

Kentish Town UK Office Propco Limited
Ecological Services

BREEAM Ecology and Land Use Assessment
Highgate Studios, Camden



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Authored by:	JB	Consultant Ecologist	23/03/2023
Reviewed by:	JM	Assistant Ecologist	23/03/2023
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Executive Summary

AEIL was commissioned by Trium Environmental Consulting LLP, on behalf of Kentish Town UK Office Propco Limited (the Applicant), to undertake an assessment of the land use and ecology BREEAM credits available for the Highgate Studios, Camden.

The site has been assessed under SD5078: BREEAM UK New Construction 2018. This BREEAM report will be used to inform the final detailed design of the Proposed Development.

The application site is located at Highgate Studios, 53-79 Highgate Rd, London, NW5 1TL, within Camden, on the western side of Highgate Road, bounded by Sanderson Close to the north, the Murphy's Yard site to the west and Carker's Lane to the south. The Site falls within the Kentish Town Industrial Area and varies between 4-5 storeys in height, comprising a self-contained café and flexible uses as either office, nursery or retail.

The site area is approximately 1.1 hectares (ha) (11,030 m²) and is currently occupied by a large, shared office complex, a Pure Gym, a bar/restaurant (Never For Ever), a raised storey car park and a ground level car park.

The Proposed Development will include the demolition of existing buildings and structures at Plot A and Plot F and erection of a 7-storey building at Plot A and 4-storey building at Plot F; part demolition of the basement at Plot G in connection with erection of a new building at Plot F and part demolition of the basement at Plot D in connection with the extension to Plot E; erection of extensions at Plot B, E and J on the existing buildings; roof extension of Plot I; external refurbishment of the existing buildings at Plot C and D; demolition of existing security structure and replacement with a new entrance pavilion, with cycle parking, hard and soft landscaping and associated works and plant; to provide Class E (g) use plus a range of other supporting and ancillary uses.

A field survey in the form of an 'extended' Phase 1 habitat survey was undertaken by Joanna Meredith, an ecologist with over 5-year experience, supported by Jamie Walker a graduate ecologist on 21st September 2022. This Report can be used to guide site design to achieve credits under BREEAM issues LE01, LE02, LE03, LE04 and LE05. The credits are as follows:

- LE01 - Site selection;
- LE02 - Ecological risks and opportunities;
- LE03 - Managing Impacts on ecology;
- LE04 - Ecological change and enhancement; and
- LE05 - Long term ecological management and maintenance.

A summary of the credits likely achieved for each plot are found in Table 1-1.

Table 1-1: Summary of Credits

Credit	Total Credits	Achievable Credits
LE01	2	2
LE02	2	2+1
LE03	3	3
LE04	4+1	4+1
LE05	2	2
Total	14	15

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1 Introduction

1.1.1 This BREEAM Ecology Report has been prepared by AEIL for Trium Environmental Consulting LLP and the applicant Kentish Town UK Office Propco Limited, in support of an application for planning permission for the redevelopment of Highgate Studios, Camden ('the site').

1.1.2 The report is focussed towards specific BREEAM Land use and Ecology Credits, LE01, LE02, LE03, LE04 and LE05. This report has been undertaken using BREEAM 2018 criteria for New Construction (2018). The credits are as follows:

- LE01 - Site selection;
- LE02 - Ecological risks and opportunities;
- LE03 - Managing Impacts on ecology;
- LE04 - Ecological change and enhancement; and
- LE05 - Long term ecological management and maintenance.

1.2 Site Description

1.2.1 The application site is located at Highgate Studios, 53-79 Highgate Rd, London, NW5 1TL, within Camden, on the western side of Highgate Road, bounded by Sanderson Close to the north, the Murphy's Yard site to the west and Carker's Lane to the south. The Site falls within the Kentish Town Industrial Area and varies between 4-5 storeys in height, comprising a self-contained café and flexible uses as either office, nursery or retail..

1.3 Proposed Works

1.3.1 The Proposed Development will include the demolition of existing buildings and structures at Plot A and Plot F and erection of a 7-storey building at Plot A and 4-storey building at Plot F; part demolition of the basement at Plot G in connection with erection of a new building at Plot F and part demolition of the basement at Plot D in connection with the extension to Plot E; erection of extensions at Plot B, E and J on the existing buildings; roof extension of Plot I; external refurbishment of the existing buildings at Plot C and D; demolition of existing security structure and replacement with a new entrance pavilion, with cycle parking, hard and soft landscaping and associated works and plant; to provide Class E (g) use plus a range of other supporting and ancillary uses.

1.4 Quality Assurance

1.4.1 All lead AEIL's ecologists are members of (at the appropriate level) the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct when undertaking ecological work. This report was reviewed by a Suitably Qualified Ecologist (Laura Cobden BSc (Hons) MCIEEM). Laura has held full membership of CIEEM since 2015.

2 Ecological characteristics of the site

2.1 Desk Study

- 2.1.1 The Zone of Influence (Zoi) is the area over which the ecological features identified may be subject to significant effects because of the Proposed Development. These will vary between ecological receptors.
- 2.1.2 An ecological desk study was undertaken to determine the presence of any non-statutory designated sites for nature conservation, habitats of conservation importance and protected and notable species that occur within 1 kilometre (km) of the site.
- 2.1.3 For International designated and National sites, the search buffer was extended to 5km and 2km respectively. Due to the site's location within a heavily urban area and lack of ecological connectivity to the site, 1km was deemed an appropriate distance for the data search (with the exception of statutory designated sites). Further data was obtained from Greenspace information for Greater London (GiGL) and the Multi-Agency Geographic Information for the Countryside (MAGIC) website.
- 2.1.4 Three sources were consulted for this desk study:
- Datasets from The Multi-Agency Geographic Information for the Countryside – MAGIC;
 - Greenspace information for Greater London (GiGL) to establish designated sites and protected species within 1km of the site; and
 - Aerial imagery to identify surrounding vegetation.

