

Appendix: Ecology

Annex 1: Letter of Validity and 2018 Preliminary Ecological Appraisal

Annex 2: Biodiversity Net Gain Note

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Annex 1: Letter of Validity and 2018 Preliminary Ecological Appraisal

Annex 2: Biodiversity Net Gain Note



Our ref: SH/TA/GM10102/006a
Your ref:

Date: 27 October 2021

Lucy Turner
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Dear Lucy

Ecological Walkover Survey

Wardell Armstrong LLP (WA) was commissioned by Trium Environmental Consulting LLP on behalf of St Thomas Bermondsey Limited (the Applicant) to undertake an updated desk study and ecological walkover survey of land bound by St. Thomas Street, Fenning Street, Vinegar Yard and Snowfields in November 2020. The site covers approximately 0.3ha and is located directly south of London Bridge train station, on the south side of the River Thames in the district of Southwark.

The survey was commissioned in order to assess whether any material changes had occurred to the ecological condition of the site since a Preliminary Ecological Appraisal (PEA) that was undertaken by WA in 2018 (see Appendix 1) as part of the Applicant's submitted planning application for redevelopment on the site in 2018 (planning reference no. 18/AP/41741). The PEA in 2018 identified no sensitive ecological receptors and no further surveys or mitigation measures were required.

Following the updated desk study and ecological walkover survey undertaken in November 2020, further amendments have been made to the scheme, resulting in a revised 'Proposed Development' (October 2021 scheme). As such, a review of the previous ecological assessments for the site has been undertaken by WA in October 2021

The proposals are for the redevelopment of the site to include the demolition of existing buildings, retention and refurbishment of the warehouse and the erection of a ground, mezzanine and 18 storey building (with plant at roof) and 3 basement levels, comprising of

café and community space within the warehouse and within the new building office, flexible medical and research and development, and flexible retail and affordable workspace, alongside cycle and disabled car parking, servicing, refuse and plant areas, public garden (including soft and hard landscaping), highway improvements and all other associated works.

Methodology

An updated desk study was received from Greenspace Information for Greater London (GIGL) via eCountability and was reviewed in November 2020. The ecological walkover survey, undertaken on 30/10/20, broadly followed the 'Extended Phase 1' methodology (Institute of Environmental Assessment (IEA), 1995 and JNCC 2010), comparing habitats assessed during the survey in 2018 with those on site in 2020.

Results

During the survey in November 2020 the two buildings within the southwest of the site were small, red brick, two-storey buildings (in use) with corrugated metal roofs. The brickwork was painted white and in good decorative order. No gaps or cavities were identified, there is poor connectivity with any natural habitat and both buildings are illuminated by spotlights/street lights. These buildings continue to offer negligible bat roost potential in October 2021 as they did in November 2020.

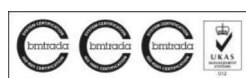
The ecological condition of the site during the survey in November 2020 was not significantly different from that recorded during the PEA in 2018. The only change was that a marquee had been installed on the area of hardstanding. This habitat continues to offer negligible ecological value and is not suitable to support any protected or notable species in October 2021 as it did in November 2020.

Three local Sites of Importance for Nature Conservation (SINCs) occur within the local vicinity of the site as identified in November 2020 and October 2021. The River Thames located approximately 455m to the north of the site and Leathermarket Gardens 150m to the south are of sufficient distance that no impacts are likely. Snowsfield Primary School Nature Garden is located approximately 40m south of the site.

The streets located between the site and closest SINC were well lit and any additional light overspill from the Proposed Development is unlikely to affect the integrity of the site.

The existing buildings between the site and the SINC are also likely to intercept light spill from the Proposed Development and the proposed greening of the site is likely to

increase the
SH/TA/GM10102/006a





ecological value of the site to invertebrates and birds, such as red listed house sparrow *Passer domesticus* and black redstart *Phoenicurus ochrurus*. It is therefore considered that no significant impacts (direct or indirect) are likely to occur due to the Proposed Development in October 2021 as it did in November 2020.

Discussion

Habitats remained broadly unchanged from those recorded in 2018 when the updated walkover survey was undertaken in November 2020. There were no receptors (designated sites, specific habitats, protected species or species of principal importance) identified on site or nearby and no adverse ecological impacts are likely to result from the Proposed Development as identified in November 2020 and October 2021. As such the conclusions of the 2018 report (Appendix 1) remain valid in light of the Proposed Development (October 2021 scheme). If works within the site commence after November 2022 an updated Ecological Assessment may be required.

Yours sincerely
for Wardell Armstrong LLP

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Appendix 1

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ST THOMAS STREET LONDON

PRELIMINARY ECOLOGICAL APPRAISAL

DECEMBER 2018

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TRIUM ENVIRONMENTAL CONSULTING LLP

ST THOMAS STREET LONDON

PRELIMINARY ECOLOGICAL APPRAISAL

DECEMBER 2018

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APPENDICES

Appendix 1 Legislation and Policy Summary

DRAWINGS	TITLE	SCALE
GM10102-001	Extended Phase 1 Habitat Results	1:1000@A3

EXECUTIVE SUMMARY

Wardell Armstrong LLP (WA) was commissioned by Trium Environmental Consulting LLP to undertake a Preliminary Ecological Appraisal (PEA) of land along St Thomas Street, to the south of the London Bridge train station. The site is dominated by areas of bare ground with active works in progress. Vegetation is absent.

The outcome of the PEA identified no sensitive ecological receptors. No further surveys or mitigation measures are required.

1 INTRODUCTION

1.1 Terms of Reference

1.1.1 Wardell Armstrong LLP (WA) was commissioned by Trium Environmental Consulting LLP to undertake a Preliminary Ecological Appraisal (PEA) of land at St Thomas St, to the south of London Bridge train station.

