low	0.12
Urban – amenity grassland	0.01	Low	Moderate	Low	Low	3	Low	0.04

Table 4.2 – Biodiversity Score Post-development based on current landscape plans – area habitats

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Urban – woodland	0.03	Medium	Moderate	Low	Low	27	Low	0.09
Urban – street tree	0.39	Low	Moderate	Low	Medium	27	Low	0.66
Total							8.84	

Table 4.4 – Biodiversity Score Post-development based on current landscape plans – linear habitats – Hedge enhancement

Habitat Enhanced	Length (km)	Distinctiveness movement	Condition movement	Ecological Connectivity	Strategic Significance	Time delay (years)	Difficulty	Biodiversity Units
Line of Trees	0.7	Low - Medium	Low - Moderate	Low	Medium	20	Medium	4.09
Total							4.09	

4

- 4.17 The biodiversity units provided on site by the habitat areas in the current landscaping plans is **8.84.** In addition, the biodiversity units provided on site by the linear habitat proposed to be enhanced in the current landscaping plans is **4.09**. This calculation is shown in full in the Biodiversity Metric 2.0 Calculation Tool spreadsheet (The Ecology Consultancy, 2021b).
- 4.18 As such the proposed development is predicted to result in a net gain in area habitat biodiversity of **8.70** habitat units and a net percentage change of **6211.47%**.
- 4.19 Additionally, the proposed development is predicted to result in a net gain in linear habitat biodiversity of **1.01** hedgerow units and a net percentage change of **32.86%**.

5 Discussion and recommendations

5.1 The finalised planting scheme for the proposed development will continue to be developed in detail as part of subsequent design stages. The below elements will be included within the final landscaping design and will ensure the proposed habitats reach their target condition score and together contribute to a biodiversity net gain. A Landscape Ecological Management Plan (LEMP) should be drawn up to cover the long-term maintenance of retained and newly created on-site habitats. This should form part of the contractual agreement for the future management of the site, including the outline measures set out below. This will also ensure that the habitats created on site will be locally relevant, ecologically functional and contribute to ecosystem services, where possible.

Biodiverse / Biosolar Roof

- 5.2 At the time of writing, it was understood that areas of biodiverse green roof would be included on sections of the new buildings. To demonstrate the highest feasible and viable sustainability standards in line with New London Plan Policies (GLA, 2021) and Kentish Town Planning Framework (Camden, 2020), it is recommended that a specification for a biodiverse roof be drawn up by a company with a proven track record in delivering these features in London. Any biodiverse green roof should support at least 25 plant species.
- 5.3 A biodiverse green roof would 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. Combining a biodiverse roof with PV panels (biosolar roof) would also provide further benefits, such as the cooling effect the vegetation has on the PV cells, increasing their productivity in hot weather, as well as resulting in a more efficient use of roof space.
- 5.4 The green roof should follow UK standards (GRO, 2014) and include additional habitat features such as deadwood, varying substrate depths and areas of bare rocky substrate. This will provide good habitat for a range of invertebrates and birds including London Biodiversity Action Plan (BAP) species.

5.5 It is understood that the green roofs proposed for Murphy's Yard will comprise a combination of acid grassland habitats, heathland and open mosaic habitat, all of which are local priority habitats, and well suited to rooftop conditions (SEW, 2021a,c).

Sustainable Drainage System (SuDS)

- 5.6 Areas of rain garden are proposed for the site, as part of the sites SuDS network. SuDS comprise a linked system of soft landscaping, green roofs, rain-water harvesting technologies including ponds, below ground drainage and porous surfacing which can be designed into a development to intercept and attenuate surface water and prevent flooding. Design of a SuDS would be appropriate to this development and should be considered as part of the site master plan. SuDS would also increase biodiversity, for example by providing a series of habitats for wildlife to use.
- 5.7 Relative to alternative measures, waterbodies provide high potential value to wildlife and are, therefore, recommended as a mechanism to enhance the importance of the Site for biodiversity. The creation of rainwater gardens, bird baths, reedbeds, bioswales, bioretention planters, attenuation ponds and ditches with marginal planting should be provided as part of proposals as part of the SuDS network. Any new water feature(s) should be created with naturalistic sinuous and sunken margins, with shallow edges and where possible, linked to an extended swale allowing an overflow during extended wet weather. To help establish vegetation, the pond margins and swale should be planted with marginal plants, using plug plants and a seed mix such as Emorsgate7 EM8 and EP1. Installation of a bench, interpretation board and/or pond dipping platform would allow the residents to appreciate the water feature and understand its intended purpose for biodiversity. Should there be safety concerns about open water, a post and rail fence (providing gaps for amphibians, mammals and birds to access the water) could be installed.
- 5.8 The inclusion of an effective SuDS system and ecological features such as rain gardens would help to prevent pollutant runoff onto the adjacent SINCs during periods of heavy rainfall. These features will also enhance the site for a range of wildlife including bats, birds and invertebrates and support the existing populations of wildlife in the neighbouring SINCs.