Statutory designated sites

- 2.1.5 Statutory site designations include the following: Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar sites, Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR) and Local Nature Reserve (LNR).
- 2.1.6 A desk-based search shows that there is one site with European or National statutory designation within the 5km of the site and two Local Nature Reserves (LNRs) within 2km:
- Hampstead Heath Woods (SSSI) - 2km north-west of the site;
 - Belsize Wood (LNR) - 1.2km west of the site; and
 - Adelaide (LNR) - 1.6km south-west of the site.

Non-statutory designated sites

- 2.1.7 A desk-based search shows that there are six Sites of Importance for Nature Conservation (SINCs) within 1km of the site.

2.2 Ecological Walkover Survey

- 2.2.1 A field survey in the form of an 'extended' Phase 1 habitat survey was undertaken by Joanna Meredith, an ecologist with over 5-year experience, supported by Jamie Walker a graduate ecologist on 21st September 2022.
- 2.2.2 The site is in a highly urban area and the habitats on the site were of low ecological value.

2.2.3 The site was considered to have low potential for protected and notable species. The ecological walkover survey identified negligible potential for roosting bats and low potential for nesting birds.

2.2.4 Habitats found on site included:

- Buildings/hardstanding
- Ornamental planting
- Scattered trees

2.2.5 The presence of Ecological Features within the Zone of Influence (Zol) of the Proposed Development, and an evaluation of their importance based on the findings of the Desk Study, extended Phase 1 habitat survey is provided below in Table 2-1.

Table 2-1: Ecological Features and Rationale for Further Assessment

Feature	Likelihood of Occurrence	Rationale
Designated Sites – Statutory & Non-Statutory and Priority Habitats		
Designated sites and Priority Habitat	Absent (within site) Present (within search area)	There are designated sites and priority habitats within the Zol of the development, but no sites are located within the construction boundary. The nearest site is located 50m (non-statutory) - Kentish Town City Farm, Gospel Oak Railsides and Mark Fitzpatrick Nature Reserve SBINC.
On-Site Habitats		
Scattered trees	Present	There is one tree present within the development site. These are not suitable for roosting bats but offer other value to local wildlife.
Mammals		
Bats	Low (roosting)	Building I has low potential for bats to roost due to gaps in the flashing and brickwork. These features are located on the south-west facing aspect. All other buildings have negligible potential for bats to roost.
Other mammals (red fox)	Low	The site has some suitable for foxes to use it although in low numbers.
Other mammals (hedgehog)	Negligible	Multiple records of west European hedgehog (<i>Erinaceus europaeus</i>) was noted in the desk study. The site does not offer suitable habitats for hedgehogs. The building refurbishment and construction works are considered unlikely to impact hedgehog populations and have therefore not been considered further within this assessment.
Invertebrates		
Invertebrates	Negligible	The site includes limited suitable habitat for invertebrates. Only five species of invertebrate have been recorded within 1km of the site within the last 10 years which suggests the presence of invertebrates on site and within the local area is negligible.
Birds		
Nesting Birds (Non-Schedule one)	Low	The site has low potential for nesting birds on the roof terraces and a few feral pigeons were seen on-site, however no nesting behaviour was observed. A couple of roof terrace areas have been netted to prevent pigeon nesting.
Nesting Birds (Schedule 1)	Negligible	The site does not provide suitable nesting habitats for black redstart, hobby or peregrine falcon. No sightings of black redstart (Schedule 1) have been recorded within 1km of the site in the last ten years. The site provides negligible potential for nesting black redstart. Black redstart requires areas of sparse wasteland vegetation and stony ground for feeding and tall and

		<p>complex structures with ledges and crevices for nesting, which are currently absent on the site. Existing levels of disturbance on the site and in the surrounding area would also likely discourage black redstart from nesting on the site, even if suitable habitat was present.</p> <p>Hobby and peregrine falcon are other Schedule 1 birds recorded in the desk study however the site does not provide suitable nesting habitat for either. The survey was carried towards the end of peak nesting season when any signs of nesting should still be visible, and no signs of raptors nesting were visible.</p>
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3 BREEAM Assessment

- 3.1.1 The Technical Guidance from Land Use and Ecology - BREEAM New Construction 2018 (BREEAM, 2018) was used for this report.
- 3.1.2 Assessment Route 2 has been used for LE01 to LE05 for this site. There are two options within Assessment Route 2:
- 3.1.3 1. *Full methodology* -This must be used where the pre-development habitats are above the set size threshold of 0.05 hectares in total or include habitats that are assigned as high distinctiveness.
- 3.1.4 2. *Simplified methodology* -This can be used where the pre-development habitats are below the set size threshold and no habitats present that are assigned a high level of distinctiveness. Route 2 may be used where desired.
- 3.1.5 The 'full methodology' has been used LE01 – LE05 for this assessment. The credits are as follows:
- LE01 - Site selection;
 - LE02 - Ecological risks and opportunities;
 - LE03 - Managing Impacts on ecology;
 - LE04 - Ecological change and enhancement; and
 - LE05 - Long term ecological management and maintenance.
- 3.1.6 The assessment of LE01 – LE05 has been informed by the results of the extended phase 1 habitat survey.
- 3.1.7 Recommendations for site protection and mitigation were based on these observations. In addition, conditions on site were used to provide recommendations for enhancing site ecology.

3.2 BREEAM LE01 – LE05 Land Use and Ecology Criteria.

- 3.2.1 The Land Use and Ecology Credits available are summarised in Table 3-1.