1.1.2 This Preliminary Ecological Appraisal (PEA) has been produced with reference to current guidelines (Chartered Institute of Ecology and Environmental Management (CIEEM 2017)) and British Standard BS 42020:2013 (BSI 2013) which involves the evaluation of the potential presence of ecological receptors and adverse effects thereon, based on Extended Phase I (Joint Nature Conservation Committee (JNCC 2010)) survey data and background desk study.

1.1.3 The purpose of the PEA is to satisfy the requirements of the National Planning Policy Framework (NPPF), identifying the likely presence of ecological receptors within or near the application site that could be subject to adverse effects arising from the proposed development. Certain species, habitats and nature conservation sites receive legislative protection which is detailed fully within Appendix 1.

1.1.4 This report also seeks to identify any requirement for further specialist survey where the initial assessment cannot be relied upon to adequately determine presence or reliably infer absence of protected species/taxa. An indicative assessment of potential adverse effects is provided, although this is not a substitute for full Ecological Impact Assessment (CIEEM 2015) and additional surveys may be required to fully inform such assessments.

1.1.5 Provisional mitigation and enhancement opportunities are also discussed, where appropriate.

1.2 Site Context

1.2.1. The study site (the site) covers approximately 0.2ha and is located directly south of the London Bridge train station, on the south side of the River Thames in the district of Southwark.

2 METHODOLOGY

2.1 Desk Study

2.1.1 The desk study was informed by a review of existing available information provided by eCountability and from available internet-based resources for a 2km search radius and from the site boundary. In addition, the search area was extended to 5km for Special Protection Area's (SPA's), Special Areas of Conservation (SAC's) and Ramsar sites. OS and satellite mapping was also used to gain contextual habitat information.

2.1.2 Specific information was sought for:

- Statutory designated sites;
- Locally designated sites;
- Ancient woodland¹;
- Protected and priority species;
- s.41 Habitats and Species;
- Local Biodiversity Action Plan (LBAP) priority habitats and species.

2.2 Extended Phase 1 Habitat Survey

2.2.1 WA carried out an Extended Phase 1 Habitat Survey of the Site on 1st October 2018. The survey was carried out by an experienced Ecologist from WA.

2.2.2 The survey broadly followed the 'Extended Phase 1' methodology (Institute of Environmental Assessment (IEA), 1995 and JNCC 2010). Each of the main habitats were classified according to the relevant criteria including vegetation composition expressed according to the DAFOR system.

2.2.3 In addition to the mapping and description of habitats, incidental observations of protected and/or notable species and the potential for such species to occur on site (and in the surrounding landscape where relevant) were also recorded onto secure digital media for mapping and data collection.

2.2.4 Broad habitats are mapped on Drawing GM10102-001 *Extended Phase 1 Habitat Survey* with appropriate references identifying features of particular note.

¹ As defined by Natural England on their Inventory of Ancient Woodlands

2.3 Nomenclature

- 2.3.1 Vascular plant names follow 'New Flora of the British Isles' (Stace, 2010) with vernacular names as provided in the Botanical Society of the British Isles website (BSBI, 2013).
- 2.3.2 All fauna names follow those on the National Biodiversity Network (NBN) Gateway (NBN, 2013).
- 2.3.3 The common and scientific name of species/taxa is provided (if available) when first mentioned in the text, with only the vernacular name referred to thereafter.

2.4 Caveat

- 2.4.1 Ecological surveys are limited by factors that affect the presence of plants and animals such as time of year, weather, migration patterns and behaviour. The survey was undertaken in October and therefore represents a valid sample of ecological evidence present on that date/season. The report is not designed, nor is it required to, present a complete inventory of flora and fauna.
- 2.4.2 The absence of desk study records is not relied upon to determine absence of a particular species. Often, the absence of records is a result of under-recording within the given search area and as such the experience of the ecologist concerned together with a range of additional factors, such as the presence or absence of potential supporting habitat, is used to infer likely presence or absence.
- 2.4.3 An indicative assessment of potential adverse effects is provided, although this is not a substitute for a full Ecological Impact Assessment.

2.5 Quality Assurance & Environmental Management

- 2.5.1 The surveys and assessments have been overseen by and the report checked and verified by a full member of Chartered Institute of Ecology and Environmental Management (CIEEM), whom is bound by its code of professional conduct.
- 2.5.2 All surveys and assessments have been undertaken with reference to the recommendations given in British Standard BS 42020, and as stated within specialist guidance, as appropriate, and are referenced separately.

3 RESULTS AND EVALUATION

3.1 Statutory and Non-Statutory Designated Sites

- 3.1.1 Desk study results for designated sites within a 2km search radius and 5km search radius for internationally designated sites are evaluated in Table 1, below.
- 3.1.2 Sites which are considered potentially sensitive to the development proposals by virtue of their supported species or habitat assemblages, the distance/ecological connectivity to the application site and the nature of the perceived impacts, are highlighted in bold text and are discussed in detail in the final sections of the report.
- 3.1.3 There were no statutory designated sites within a 5km search radius.
- 3.1.4 There were 29 non-statutory sites within a 2km search radius.
- 3.1.5 Sites for which potential adverse effects are not anticipated are excluded from further assessment.

Table 1: Designated Sites Evaluation.