⁷ https://wildseed.co.uk/mixtures/category/wetland-and-pond

Wildlife planting

- 5.9 Current proposed landscaping plans include areas of acid grassland habitat, flower rich perennial planting, raingardens, living roofs, hedgerow creation and tree planting. Wildlife planting should be integral to the soft landscape plans and in the creation of the proposed new neighbourhood parks. The proposed planting plans should include native species and/or species of recognised wildlife value⁸. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals and continue to accommodate those already recorded at the site. Trees should be underplanted to improve structure and cover for wildlife.
- 5.10 As is proposed (SEW, 2021a,c), consideration should be given to creation of habitats which reflect the existing character of habitats found in Hampstead Heath, especially where the landscaping forms part of the proposed 'Heath Line' green corridor which will link Kentish Town to Hampstead Heath (Camden, 2020).
- 5.11 Native broadleaved woodland is a Habitat of Principal Importance (HPI), and Camden Biodiversity Action Plan (BAP) habitat. To best replicate this, woodland areas should be primarily composed of native species, and diversity of species should be high. Some feature non-natives could be included, but non-natives should make up less than 10% of cover. Fallen and standing deadwood including large dead branches/stems should be included to provide habitat for invertebrates, especially stag beetle which are on the Camden Biodiversity Action Plan⁹. When planting, a natural structure should be emulated, planting mixes of species rather than single species blocks; incorporate open spaces; and include scrubby or understorey species such as hawthorn, hazel, blackthorn, wild privet, guelder rose as appropriate to the site. Plant these along edges as well as within the main mix. Climbers can also be included to help provide a varied structure, such as honeysuckle or wild rose. Species such as bramble may come in naturally, and add to the variety of structure and habitat value.
- 5.12 Good horticultural practice should be utilised, including the use of peat-free composts, mulches and soil conditioners, native plants with local provenance and avoidance of

⁸ For example The Royal Horticultural Society (RHS) Perfect for Pollinators Scheme <u>https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators</u> and the joint RHS/Wildlife Trust's Gardening With Wildlife In Mind Database <u>http://www.joyofplants.com/wildlife/home.php</u>

⁹ https://ptes.org/wp-content/uploads/2016/11/Build-a-log-pile-for-stag-beetles.pdf

the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

- 5.13 It is recommended that green walls or trellis structures are created to provide vertical opportunities for wildlife and maximise greenery. Recommended species include hop, wild honeysuckle, jasmine, and common ivy. These species provide nectar for bumblebees and potential nest sites for house sparrow. Honeysuckle is a known plant favoured by the garden tiger moth, a London BAP species. Hop supports buttoned snout moth, a nationally declining species for which London has become a stronghold.
- 5.14 The inclusion of orchards or community growing areas within the development would also contribute to achieving Camden BAP habitats.

Native hedgerow

5.15 The design includes areas of hedgerow planting and enhancement of the tree line along the boundaries of the site. Hedgerows should comprise a mix of at least five native plant species, such as holly, hawthorn, elder, guelder rose, dogwood, yew or blackthorn. New, native, species-rich hedgerows could also be planted along other boundaries and around other areas of planting. Native hedgerows would increase the amount of cover and foraging opportunities for wildlife. Enhancement of the tree line along the railway corridors would also improve this feature as a wildlife corridor, and act as a buffer to disturbance to the SINC.

Prairie Planting

5.16 A prairie style of border planting is recommended for areas of planting beds. It is an informal planting style, rich in pollen for insects, and uses bold blocks of plants and colours, and allows grasses and flowers to self-seed and colonise. It can be used in small areas and is a low maintenance style of planting. Shade tolerant species that can be used in a prairie style planting include woodruff, bladderwort, Hebe species, lungwort and yellow archangel. Further information on prairie style planting is available from the Royal Horticultural Society^{10,11}.