Table 3-1: Summary of Available LE Credits

BREEAM Issue	Description of Criteria	Number of Credits Available (Route 2)
LE01: Site Selection	Previously occupied land	1
	Contaminated land	1
	Survey and evaluation	1

LE02: Ecological risks and opportunities	Determining ecological outcomes	1
	<i>Exemplary Credit¹</i>	1
LE03: Managing Impacts on Ecology	Planning and measures on-site	1
	Managing negative impacts of the project	Up to 2
LE04: Ecological change and enhancement	Ecological enhancement	1
	Change and enhancement of ecology	up to 3
	<i>Exemplary Credit²</i>	1
LE05: Long term ecological management and maintenance	Planning and measures on-site	1
	Managing negative impacts of the project	1

3.3 Limitations – BREEAM Ecology Report

- 3.3.1 The BREEAM Land use and Ecology assessment outlined in this report is informed by the submission documents by the applicant available at the time of writing. Any changes to the site design could significantly affect the conclusions of this assessment.
- 3.3.2 Achievement of the credits will require a commitment by the client and/or contractors to implement the recommendations outlined in this report, and post-construction verification that implementation of the recommendations has been completed by the Suitably Qualified Ecologist (SQE).
- 3.3.3 The ‘before development’ BREEAM LE04 calculation is based on the desk study and the results from the ecology walkover survey undertaken in 2022. Calculations for ‘after development’ have been provisionally calculated using the proposed habitats and their associated areas at this stage to inform the design of the site. A further calculation will need to be undertaken once a post-planning detailed design and landscaping plan for the site has been produced. This report can be used to guide site design and to help achieve credits.

4 LE01: Site selection

4.1 Previously occupied land (1 Credit)

- 4.1.1 At least 75% of the proposed development is on previously occupied land.

Evidence of this Credit

- 4.1.2 This credit can be achieved because the site is fully on previously occupied land.

¹ Exemplary level criteria - Wider site sustainability

² Exemplary level criteria - Significant net gain of ecological value (percentage score of 110 or above).

4.1.3 This Credit can be achieved.

4.2 Contaminated land (1 Credit)

4.2.1 A contaminated land professional undertakes a site investigation, risk assessment and appraisal, which deems that land within the development footprint to be affected by contamination. This report identifies:

- The degree of contamination
- The contaminant sources or types
- The options for remediating sources of contamination which present an unacceptable risk.
- The client or principal contractor confirms that a remediation strategy will be implemented, in line with the report.

4.2.2 This credit can be achieved with confirmation from a contaminated land professional.

Evidence of this Credit

4.2.3 Soil Technics have previously carried out a ground investigation. The report outlined that the risk assessment did not highlight any potential contaminant linkages (PCL) which could pose a significant possibility of significant harm (SPOSH) under the current land use.

4.2.4 This Credit can be achieved.

4.2.5 *LE01 This credit can be achieved if a contaminated land professional undertakes a site investigation.*

5 LE02: Ecological risks and opportunities

5.1 Survey and evaluation (1 Credit)

5.1.1 An SQE carries out a survey and evaluation for the site early enough to influence site preparation works, layout and, where necessary, strategic planning decisions.

5.1.2 The SQE's survey and evaluation determines the site's ecological baseline including:

- Current and potential ecological value and condition of the site and related areas within the Zone of Influence;
- Direct and indirect risks to current ecological value from the project; and
- Capacity and feasibility for enhancement of the site's ecological value and, where relevant, areas within the Zone of Influence.

5.1.3 Recommendations and data collected from the survey and evaluation are shared with appropriate project team members to influence decisions made for activities during site preparation, design and construction works, which can support ecological features.

Evidence for this Credit

5.1.4 An SQE undertook a phase 1 habitat survey and an associated preliminary ecological appraisal (PEA) which detailed the ecological value of the site in detail. The PEA also discussed the potential risks the

project could have on the ecological value of the site and the capacity the project has to enhance the ecological value of the site.

5.1.5 This Credit can be achieved.

5.2 Determining ecological outcomes (1 Credit)

5.2.1 Survey and evaluation criteria relevant to the chosen route:

- Avoidance;
- Protection;
- Reduction or limitation of negative impacts;
- On site compensation; and
- Enhancement, considering the capacity and feasibility within the site, or where viable, offsite.

5.2.2 The project team liaise and collaborate with representative stakeholders early enough to influence key planning decisions (typically Concept Design stage), to:

- Identify the optimal ecological outcomes for the site.
- Identify, appraise and select measures to meet the optimal ecological outcomes for the site in line with the mitigation hierarchy of action, according to the route being used.

Evidence for this Credit

5.2.3 An SQE undertook a phase 1 habitat survey as part of the PEA which detailed the avoidance, protection and management of potentially negative impacts, and on-site compensations and enhancements.

5.2.4 The SQE and the landscaping team have liaised to discuss ways of further enhancing the site's ecological value, especially in relation to increasing the urban greening factor (UGF) for Proposed Development.

5.2.5 The mitigation hierarchy has been applied during the biodiversity net gain assessment.

5.2.6 This Credit can be achieved.

5.2.7 *Exemplary level criteria - Wider site sustainability (1 Credit)*

5.2.8 Achieve criterion 4.1 above.

5.2.9 Wider sustainability related activities and potential ecosystem service benefits are considered as part of determining the optimal ecological outcomes for the site.

5.2.10 Achieve the credits of the assessment issues outlined below:

- Safe and healthy surroundings - both credits;
- Flood and surface water management - Achieve credits for 'Surface water run-off';
- Minimising watercourse pollution; and
- Reduction of noise pollution.

Evidence of this Credit

5.2.11 No assessments related to the above have currently been undertaken.

5.2.12 This Credit cannot be achieved in this report.

5.2.13 *LE02 Exemplary credit can be achieved if wider sustainability related activities and potential ecosystem service benefits are considered.*

6 LE03 Managing Impacts on Ecology

6.1 Pre-requisite – Ecological risks and opportunities

6.1.1 LE02 'Survey and evaluation and Determining ecological outcomes' criteria have been achieved.

6.1.2 LE02 has been achieved.

6.1.3 This Pre-requisite can be achieved.

6.2 Planning & Measures on Site (1 Credit)

6.2.1 Further planning to avoid and manage negative ecological impacts on-site is carried out early enough to influence the concept design and design brief as well as site preparation planning.