Site Name and Status ²	Reason for Designation	Potential Adverse Effects
Snowsfield Primary School Nature Garden SLI 50m south	Scrub, rough grassland and a large hedge is found on this site. There are several native species on site including hazel, silver birch, holly <i>Ilex aquifolium</i> and periwinkle <i>Vinca minor</i> . The site is also known for foxglove, fennel, bluebells and snowdrops as well as a pond with water lilies. Species located on site include newts, frogs, birds and pipistrelle bats.	The site has limited ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Leathermarket Gardens & Community Park SLI 158m south	A small park located in an area lacking wildlife sites. It contains some mature trees, many young trees and shrubs creating a small woodland, and grass lawns planted with wildflower species.	The site has limited ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
River Thames and tidal tributaries (SMI)	The Thames, London's most famous natural feature, is home to many fish and	The site has no obvious ecological connectivity to the site. Works are

² LNR – Local Nature Reserve, SSSI – Site of Special Scientific Interest, SBI – Site of Borough Importance, SMI – Site of Metropolitan Importance, SLI – Site of Local Importance.


464m north	birds, creating a wildlife corridor running right across the capital.	considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
St Mary Magdalene Churchyard, Bermondsey SLI 502m south	The site hosts numerous mature trees with ivy cover, a substantial blackthorn <i>Prunus spinose</i> hedge as well as an area of roughland.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Tabard Gardens SLI 551m south west	The site is covered by closely-mown grassland with planted ornamental maple trees and a dense thicket of native shrubbery. The site is important for foraging bird species such as great tit <i>Parus major</i> , greenfinch <i>Chloris chloris</i> , goldfinch <i>Carduelis carduelis</i> and robin <i>Erithacus rubecula</i> . There is also two raised wildflower banks.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
London Wall and the wall of the Tower of London SBI (Grade II) 713m north east	The site hosts the last remaining population of London rocket <i>Sisymbrium irio</i> , a priority species within the Tower Hamlets Biodiversity Action Plan.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Dickens Square Park (Rockingham Park) SLI 848m south west	A park with a very natural quality containing woodland of sycamore <i>Acer pseudoplatanus</i> and hybrid black poplar <i>Populus x canadensis</i> with occasional hawthorn <i>Crataegus monogyna</i> and hazel <i>Corylus Avellana</i> . The site is home to some uncommon London species of bird including blackcap <i>Sylvia atricapilla</i> and green woodpecker <i>Picus viridis</i> .	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
St Katharine's Dock SLI	The site is known for Jersey cudweed <i>Gnaphalium luteoalbum</i> , which is protected as a Schedule 8 species under	The site has no obvious ecological connectivity to the site. Works are

860m north east	the Wildlife & Countryside Act. The site is used by nesting waterfowl such as tufted duck <i>Aythya fuligula</i> , coot <i>Fulica atra</i> and moorhen <i>Gallinula chloropus</i> .	considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Pepys Garden, Seething Lane and St Olave's Churchyard SLI 880m north	Two small gardens containing a number of mature trees, containing a tradition English variety of shrubs. Pepys Garden host the liverwort <i>Lunularia polymorpha</i> and St Olave's Churchyard has a varying population of mosses and liverworts growing on tombstones.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Hermitage Basin SLI 1130m north east	This small dock has vertical brick walls with abundant aquatic vegetation such as water milfoil <i>Myriophyllum sp.</i> , white water lily <i>Nymphaea alba</i> and rigid hornwort <i>Ceratophyllum demersum</i> . The site is used for foraging by grey wagtail <i>Motacilla cinerea</i> , pied wagtail <i>Motacilla alba</i> , house martin <i>Delichon urbicum</i> and sand martins <i>Riparia riparia</i> . A pair of coots nest regularly.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Victory Park and Elba Place Nature Garden SLI 1222m south west	A nature garden of mainly roughland and grassland which is long grass and moderate wildflower diversity. The site contains small areas of scrub and woodland.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Cleary Gardens SLI 1331m north west	A garden constructed on three levels containing several semi-mature trees, climbing shrubs and numerous flowering species such as wall speedwell <i>Veronica arvensis</i> , trailing bellflower <i>Campanula poscharskyana</i> and biting stonecrop <i>Sedum acre</i> . The site also has nesting house sparrow <i>Passer domesticus</i> , blue tit <i>Cyanistes caeruleus</i> and blackbirds <i>Turdus merula</i> .	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.

Swedenborg Gardens SLI 1515m north east	Habitats found at this site include acid grassland, semi-improved neutral grassland and treelines. There is also ornamental shrub planting and a wildflower meadow. The site is notable for its locally scarce plant species such as hare's-foot clover <i>Trifolium arvense</i> and extremely London rare toothed medick <i>Medicago polymorpha</i> .	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Pinchin Street Disused Railway SBI (Grade II) 1540m north east	The site contains a large open mosaic of habitats, namely wildflowers, such as hawkweed oxtongue <i>Picris hieracioides</i> , likely to be of value to invertebrates and birds.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
St Paul's Cathedral gardens SLI 1545m north west	The site contains a high abundance of mature trees including London plane <i>Platanus x hispanica</i> and common lime <i>ilia x europaea</i> and trees with biblical associations such as Judas tree <i>Cercis siliquastrum</i> . There is also substantial shrubbery with berry sources for foraging birds and flower beds providing a nectar source.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
St Botolph's Bishopsgate Church Grounds SLI 1550m north	The site is host to a large number of trees, hedges and tall shrubbery as well as a small pond. This includes undisturbed habitat for the blackbird and blue tit breeding on the site.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Surrey Square Park SLI 1580m south	The park is mainly rough grassland with wildflower species, native hedging and a chalk bank, surrounded by scrub and few scattered trees. The site is notable for its flora and invertebrate diversity.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.