¹⁰ <u>https://www.rhs.org.uk/advice/profile?pid=1025</u>

¹¹ <u>https://www.rhs.org.uk/gardens/partner-gardens/articles/prairie-style-at-home</u>

Provision of bird nesting and bat roosting opportunities

- 5.17 The provision of bird boxes would be appropriate at this site. Many different designs are available including boxes to support colonial species such as house sparrow, a Species of Principal Importance and Camden BAP species. Woodcrete bird boxes (Schwegler, 2011) are recommended as they are long lasting compared to wooden boxes, insulate occupants from extremes of temperature and condensation and are available in a broad range of designs.
- 5.18 The provision of artificial bat roosting opportunities will also be appropriate at this site. These may include bat boxes located on retained trees on the boundaries of the site, or incorporated into the design of the new buildings, adjacent to suitable foraging and commuting habitats for bats. Bat boxes should be positioned between 3-5m above ground level, facing south-east to south-west, in a location that will not be lit by artificial lighting. Models from Schwegler such as 1FF Flat Bat Box are appropriate for use on retained trees and do not require any cleaning. Integrated bat features such as Schwegler Bat Tube 1FR should be included within the designs of the new buildings, and are maintenance free. More information regarding the bat boxes are available through the Schwegler website¹².

Stag beetle loggeries

5.19 It is recommended that, where possible, such as in woodland areas, on biodiverse roofs, and hedgerows, that deadwood habitats are included on site including stag beetle loggeries¹³, created using untreated timber, to provide habitat for invertebrates and fungi on site, including stag beetle which have been recorded within 1km of the site.

¹² <u>www.schwegler-natur.de</u>

¹³ https://ptes.org/wp-content/uploads/2016/11/Build-a-log-pile-for-stag-beetles.pdf

6 References

Baker, J., Hoskin, R. and Butterworth, T. (2019) *Biodiversity Net Gain Good Practice Principles for Development.* CIRIA, London

Camden (2020). Kentish Town Planning Framework - July 2020. Available at: https://www.camden.gov.uk/kentish-town-planning-framework1 [accessed 16/05/2020].

Camden (2017). *Camden Local Plan*. Available at: <u>https://www.camden.gov.uk/documents/20142/3912524/Local+Plan+Low+Res.pdf/54bd0f</u> <u>8c-c737-b10d-b140-756e8beeae95</u> [accessed 20/05/2020]

Camden (2013). Camden Biodiversity Action Plan 2013-2018.

CIEEM (2019). *Biodiversity Net Gain, Good practice principles for development.* Chartered Institute of Ecology and Environmental Management, Winchester.

Greater London Authority (GLA) (2021). *The London Plan: The Spatial Development Strategy for Greater London*. <u>https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan</u>

Mayor of London (2002). Connecting With London's Nature – The Mayor's Biodiversity Strategy. <u>https://www.london.gov.uk/sites/default/files/biodiversity_strategy.pdf</u>

Ministry of Housing, Communities & Local Government (2019) *National Planning Policy Framework*. MHCLG. London.

Natural England (2019a). *The Biodiversity Metric 2.0. Technical Supplement Beta Version*. Available at: <u>http://publications.naturalengland.org.uk/publication/5850908674228224</u>

Natural England (2019b). *The Biodiversity Metric 2.0. User Guide Beta Version*. Available at: <u>http://publications.naturalengland.org.uk/publication/5850908674228224</u>

Studio Egret West (2021a) Murphy's Yard: Design Code

Studio Egret West (2021b) Folgate Estates Ltd, Murphy's Yard Parameter Plan. Ref: 0360-SEW-SK0059_Parameter Plan

Studio Egret West (2021c) Murphy's Yard, Illustrative Masterplan – Soft Landscape Types. Ref: 0360-SEW-ZZ-ZZ-DR-L-PL1002

The Ecology Consultancy (2019a) Murphy's Yard: Preliminary Ecological Appraisal. Report ref: 8366

The Ecology Consultancy (2019b) Murphy's Yard: Bat Survey Report. Report ref: 8366

The Ecology Consultancy (2021a) Murphy's Yard: Ecological Impact Assessment. Report ref: 5240

The Ecology Consultancy (2019b) Murphy's Yard: Biodiversity Net Gain Calculation Tool. Report ref: 5240

UK Habitat Classification Working Group (2018). *The UK Habitat Classification*. Available at: <u>http://ecountability.co.uk/ukhabworkinggroup-ukhab</u>

Appendix 1: Habitat Map

Figure 1: Baseline Habitat Survey Map ¹⁴



¹⁴ the red line presented on Figure 2 below [i.e. the illustrative masterplan figure] is the legally correct red line boundary. The red line shown in Figure 1 is indicative, and used for the purposes of habitat survey mapping. Importantly, the differences in the redline used are not material to the assessment of net gain.

Appendix 2: Proposed Landscape Plans

Figure 2: Proposed Landscaping Plans (SEW, 2021c).







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