6.2.2 On-site measures for managing negative ecological impacts during site preparation and construction are implemented in-practice (e.g. mitigation measures to protect existing ecological features)

6.2.3 Project team input in collaboration with representative stakeholders and data collated as part of the 'Determining ecological outcomes' in LE02 Ecological risks and opportunities.

Evidence of this Credit

6.2.4 An SQE undertook a PEA which detailed the avoidance and management of any ecological impacts on-site. This PEA was undertaken at an early stage allowing the SQE to influence the design and provide some recommendations. The SQE has liaised extensively with the landscaping team in relation to increasing the UGF for Proposed Development. On-site recommendations have been made within the PEA report.

6.2.5 This Credit can be achieved.

6.2.6 *LE03 Achieving the first credit is dependent on recommendations being implemented by the client/contractor.*

6.3 Managing Negative Impacts of the Project (up to 2 Credits)

6.3.1 Above criteria have been achieved.

6.3.2 Negative impacts from site preparation and construction works will be managed according to the hierarchy and:

- No net loss of ecological value has occurred under LE04 (2 credits).

Evidence of this Credit

6.3.3 The Proposed Development results in a net gain percentage above 10%.

6.3.4 Two credits can be achieved.

6.3.5 *LE03 the second and third credits are unachievable based on the current landscaping plans.*

7 LE04: Ecological change and enhancement

7.1 Pre-requisite – Managing Negative Impacts on Ecology

- 7.1.1 The client or contractor confirms compliance is monitored against all relevant UK, EU or international legislation relating to the ecology of the site.

Evidence of this Credit

- 7.1.2 All reports have been prepared in compliance with all relevant UK, EU and international legislation. Client will commit to monitoring compliance against all relevant UK, EU or international legislation relating to the ecology on site.

- 7.1.3 **This Pre-requisite can be achieved.**

7.2 Ecological Enhancement (1 Credit)

- 7.2.1 Measures have been implemented that enhance ecological value, which are based on input from the project team and SQE in collaboration with representative stakeholders and data collated as part of the 'Determining ecological outcomes' in LE 02. These measures have been implemented on-site (Figure 1). Measures are implemented in the following order:

- On site, and where this is not feasible,
- Off site within the Zone of Influence.

- 7.2.2 Data collated are analysed. No valuable data was recorded therefore no submission to the local environment records centre is required.

Evidence of this Credit

- 7.2.3 Measures have been implemented to enhance on site ecological value. Such measures include the incorporation of the following habitats: raised planters, rain gardens, façade bound green wall climbers, extensive green roof, intensive green roof and scattered trees.

- 7.2.4 Further enhancement recommendations have been included within the PEA, such recommendations include:

- Native tree and scrub planting - It is recommended that the Norway maple (*Acer platanoides*) tree be retained and protected during the refurbishment and construction of the Proposed Development. It is also recommended that native trees and scrub species are included within any landscaping to enhance the site. 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 utilising the site. The following tree species have been proposed Japanese zelkova (*Zelkova serrata*), sour cherry (*Prunus cerasus*), katsura (*Cercidiphyllum japonicum*), downy birch (*Betula pubescens*), man fern (*Dicksonia antarctica*) and shadbush (*Amelanchier*).
- Good horticultural practice - including the use of peat-free composts, mulches and soil conditioners, native plants with local provenance and avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

- Installation of Green Roofs - it is recommended that green roofs containing intensive planting are provided on the refurbished buildings. To maximise biodiversity, this should comprise of the intensive planting of a range of native grasses and flowering plants.
- Provision of wildlife boxes - insect houses, puddle pools and log piles can be installed both within the ground level intensive planting and on the intense green roof terraces to enhance invertebrate habitats. Bat boxes should be installed on the refurbished buildings, to provide roosting habitat for bats. These could be installed onto or within the brick elevator shafts which are higher than roof level on the east or south face. Bird boxes should be installed with different sized holes (including both 32mm and 26mm diameter) to cater for different species.

7.3 This Credit can be achieved.

7.4 Change and Enhancement of Ecology (up to 3 Credits)

- 7.4.1 Up to three credits can be awarded based on the calculation of the change in ecological Biodiversity Units as result of the development.
- 7.4.2 Credits are awarded as follows:
- Criteria 6.a Minimising loss of ecological value (one credit -percentage score of 75-94);
 - Criteria 6.b No net loss of ecological value (two credits -percentage score of 95-104); and,
 - Criteria 6.c Net gain of ecological value (three credits -percentage score of 105-109).
- 7.4.3 The rain garden and sustainable drainage habitat has been listed as 'bare ground' habitat due to the lack of appropriate habitat description within the BREEAM habitat types.