Finsbury Circus SLI 1677m north	The oldest public park in London, it follows a traditional formal layout with mature trees and shrubbery with flower beds and grass lawns. Most notably, the site hosts the oldest pagoda tree <i>Sophora japonica</i> in London. The site has a large population of nesting blackbirds and foraging blue tits.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Aldermanbury Gardens SLI 1680m north	The site contains tombstones and old stone walls which support uncommon species in London such as maidenhair spleenwort <i>Asplenium trichomanes</i> , black spleenwort <i>Asplenium adiantum-nigrum</i> and male fern <i>Dryopteris fleix-mas</i> . Also present are ornamental trees, several flower beds and nesting birds.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Waterloo Millenium Green SLI 1772m west	A fairly recent greenspace, it hosts a range of wildlife habitats including a pond and wildflower meadow. The pond contains a range of species including lesser reedmace <i>Typha angustifolia</i> , water mint <i>Mentha aquatica</i> and marsh-marigold <i>Caltha palustris</i> . It is also surrounded by flower beds and shrubbery. The wildflower meadow contains a range of species attracting a large population of invertebrates, specifically the large red damselfly <i>Pyrrhosoma nymphula</i> .	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
St George-in-the-East Church Gardens SLI 1819m north east	The site comprises a large area of amenity grassland with scattered mature trees, several small meadows, and exotic shrub beds located around the periphery of the site. The small meadows contain well established wildflower species and are home to Essex skipper butterflies and Roesel's bush crickets. There trees provide optimal habitat for bird with the meadows providing optimal invertebrate habitat.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Roman Wall, Noble Street SLI	A remaining wall and corner of a Roman fort, colonised by wild plants such as Oxford ragwort <i>Senecio squalidus</i> , wavy bittercress <i>Cardamine flexuosa</i> and male	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a

1820m north west	fern. The site also has damp grassland containing ivy <i>Hedera helix</i> wall cover wild flowers, tall herbs and buddleia <i>Buddleja davidii</i> and bramble <i>Rubus futicosus</i> scrub. The sites hosts breeding blackbirds and holly blue <i>Celastrina argiolus</i> butterflies.	significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Geraldine Mary Harmsworth Park SLI 1955m south west	The site is one of the largest openspace's of the Borough. There are numerous mature London plane trees as well as a white mulberry <i>Morus alba</i> . There is also diversity of native tree species, managed grassland for wildflower species including the London rare hair buttercup <i>Ranunculus sardous</i> . There is a small pond surrounded by herbaceous species providing a large nectar source.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.
Temple Gardens SBI (Grade II) 2000m north west	One of the largest open spaces in the City, the Temple Gardens have a number of features of wildlife value and are home to a good range of birds.	The site has no obvious ecological connectivity to the site. Works are considered unlikely to have a significant effect, either directly or indirectly, upon the conservation value of this habitat type.

Table 2: Habitat Description and Evaluation	
Phase 1 Habitats	
<p>Bare Ground/Active Site</p> <p>The entirety of the site within the boundaries was bare ground/active demolition site. The majority of this area was used for storing of materials and site equipment. A small area in the east of the site was an active site for demolition works.</p>	

3.2 Habitats

- 3.2.1 All habitats within the Site are described in Table 2. The conservation value and sensitivity of habitats in relation to the proposed works is provided.
- 3.2.2 Habitats which could be subject to adverse effects are indicated with bold text and are discussed in Section 5 *Discussions and Recommendations*. Habitats for which potential adverse effects are not anticipated are excluded from further assessment.
- 3.2.3 The location and extent of habitats is shown on Drawing GM10102-001 *Extended Phase 1 Habitat Survey*.

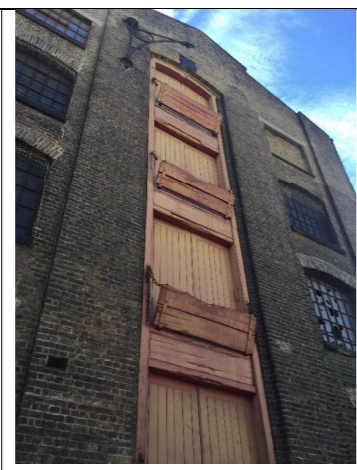
<p>Buildings There were two buildings which formed part of the boundary of the site. One in the east/south east corner of the site and one in the south of the site.</p>			<p>x</p>	<p>x</p> <p>Buildings are a common man-made habitat and is of little intrinsic ecological value.</p>
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Table 2: Habitat Description and Evaluation				s.41	LBAP	Potential Adverse Effects
Phase 1 Habitats						
						

Table 2: Habitat Description and Evaluation			
Phase 1 Habitats	s.41	LBAP	Potential Adverse Effects
<p>Timber Board Boundary The majority of the site has a timber board boundary blocking off the site.</p> 	x	x	<p>Timber board boundary is a common man-made habitat and is of no ecological value.</p>

Table 2: Habitat Description and Evaluation			
Phase 1 Habitats	s.41	LBAP	Potential Adverse Effects
<p>Stone Wall A stone wall of approximately 4-5m high and 12m wide was located in the east of the site and formed part of the site boundary. The wall was blocked from view by scaffolding.</p> 	x	x	<p>Stone walls are a common man-made habitat and are of little ecological value.</p>

3.3 Species

3.3.1 Observations and/or evidence of the following protected species were recorded during the survey and are described below:

Birds

3.3.2 All birds recorded during the survey are summarised in Table 4 below together with a preliminary assessment of potential adverse effects arising from the development. Species for which adverse effects are predicted are indicated in bold text and are discussed in more detail in the discussion section.

3.3.3 All nesting birds are discussed in the final section given the general legislative provisions relating to the protection of active nests.

Table 4: Bird Species Recorded				
Common name	Latin name	Status ³	Supporting Habitat	Potential Adverse Effects
Feral Pigeon	<i>Columba livia domestica</i>		Scattered trees, ornamental planters and urban structures.	Species is common and widespread, and the proposed works will be temporary and cause only minimal impact to the supporting habitat.