Table 4: Area Based Habitat Pre-Development

Area Based Habitat Pre-Development					
Habitat No.	Habitat Type	Distinctiveness	Condition	Area (hectares)	Biodiversity Units
1	J1.4 Introduced Shrub / Ground Level Planters	Low	Poor	0.005	0.01
1	A.3.3 Scattered Trees (Mixed)	Medium	Moderate	0.0366	0.2928
2	J3.6 Developed Land/Building	Hard Standing or Building	Hard Standing or Building	1.1	0
Total				1.1416	0.3028

Table 5: Area Based Habitat Lost

Area Based Habitat Lost					
Habitat No.	Habitat Type	Distinctiveness	Condition	Area (m²)	Biodiversity Units
1	J1.4 Introduced Shrub / Ground Level Planters	Low	Poor	0.005	0.01
Total				0.005	0.01

Table 6: Area Based Habitats Created

Area Based Habitat Created								
Habitat No.	Habitat Type	Distinctiveness	Condition	Area (ha or m ²)	Delivery Risk	Temporal Risk	Spatial Risk	Biodiversity Units
1	J1.4 Introduced Shrub / Ground Level Planters	Low	Poor	0.024	Low	0	Not making a contribution to local strategy	0.02
2	J.4 Rain Garden / Sustainable Drainage Feature / Bare Ground	Low	Moderate	0.046	Low	0	Not making a contribution to local strategy	0.09
3	Green wall / living wall	Medium	Moderate	0.050891	Medium	1	Not making a contribution to local strategy	0.13
4	Extensive Green Roof	Low	Moderate	0.1264	Low	1	Not making a contribution to local strategy	0.25
5	Intensive Green Roof	Medium	Moderate	0.0722	Medium	1	Not making a contribution to local strategy	0.18
6	A.3.3 Mixed Scattered Trees	Medium	Moderate	0.1831	Low	20	Not making a contribution to local strategy	0.37
Total				0.502591				1.04

Table 7: Total Post Development Area Biodiversity Units

Total Post Development Area Biodiversity Units					
Pre-Development Area Biodiversity Units	Area Based Biodiversity Units Lost	Area Based Biodiversity Units (Creation)	Area Based Units (Enhancement)	Total Post Development Area Biodiversity Units	Biodiversity Unit Score
0.3028	0.01	1.04	0	1	441%

Evidence of this Credit

- 7.4.4 A significant net gain has been achieved through the proposed development.
- 7.4.5 The Percentage Change in Area Biodiversity Units = **441%**
- 7.4.6 The Percentage Change in Biodiversity Units results in a net gain.
- 7.4.7 Three Credits can be achieved.
- 7.4.8 *LE04 achieving the first credit is dependent on recommendations being implemented by the client/contractor. Credits can be achieved if all proposed habitats of ecological value are created for the Proposed Development.*

Exemplary Level Criteria

- 7.4.9 The change in ecological value occurring is calculated in accordance with the process set out in GN36 -BREEAM, CEEQUAL and HQM Ecology Calculation Methodology –Route 2. The credit is awarded as follows:
 - Significant net gain of ecological value (percentage score of 110 or above).
- 7.4.10 To achieve one Exemplary Level Criteria credit there must be a significant net gain of ecological value (percentage score of 110 or above).
- 7.4.11 **This Exemplary Credit can be achieved.**

8 LE05: Long term ecological management and maintenance

8.1 Prerequisite - Statutory obligations, planning and site implementation

- 8.1.1 The client or contractor has confirmed that compliance is being monitored against all relevant UK, EU and international standards relating to the ecology of the site.
- 8.1.2 The following must be achieved, according to the route being assessed:
 - No net loss has been achieved, and at least one credit under LE 04 Change and Enhancement of Ecology' has been awarded.

8.1.3 The Pre-requisite can be achieved.

8.2 Management and maintenance throughout the project (1 Credit)

- 8.2.1 Measures have been implemented to manage and maintain ecology and will be continued throughout the project. These measures are based on input from the project team in collaboration with representative stakeholders and data collated. To ensure the optimal ecological outcomes agreed in LE 02 are met in-practice, these measures must monitor and review the effectiveness of the mitigation and enhancement measures in place for LE 03 & LE 04 to ensure they are implemented.
- 8.2.2 It is recommended the existing tree on site is retained and maintained.
- 8.2.3 On-site measures to be included to minimise ecological damage during construction include the below recommendations.

8.3 Designated Sites and Priority Habitats

- 8.3.1 A CEMP should be submitted to detail specific measures to ensure that all works on site comply with relevant legislation in relation to protected species and that the CEMP is adhered to throughout the construction phase of development to reduce impacts on Kentish Town City Farm, Gospel Oak Railsides and Mark Fitzpatrick Nature Reserve SBINC to a level that is not significant.
- 8.3.2 The CEMP will provide advice to developers and contractors on how best to minimise impacts on wildlife and nearby designated sites throughout the construction phase of development.
- 8.3.3 Examples for dust management include:
 - Monitoring: Daily on-site and off-site inspection, where receptors are nearby, to monitor dust, record inspection results, and make the log available to the local authority etc. when asked.
 - Maintenance: Keeping site infrastructure clean using wet methods where there is the risk of dust accumulation. Remove materials that have the potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.

- Use water-assisted dust sweeper(s) on access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site) where reasonably practicable.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.

8.3.4 Within the CEMP is a timetable of construction related activities that will be adhered to and will be submitted alongside the application.

8.4 Bats

8.4.1 The only building with bat roosting potential (Building I) will be subject to an extension but this is unlikely to result in the loss of the potential roost feature. A precautionary working method statement should be submitted to ensure the extension does not disturb the feature on Building I.

8.4.2 If additional lighting is necessary for construction purposes elsewhere on the site, it is recommended that these should be positioned carefully so as not to create any light spill on the feature on Building I).

8.5 Nesting Birds

8.5.1 All birds, their active nests and eggs are protected from harm under the WCA which makes it an offence to kill, injure or take any wild bird or to take, damage or destroy the nest of any wild bird while that nest is in use or being built. An offence could therefore occur during clearance work on the site.

8.5.2 The building and trees could support nesting birds. To ensure legal compliance, clearance of habitat suitable for nesting birds (building and all trees) should be undertaken outside the nesting bird season (i.e. between October and February inclusive). However, should this not be practical, the following measures must be adhered to:

8.5.3 Works must be undertaken in line with a Precautionary Working Method Statement (PWMS);

8.5.4 Prior to clearance, an ecologist should carry out a nesting bird inspection of areas to be cleared;

8.5.5 Should any active birds' nests be found, the work may not take place within an appropriate established buffer zone (usually 5m), which should be left intact until it has been confirmed that the young have fledged, and the nest(s) is no longer in use.

8.6 Other mammals – red fox

8.6.1 All wild mammals, including red fox (*Vulpes vulpes*), are protected by the Wild Mammals (Protection) Act 1996 which makes it an offence to intentionally cause any wild mammal unnecessary suffering by certain methods. Common wild mammals, such as red fox, may venture onto the site during the refurbishment and construction of the Proposed Development.

- 8.6.2 To avoid an offence, measures should be employed during the construction phase, including the covering of all deep holes and trenches overnight and/or the provision of planked escape routes for any wildlife that may fall in. In addition, any liquids held on-site should be stored in a secure lock-up. These measures should be implemented through a Demolition and Construction Method Statement (DCMS) or similar. Hoarding around the perimeter of the site should also minimise the likelihood of any wild mammals gaining access to the site.

8.7 Habitat Management Plan

- 8.7.1 A Habitat Management Plan / Landscape Management Plan should be developed for the site. The aim of the plan would be to facilitate the appropriate maintenance of landscaped areas. The plan would also outline proposed management measures to maintain the ecological value of any new habitats created, such as biodiverse roof(s) and areas of new planting. The Habitat Management Plan (HMP) should refer to the retained and enhanced habitats; however, these should be dealt with primarily within the assessment of BNG. Recommendations for additional enhancements such as wildlife boxes and bricks, are considered appropriate. Their monitoring and any remedial actions should be secured within the plan.
- 8.7.2 This credit can be achieved if the ecology on site is managed and maintained both throughout the project and thereafter. Monitoring of ecological features management will need to take place during and post construction. If this occurs, this credit will be achievable.

1.1.1 This Credit can be achieved.

8.8 Landscape and ecology management plan (1 Credit)

- 8.8.1 A Landscape and Ecology Management Plan (LEMP), or equivalent, has been developed. The LEMP should cover, at a minimum, at least the first five years after project completion as and include:
- Actions and responsibilities of relevant individuals prior to handover
 - The ecological value and condition of the site at handover and how this is expected to develop and change over time
 - Identification of opportunities for on-going alignment with activities beyond the development project, which support the aims of BREEAM's Strategic Ecology Framework
 - Identification and guidance to trigger appropriate remedial actions to address previously unforeseen impacts
 - Clearly defined and allocated roles and responsibilities for delivering the plan
- 8.8.2 This credit can be achieved as a detailed LEMP has been written. The LEMP details include the above points and also includes methods of habitat/ecological feature management.
- 8.8.3 This Credit can be achieved.**
- 8.8.4 *LE05 these credits can be achieved once a Landscape and Ecology Management Plan has been created.*

9 Summary of Credits

Table 8: Credit Summary

BREEAM Issue	Description of Criteria	Number of Credits Achieved (Route 2)	Number of Credits Available (Route 2)
LE01: Site Selection	Previously occupied land	1	1
	Contaminated land	1	1
LE02: Ecological risks and opportunities	Survey and evaluation	1	1
	Determining ecological outcomes	1	1
	<i>Exemplary Credit*</i>	0	1
LE03: Managing Impacts on Ecology	Planning and measures on-site	1	1
	Managing negative impacts of the project	2	Up to 2
LE04: Ecological change and enhancement	Ecological enhancement	1	1
	Change and enhancement of ecology	3	up to 3
	<i>Exemplary Credit*</i>	1	1
LE05: Long term ecological management and maintenance	Planning and measures on-site	1	1
	Managing negative impacts of the project	1	1
	TOTAL	14	15

10 Enhancements

10.1.1 Planning policy at the national and local level and strategic biodiversity partnerships encourage inclusion of ecological enhancements in development projects. Ecological enhancements can also contribute to green infrastructure and ecosystem services such as storm water attenuation and reducing the urban heat island effect. The following measures would be suitable for integration into the site's design.

10.2 Native tree and scrub planting

- 10.2.1 It is recommended that the Norway maple (*Acer platanoides*) tree be retained and protected during the refurbishment and construction of the Proposed Development. It is recommended that native trees and scrub species are included within any landscaping to enhance the site.
- 10.2.2 The following tree species have been proposed Japanese zelkova (*Zelkova serrata*), sour cherry (*Prunus cerasus*), katsura (*Cercidiphyllum japonicum*), downy birch (*Betula pubescens*), man fern (*Dicksonia antarctica*) and shadbush (*Amelanchier*).
- 10.2.3 It is recommended wildlife planting should be integral to the soft landscape plans and should include native species and/or species of recognised wildlife value. 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 utilising the site. Where possible, larger shrubs should be under-planted to create greater structure and cover for wildlife. The use of block planting of single species should be avoided in favour of a higher diversity of plant types per square metre.