³ S1 – Schedule 1 Wildlife and Countryside Act, A1 – Annex 1 EU Birds Directive, RL - Birds of Conservation Concern 'red list', AL - Birds of Conservation Concern 'amber list', s.41- species listed under section 41 of the NERC Act as species of principal importance

4 ECOLOGICAL EVALUATION

4.1.1 Protected and NERC s.41 Priority species are evaluated in order to identify potential adverse effects in Table 5 below, based on the following criteria:

- Desk study records;
- Evidence found during the survey;
- Presence, extent, quality and viability of supporting on-site habitat;
- Ecological connectivity to viable off-site habitats; and
- Perceived impacts of habitat loss/impact to individuals in relation to proposals.

4.1.2 Species for which adverse effects are predicted are indicated in bold text and are discussed in more detail in the Discussion and Recommendations section. Species/taxa for which potential adverse effects are not anticipated are excluded from further assessment

Table 5: Species Evaluation				
Receptor	Desk Study Record	Status ⁴	Supporting Habitat	Potential Adverse Effects
Bats <i>Chiroptera</i>	Closest record of bat is 730m north.	EPS, WCA, s.41,	No suitable bat roosting habitat is present on site.	Species is likely to be absent and the works entirely avoid supporting habitat.
Badger <i>Meles meles</i>	No records.	BA	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
Brown hare <i>Lepus europaeus</i>	No records.	s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
European hedgehog <i>Erinaceus europaeus</i>	✓	s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
Otter <i>Lutra lutra</i>	No records.	EPS, WCA, s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
Water vole <i>Arvicola amphibius</i>	No records.	WCA, s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
Reptiles	✓	WCA, s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
Great crested newt <i>Triturus cristatus</i>	No records.	EPS, WCA, s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.
Common toad <i>Bufo bufo</i>	No records.	s.41	No supporting habitat	Species is likely to be absent and the works entirely avoid supporting habitat.

⁴ EPS – European Protected Species, WCA – Wildlife and Countryside Act, A1 – Annex 1 (Birds Directive), A2 – Annex 2 (Habitats Directive), BA – Protection of Badgers Act, s.41- species listed under section 41 of the NERC Act as species of principal importance, BoCC – Birds of Conservation Concern.

Table 5: Species Evaluation				
Receptor	Desk Study Record	Status ⁴	Supporting Habitat	Potential Adverse Effects
Nesting birds (general)	There were records of Section 41 species such as house sparrow <i>Passer domesticus</i> and hen harrier <i>Circus cyaneus</i> , Schedule 1 such as black redstart <i>Phoenicurus ochrurus</i> and red kite <i>Milvus milvus</i> and Annex 1 species including peregrine falcon <i>Falco peregrinus</i> and sandwich tern <i>Sterna sandvicensis</i> .	s.41, WCA BoCC, A1	Minimal supporting nesting habitat provided by the buildings on site boundary.	Nesting birds are likely to be absent due to minimal supporting habitat recorded on site and levels of disturbance on site.
Black Redstart	The closest record of black redstart was 278m north east.	WCA	No supporting habitat	Species is likely to be absent due to the lack of supporting habitat recorded on site, therefore they are not considered to be a constraint to the proposed development.
Protected or notable invertebrates	Closest record of notable species was of stag beetle, 48m west.	A2, s.41	No supporting habitat	Species is likely to be absent due to the lack of supporting habitat recorded on site, therefore they are not considered to be a constraint to the proposed development.

5 DISCUSSION AND RECOMMENDATIONS

- 5.1.1 There were no designated sites, specific habitats, protected species or species of principal importance (receptors) identified on site or nearby as being subject to potential adverse effects.
- 5.1.2 There were 29 non-statutory sites located within a 2km radius of the proposed development, but none had any obvious ecological connectivity to the site and unlikely to be subjected to any adverse effects from the proposed development.
- 5.1.3 This preliminary ecological appraisal can be used in support of a planning application as no potential constraints have been identified.
- 5.1.4 In the unlikely occurrence of a protected species or habitat being identified on site, all works must stop immediately, and advice sought from a suitably qualified ecologist.

5.2 Ecological Enhancement Measures

- 5.2.1 Enhancements in line with the NPPF could include the following measures, to promote a net benefit to biodiversity following the completion of the development.
- At least 10 integrated 'woodcrete' swift boxes⁵ could be installed under the eaves of the multi-storey building. As swifts typically nest in the upper elevations of tall buildings the access slots for the boxes should ideally be placed at maximum height, and on a range of elevations so that varied climatic conditions are available. The exact locations and designs should be specified by a suitably qualified ecologist prior to the finalisation of detailed design. These will not need to be accessible and would be left undisturbed once installed.
 - In addition, at least 10 'woodcrete' house sparrow terraces⁶ could be installed, where possible, under the of the two-storey building to provide suitable nesting opportunities for the species. As for swift, house sparrow populations have declined considerably in recent years and as lack of available nesting opportunities may be a contributing factor, such enhancements are considered worthy, especially for species which are associated with urban environments.

⁵<https://www.nhbs.com/browse/search?q=swift&qtview=162186>

⁶https://www.nhbs.com/browse/search?q=sparrow%20terrace&hPP=30&idx=titles&p=0&is_v=1&qtview=174850

- 5.2.2 Enhancement of vegetation on the development could include the planting of small native tree species such as birch *Betula sp.*, oak *Quercus sp.*, wild service *Sorbus torminalis*, wild cherry *Prunus avium* or spindle *Euonymus europaeus* and species such as burnet rose *Rosa spinosissima*, butcher's broom *Ruscus aculeatus* or wild privet *Ligustrum vulgare* in the ornamental planters at ground level and on the roof terraces. These species are fruit bearing and flowering species, providing a suitable food source for foraging birds and invertebrates. The planters should also include herbaceous species, selected ideally from native stock and/or from species which are known to provide nectar resources to bees, butterflies and other insects. In addition, small log piles could be provided, where possible, within the vegetation as habitat for invertebrates such as the stag beetle.
- 5.2.3 Installation of sensitive lighting on the development could be used to avoid deterring any wildlife such as bats. This could include the use of low-pressure sodium lights, fitting lights with UV filters and directing light to where it's needed to remove light spillage across larger areas or vegetation.

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APPENDICES

Appendix 1 – Legislation and Policy Summary

Legislation for Habitats/Sites

Designated Site/Habitat	Status
Ramsar Sites	Ramsar Sites are wetlands of international importance designated following The Ramsar Convention. RAMSAR sites have the same level of protection as SSSIs under the Wildlife and Countryside Act 1981 (as amended).
SPA (Special Protection Areas)	SPAs are classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC), the Birds Directive. They are they seek to protect the habitats of rare and vulnerable birds, listed in Annex I of the Birds Directive, and for regularly occurring migratory species. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 implement the Birds Directive in the UK.
SAC (Special Areas for Conservation)	SACs are strictly protected areas which represent typical European Union of habitats and (non-bird) species listed in Annexes I and II of the EC Habitats Directive. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 implement the Habitats Directive in the UK.
SSSI (Sites of Special Scientific Interest)	SSSIs protect the best examples of the UK's flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were renotified under the Wildlife and Countryside Act 1981 (as amended). Modified provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000.
NNR (National Nature Reserves)	NNRs are examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. NNRs are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). Legal protection of NNRs is provided under The Wildlife and Countryside Act 1981 (as amended).
Hedgerows	All hedgerows are protected by the Hedgerows Regulations 1997, under which it is an offence to remove or destroy certain hedgerows without planning consent or permission from the

Designated Site/Habitat	Status
	Local Planning Authority. These regulations do not apply to any hedgerow within the curtilage of, or marking the boundary of the curtilage of, a dwelling house.
LNR (Local Nature Reserves)	Designated by the National Parks and Access to the Countryside Act 1949, LNRs may be declared for nature conservation by local authorities after consultation with the relevant statutory nature conservation agency. Legal protection of LNRs is provided under The Wildlife and Countryside Act 1981 (as amended).

Legislation for Species

Species	Legal Status
<i>European Legislation</i>	
Creeping Marshwort, Early Gentian, Fen Orchid, Floating-leaved Water Plantain, Killaney Fern, Lady's Slipper, Shore Dock, Slender Naiad, Yellow Marsh Saxifrage	Under the Conservation of Habitats and Species Regulations 2017 (and as amended), it is illegal to deliberately pick, collect, uproot or destroy any such species.
Bats, Dormouse, Otter, Wild Cat, Great Crested Newt, Natterjack Toad, Sand Lizard, Smooth Snake, Large Blue Butterfly	<p>These animals and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2017 (and as amended), which makes it illegal to:</p> <ul style="list-style-type: none"> • Deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs; • Deliberately disturb⁷ such an animal; and • Damage or destroy a breeding site or resting place of such an animal. <p>European Protected Species (EPS) licenses can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed, namely:</p>

⁷ Under the Conservation Regulations, disturbance of protected animals includes in particular any disturbance which is likely to: (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young or to hibernate or migrate; (ii) significantly affect the local distribution or abundance of the species in question.

Species	Legal Status
	<ul style="list-style-type: none"> The development is for reasons of overriding public interest; There is no satisfactory alternative; and The favourable conservation status of the species concerned will be maintained and/or enhanced. <p>Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a duty to 'have regard to the requirements of the EC Habitats Directive' i.e. LPA's must consider the above 3 'tests' when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations.</p>
<i>Domestic (UK) Legislations</i>	
Bats, Dormouse, Great Crested Newt, Heath Fritillary, High Brown Fritillary, Large Blue, Marsh Fritillary, Natterjack Toad, Pine Martin, Otter, Red Squirrel, Sand Lizard, Smooth Snake, Swallowtail, Water Vole, Wildcat	<p>These animals receive full protection under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to certain exceptions) to:</p> <ul style="list-style-type: none"> Intentionally kill, injure or take any such animal; Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.
Adder, Common Lizard, Grass Snake, Slow Worm, White-clawed Crayfish	<p>These animals receive partial protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which provide protection against intentional killing or injury of any such animal.</p>
Nesting Birds	<p>All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to exceptions) to:</p> <ul style="list-style-type: none"> Intentionally kill, injure or take any wild bird; Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.
WCA Schedule 1 listed Birds	<p>Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (and as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to:</p> <ul style="list-style-type: none"> Intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.

Species	Legal Status
Badgers	<p>The Protection of Badgers Act 1992 makes it illegal to wilfully kill or injure a Badger, or attempt to do so and to intentionally or recklessly interfere with a Badger sett. This includes:</p> <ul style="list-style-type: none"> damaging or destroying an active sett; obstructing access to a sett; and disturbing a Badger while it is occupying a sett. <p>Licences can be granted to permit sett closure and/or disturbance between July and November inclusive (i.e. outside the sow pregnancy/birth period).</p>
Wild Mammals	<p>The Wild Mammals (Protection) Act 1996 provides legal protection to all wild mammals (as defined by the act) against the following actions: mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, drown, crush, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.</p>
<i>Invasive Species</i>	
WCA Schedule 9 listed animals (Part 1) and plants (part 2)	<p>Certain species of plants and animals that do not naturally occur in Great Britain have become established in the wild and represent a threat to the natural fauna and flora. Section 14 of the Wildlife & Countryside Act prohibits the release of any animal species that are:</p> <p><i>"not ordinarily resident in and is not a regular visitor to Great Britain in a wild state"</i></p>

Policy Summary

Section 40 of the Natural Environment and Rural Communities (NERC) Act imposes a legal duty on Planning Authorities to 'have regard' to the conservation of biodiversity when considering planning applications.