10.3 Good horticultural practice

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

10.4 Installation of Green Roofs

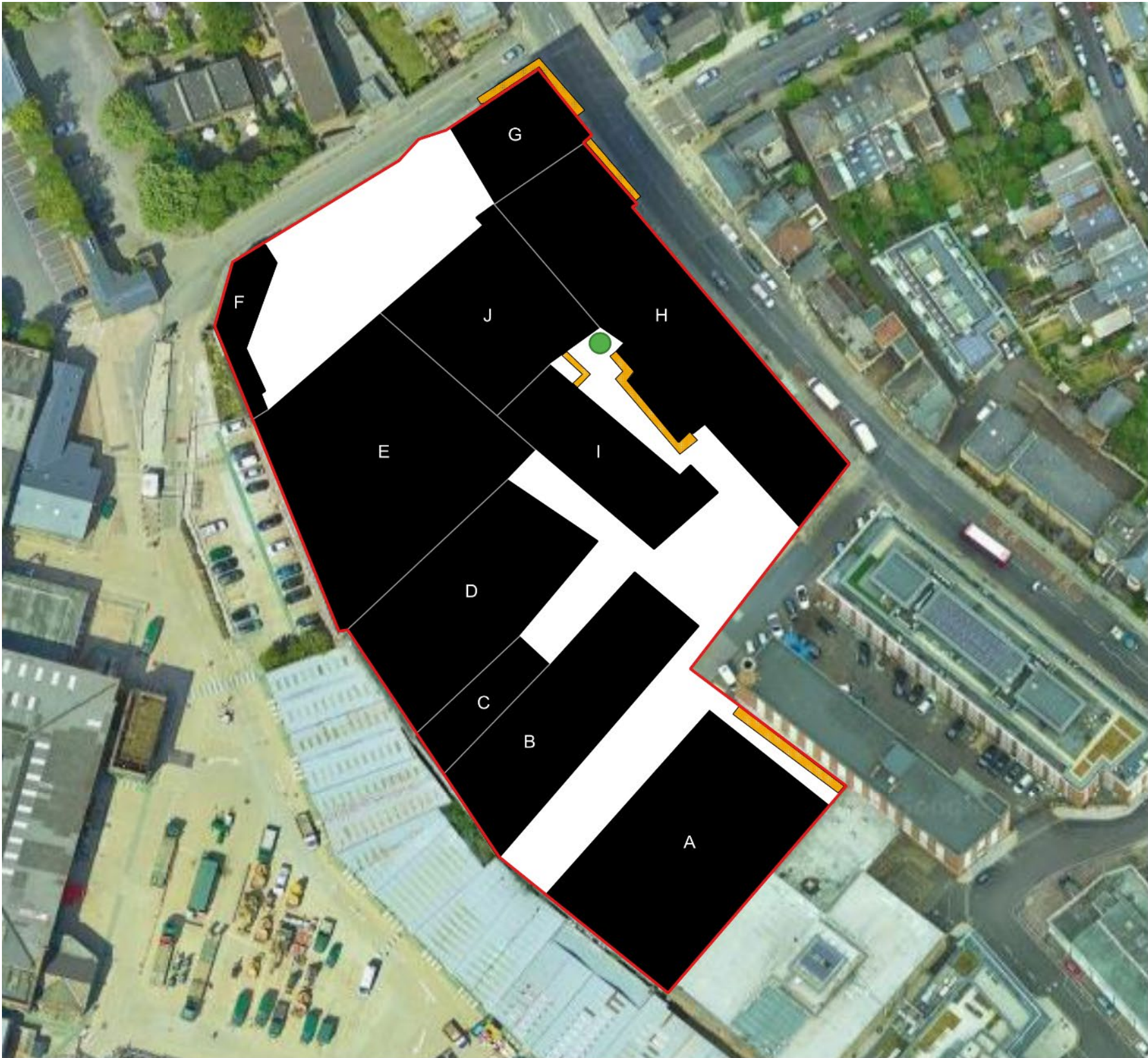
- 10.4.1 It is recommended that green roofs containing intensive planting are provided on the refurbished buildings. To maximise biodiversity, this should comprise of the intensive planting of a range of native grasses and flowering plants. This would provide habitat for birds and invertebrates and would represent a valuable ecological enhancement. This should ideally only be accessible for maintenance purposes, to minimise disturbance to wildlife. If the roof terraces are to be open to the public, it is recommended that the intensive planting is kept off walking routes to avoid disturbance.
- 10.4.2 Other features could be installed on an intensive green roof terrace, to enhance its ecological value. A bird bath and bird feeders could be provided, to provide washing and feeding opportunities for birds. Stone or log piles would also provide shelter for a variety of invertebrates.

10.5 Provision of wildlife boxes

- 10.5.1 Insect houses, puddle pools and log piles can be installed both within the ground level intensive planting and on the intensive green roof terraces to enhance invertebrate habitats.
- 10.5.2 Bat boxes should be installed on the refurbished buildings, to provide roosting habitat for bats. These could be installed onto or within the brick elevator shafts which are higher than roof level on the east or south face.
- 10.5.3 Bird boxes should be installed with different sized holes (including both 32mm and 26mm diameter) to cater for different species. Notable species that could occur on the site such as swifts should be catered for by adding the 'Vivara Pro WoodStone Swift Nest Box' which should be installed at least 5m above the ground and features a downward facing hole to discourage house sparrows and starlings from occupying the box. Other boxes could be added such as the Schwegler 1SP Sparrow Terrace. A further suggestion is the Schwegler No 24 Brick Box and Schwegler 1B Bird Box, including both 32mm

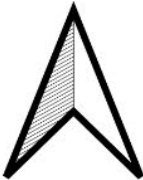
and 26mm diameter holes. These boxes should also be located adjacent to any landscaped areas, at least 3m above the ground and facing southeast to north, to avoid direct sunlight and the heaviest rain

Appendix A Phase 1 Habitat Survey Map with codes

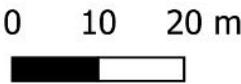


Ke Key – including Phase 1 habitat codes

- Red Line Boundary
- J3.6 - Buildings
- J5 - Hardstanding
- A3.1 - Scattered Tree
- J5 - Raised Ornamental Planter




Client	Trium Environmental Consulting LLP
Project	TRI055 - Highgate Studios
Title	Phase 1 habitat map
Reference	Figure 1
Drawn	JW
Date	05/10/2022



Appendix B Post-Development Landscape Plan



Surface Cover Type Legend

-  Biodiverse Green Roofs
-  Intensive Green Roofs
-  Buildings
-  Permeable Paving
-  Rain Gardens
-  Flower-rich perennial plants
-  Trees
-  Climbers