Section 41 of the NERC Act requires the Secretary of State to publish a list of species and habitats of principal importance for conserving biodiversity in the UK. Such Biodiversity Action Plan (BAP) Habitats and Species (2007) do not offer the species any specific protection but help to highlight the species importance at a national level. This list is used by Local Planning Authorities to identify the species and habitats that should be afforded priority when applying the requirements of the National Planning Policy Framework (NPPF).

The NPPF underpins the Government's planning policies for England and how these are to be applied. The central theme of the NPPF is a presumption in favour of sustainable development. This presumption does not apply where development requiring Appropriate

Assessment under the Birds or Habitats Directives is being considered, planned or determined.

The NPPF underpins the Government's planning policies for England and how these are to be applied.

The NPPF states:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

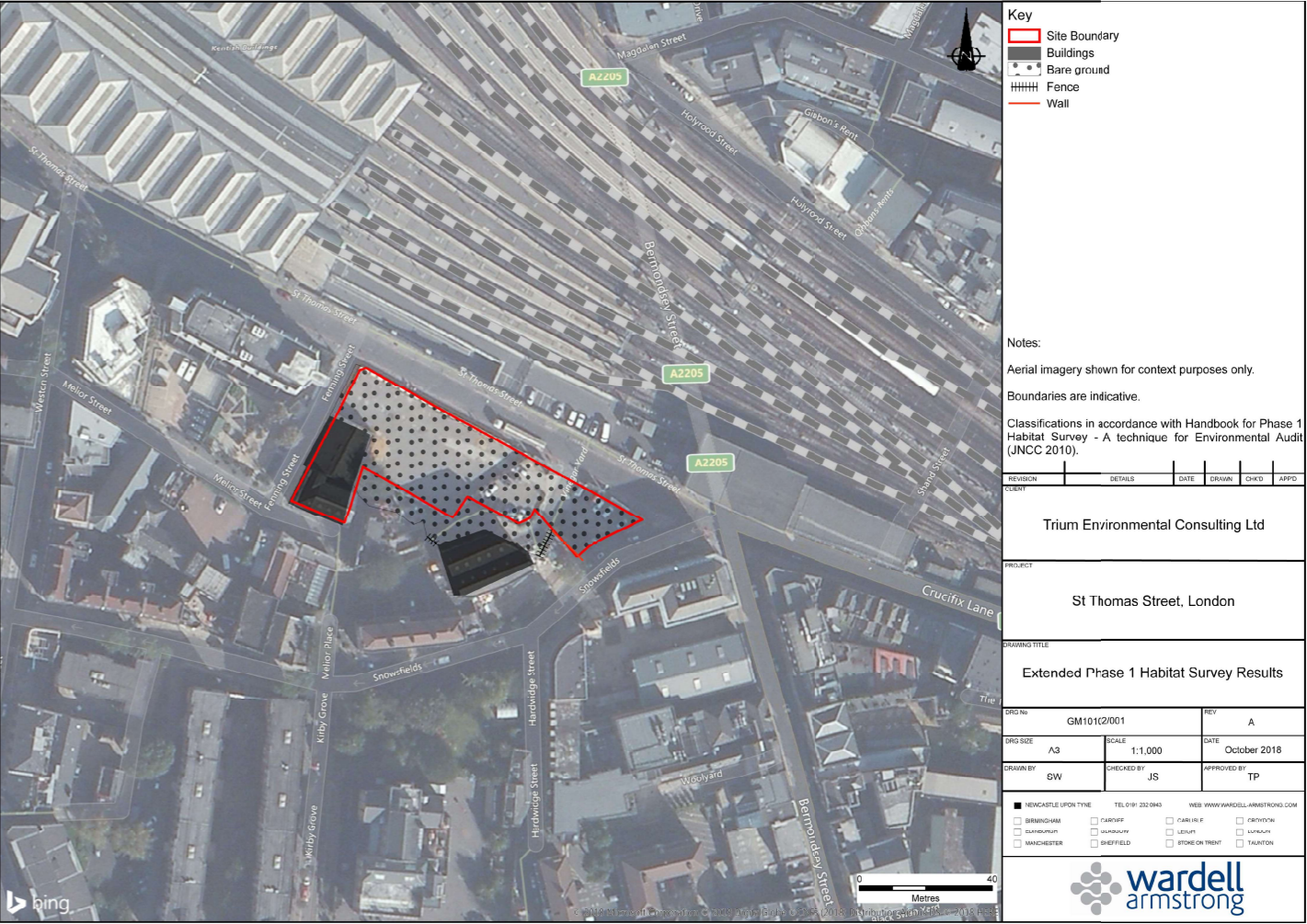
- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;;
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵⁸ and a suitable compensation strategy exists; and;
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity;
- The following should be given the same protection as habitats sites:
 - a) potential Special Protection Areas and possible Special Areas of Conservation;
 - b) listed or proposed Ramsar sites; and
 - c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

The NPPF requires the Planning Authority to have a responsibility to promote the preservation, restoration and re-creation of priority habitats, ecological networks and the

protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan. In addition, the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

DRAWINGS



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Appendix: Ecology

Annex 1: Letter of Validity and 2018 Preliminary Ecological Appraisal

Annex 2: Biodiversity Net Gain Note

PROJECT:	Vinegar Yard, London
SUBJECT:	Preliminary Biodiversity Offsetting Assessment
NOTE REF:	GM10102-005c
DATE:	01-11-21
PREPARED BY:	James Richardson (Associate Director) and Tosha Allen (Associate Director)
REVIEWED BY:	Simon Holden (Technical Director)

EXECUTIVE SUMMARY

This Preliminary Biodiversity Offsetting Assessment has been informed by baseline data collected during an Extended Phase 1 Habitat Survey in November 2020 and the Public Realm and Landscaping Strategy by Spacehub (including landscape drawings 8350-PL-GA-101-P, 8350-PL-GA-102-P and 8350-PL-UGF-101) for a mixed-use development at Vinegar Yard, St Thomas Street, London.