Appendix C Relevant Legislation

C.1 The Environment Act 2021

- C.1.1 The focus of the Act is the “...provision for targets, plans and policies for improving the natural environment...” and its requirements are structured around a number of broad themes (noting this is not a comprehensive summary of the provisions):
- C.1.2 Nature and biodiversity – Part 6 of the Act importantly makes provision for “biodiversity gain in planning” which will apply to applications under the Town & Countryside Act and the Planning Act. In addition, the responsibilities on Government or public bodies have changed, including through:
- strengthening the existing biodiversity duty;
 - requiring biodiversity reports;
 - setting up local nature recovery strategy areas;
 - providing for national habitat mapping; and
 - establishing species conservation and protect site strategies.
- C.1.3 Section 98 and 99 introduce biodiversity gain requirements that make changes to the Town & Country Planning Act and The Planning Act. The commencement of these changes and whether secondary legislation will be required to enact them will have to be subject to legal interpretation and advice.
- C.1.4 Conservation covenants– Part 7 of the Act makes provisions for conservation covenants which essentially support the “biodiversity gain in planning” concept by providing a mechanism through which any gains can be secured and managed. These come into force at the point that the Secretary of State “by regulations appoints”.

C.2 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – the 2019 Regulations

- C.2.1 The Conservation of Habitats and Species Regulations (Amendment)(EU Exit) Regulations 2019 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.
- C.2.2 Under the Regulations, competent authorities i.e. government departments and public bodies, have a general duty to have regard to the EC Habitats Directive and Wild Birds Directive. The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I and II of the Habitats Directive respectively) to the European Commission. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs) classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites form a network termed Natura 2000. The Regulations enable the country agencies to enter into management agreements on land within or adjacent to a European site, in order to secure its conservation. The Regulations also provide for the

control of potentially damaging operations, whereby consent from the country agency may only be granted once it has been shown through appropriate assessment that the proposed operation will not adversely affect the integrity of the site. When considering potentially damaging operations, the precautionary principle applies i.e. consent cannot be given unless it is ascertained that there will be no adverse effect on the integrity of the site.

- C.2.3 The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a few purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

C.3 The Wildlife and Countryside Act (WCA) 1981 (as amended)

- C.3.1 The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2010 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).
- C.3.2 Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species. All relevant species-specific legislation is detailed later in this Appendix.
- C.3.3 Schedule 1 – Part 1 relates to birds and their young, for which it is an offence to intentionally or recklessly disturb at, on or near an ‘active’ nest. Schedule 1 – Part 2 relates to birds afforded special protection during the close season which is 1 February to 31 August (21 February to 31 August below high-water mark), but which may be killed or taken outside this period.

C.4 The Countryside and Rights of Way (CROW) Act 2000

- C.4.1 V The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife.
- C.4.2 Legislation detailed in the WCA places a duty on government departments and the National Assembly for Wales to have regard for biodiversity and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

C.5 The Natural Environment and Rural Communities (NERC) Act 2006

- C.5.1 Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CROW Act 2000.

C.6 UK Biodiversity Action Plan

- C.6.1 The United Kingdom Biodiversity Action Plan (UK BAP), first published in 1994 and updated in 2007, was a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UK BAP contained a list of priority habitats and species of conservation concern in the UK and outlined biodiversity initiatives designed to enhance their conservation status. Lists of Broad and Local habitats were also included. The priority habitats and species correlated with those listed on Section 41 and 42 of the NERC Act.
- C.6.2 The UK BAP required that conservation of biodiversity be addressed at a County level through the production of Local BAPs. These were complementary to the UK BAP, however, were targeted towards species of conservation concern characteristic of each area. In addition, several local authorities and large organisations have produced their own BAPs.

C.7 Species and Habitats of Material Consideration for Planning in England

- C.7.1 In 2011, the government published the 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' to replace the previous England Biodiversity Strategy. In 2012 the UK BAP was replaced by the UK Post-2010 Biodiversity Framework.
- C.7.2 Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process, but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

C.8 Birds of Conservation Concern 4: the Red List for Birds

- C.8.1 Birds of Conservation Concern 4: the Red List for Birds was published in December 2015.
- C.8.2 Commonly referred to as the UK Red List for birds, this is the fourth review of the status of birds in the UK, Channel Islands and Isle of Man, and updates the last assessment in 2009. Using standardised criteria, 244 species with breeding, passage or wintering populations in the UK were assessed by experts from a range of bird NGOs and assigned to the Red, Amber or Green lists of conservation concern.

C.9 Protection of Badgers Act 1992

- C.9.1 Under the Protection of Badgers Act 1992, it is an offence to disturb a badger in its sett or damage, destroy or obstruct access to a badger sett. If the proposed work will involve works coming within 30m of an active badger sett Natural England's standing advice will need to be consulted and a mitigation plan drawn up. After which a licence will need to be applied for from Natural England to undertake any works. It should be noted that badgers cannot be captured and moved purely for development purposes.

C.10 Invasive Species (Enforcement and Permitting) Order 2019

- C.10.1 This Order allows for the enforcement of Regulation (EU) No. 1143/2014 on the prevention and management of the introduction and spread of invasive alien species in England and Wales, including the relevant licences, permits and rules for keeping invasive alien species.
- C.10.2 An enforcement regime is introduced, including criminal offences, licencing, and permitting provisions for Regulation (EU) No. 1143/2014 on the prevention and management of the introduction and spread of invasive alien species ("The IAS Regulation")
- C.10.3 The IAS Regulation lists species of concern which cannot be imported, kept, bred / grown, transported, sold, used, allowed to reproduce, or released into the environment. There are currently 49 species listed, which can be found in the Annex of Regulation (EU) No. 2016/1141 adopting a list of invasive alien species of Union concern pursuant to Regulation (EU) No 1143/2014. The regulator is Natural England for England, offshore marine areas, and in relation to imports and exports.

AEIL Limited
Innovation Centre
1 Evolution Park
Blackburn
BB1 2FD

www.assystem.com
Email: UK-EI@assystem.com
Ecology@assystem.com