The site consists of hardstanding and is currently occupied by two buildings in the southwest portion of the site. The hardstanding was occupied during the most recent survey in November 2020 by temporary structures such as marquees and tents as part of a temporary market use and continues to be used. Four trees (G1 and T4 on plan GM10102-002) are located within the Site along the boundaries, however these were not recorded during the Phase 1 Habitat Survey in November 2020 due to being excluded by the Site hoarding.

The proposed development would result in a net gain for biodiversity. Proportionate and achievable recommendations for habitat retention, enhancement and creation have been made to enable the development to comply with national planning policy (NPPF, 2021) which requires a net gain in biodiversity, and recommendations have been incorporated into the landscape plans.

1 INTRODUCTION

This preliminary Biodiversity Offsetting Assessment (BOA) has been prepared by Wardell Armstrong LLP (WA) for Trium Environmental Consulting LLP on behalf of St Thomas Bermondsey Limited (the Applicant).

The proposals are for the redevelopment of the site to include the demolition of existing buildings, retention and refurbishment of the warehouse and the erection of a ground, mezzanine and 18 storey building (with plant at roof) and 3 basement levels, comprising of café and community space within the warehouse and within the new building office, flexible medical and research and development, and flexible retail and affordable workspace, alongside cycle and disabled car parking, servicing, refuse and plant areas, public garden (including soft and hard landscaping), highway improvements and all other associated works.

This Technical Note provides a BOA for the site to demonstrate its ecological value prior to development, and the likely ecological value following development, based on the Design & Access Statement and associated drawings by Spacehub.

2 BIODIVERSITY OFFSETTING ASSESSMENT (BOA)

A BOA has been undertaken for the site using The Biodiversity Metric 2.0 – Calculation Tool-Beta Test December 2019 Update. The Design & Access Statement provides an indicative plant palette and as such the proposals may be adapted during detailed design. As such provisional calculations have been made in order to inform the BOA, based on the following assumptions:

Pre-development

- The condition and extent of habitats recorded during the Phase 1 Habitat survey in 2018 has not substantially changed as confirmed by the update ecological walkover undertaken in November 2020 and continue to be valid in light of the proposed development (October 2021 scheme). Conditions are assumed to be:
 - Buildings and hardstanding are of 'N/A/Other' condition;
 - Trees are of 'Moderate' condition.

The ecological baseline for the site is therefore assessed as 0.0018 habitat units, 0 hedgerow and 0 river units.

Post-development

Because the site baseline is 0.01 habitat units due to the lack of vegetated habitats present, any new habitat provided in the landscape scheme will result in a net gain of habitat units.

In this regard, the scheme proposes roof terrace planters containing shrubs and herbaceous planting, with ground level planting, additional street trees, and an area of species rich grassland. One tree is proposed to be removed due to its poor condition. This tree, a tree-of-heaven *Ailanthus altissima* is also listed on the London Invasive Species Initiative (LISL) which recommends the co-ordinated removal of this species across the capital and as such this can be considered to add to the positive change in biodiversity value of the site.

The site post-development would deliver a total of **+0.33 habitat units and 4552.41% net gain.**

Figure 1 below illustrates the 'headline results' of the BOA.

Figure 1: BOA Headline Results

On-site baseline	Habitat units	0.01
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	0.33
	Hedgerow units	0.00
	River units	0.00
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	Habitat units	0.33
	Hedgerow units	0.00
	River units	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	Habitat units	4552.41%
	Hedgerow units	0.00%
	River units	0.00%

3 ECOLOGICAL ENHANCEMENTS AND RECOMMENDATIONS

Recommendations including wildlife-friendly ornamental planting and tree species were made to the design team via email on 09-11-20.

The following landscape features have been included within the landscape scheme, in order to achieve biodiversity net gain at the site:

- Street trees and a new garden area at ground level containing a mixture of native, European and exotic trees, and herbaceous planting, including a green wall.
- Roof level planting of mostly ornamental species, many of which have known wildlife value such as *Eryngium*, *Achillea*, *Vinca*, *Salvia*, *Heuchera* and *Thymus*.

Additional recommendations were made to the design team via email on 09-11-20 which can be incorporated at detailed design:

- Inclusion of solitary bee boxes near planting, and house sparrow boxes either integrated into the façade or attached to the façade near planting, up to level 4/5 if possible. These recommendations would not affect the net gain score but would provide additional ecological enhancements.

4 CONCLUSIONS

The landscape proposals suggest the development (October 2021 scheme) would result in a **net gain of +0.33 habitat units and 4552.41% net gain.**

Due to the limited existing habitats on site, the proposals will result in a net gain for biodiversity. The Design & Access Statement also gives an indicative Urban Greening factor of 0.31.

It is likely that the landscaping proposals for the site will evolve over time, but as long as the above ecological enhancements and general area of new landscape remain broadly similar, a net gain in biodiversity shall be achieved.

