

Kentish Town UK Office Propco Limited
Ecological Services

Landscape Ecological Management Plan
Highgate Studios, Camden



Reference No.: TRI055 / PRJ0008697

Date: March 2023

Document Management

Project No: TRI055 / PRJ0008697
Title: Landscape & Ecology Management Plan for Highgate Studios, London Trium
Contracting Authority Environmental Consulting LLP on behalf of Kentish Town UK Office Propco Limited
Issue Date: March 2023
Issue Office: 20 Old Bailey, London

	Name	Job Title	Date
Authored by:	JB	Consultant Ecologist	23/03/2023
Authorised by:	LC	Practice Manager	23/03/2023

Table of Contents

1	Purpose of the document.....	4
2	Introduction.....	4
2.1	Background Information.....	4
2.2	Site Description.....	4
2.3	Proposed Works	4
2.4	Quality Assurance.....	5
3	Objectives for Ecological Enhancement and Habitat Management.....	5
3.2	Background.....	6
4	Preliminary Ecological Appraisal.....	6
5	Mitigation as Proposed within the PEA.....	7
5.1	Designated Sites and Priority Habitats	7
5.2	Bats	7
5.3	Nesting Birds.....	7
5.4	Other mammals – red fox.....	8
5.5	Habitat Management Plan.....	8
6	Creation of Ecologically Valuable Features	9
6.1	Summary of Enhancement Features	9
6.2	Description & Evaluation of Enhancement Features	9
6.3	Management of Enhancement Features.....	9
7	Creation of Ecologically Valuable Habitats.....	10
7.1	Proposed Habitats	10
7.2	Management & Evaluation of habitats	12
8	Maintenance Schedule	15
9	Monitoring & Remedial Actions	16
10	Mechanisms to Secure Delivery	17
10.1	Legal and Funding Mechanisms	17
10.2	Persons Responsible.....	17
Appendix A	Relevant Legislation.....	18

1 Purpose of the document

- 1.1.1 The purpose of this document is to provide information regarding ways in which new and existing habitats at the site should be managed in future to maximise the biodiversity value of the site.
- 1.1.2 This Landscape and Ecology Management Plan (LEMP) has been produced to be appropriate to the site and covers at least the first five years after project completion in accordance with criteria for new construction for SD5078: BREEAM 2018.
- 1.1.3 Interpretations and recommendations contained in this LEMP represent the professional opinions of our suitably qualified ecologists.
- 1.1.4 This report is prepared and written in the context of the current proposals stated within the report. Alterations to the initial proposals or changes in conditions on site over time may necessitate an alteration to the plan/report in whole or in part after its submission.

2 Introduction

2.1 Background Information

- 2.1.1 Assystem Energy & Infrastructure Ltd (AEIL), previously Schofield Lothian, was appointed by Trium Environmental Consulting to prepare a LEMP of land at the Highgate Studios, London.
- 2.1.2 This management plan report is a mandatory pre-requisite for award of any credits under LE 05 'Long Term Impact on Biodiversity' in the BREEAM UK New Construction: Non-domestic Buildings (United Kingdom) SD5078 BREEAM UK New Construction 2018 3.0.
- 2.1.3 The client will be responsible for clearly selecting individuals and stating their responsibilities in terms of long-term management for pre-existing and proposed habitats prior to handover.
- 2.1.4 The client will be responsible for the clearly defined and allocated roles and responsibilities for delivering the management plan.
- 2.1.5 This report will provide the Applicant with a greater understanding of the way in which new and existing habitats at the site should be managed in future to maximise the biodiversity value of the site.

2.2 Site Description

- 2.2.1 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.
- 2.2.2 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.

2.3 Proposed Works

- 2.3.1 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.

2.4 Quality Assurance

- 2.4.1 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. The work was managed by Laura Cobden BSc (Hons), an ecologist with 12 years' experience within ecological consultancy. Laura has held full membership of CIEEM since 2015.

3 Objectives for Ecological Enhancement and Habitat Management

- 3.1.1 The aim of the LEMP is to provide documentation in accordance with BS42020:2013: Biodiversity – Code of Practice for Planning and Development (BSI, 2013) and to detail all future habitat management (and monitoring) across the site, specifically those areas to be restored to nature conservation use. It solely covers biodiversity and deals with the operational phase of the site, once all construction related activities have been completed covering the first 5- years of management.
- 3.1.2 This LEMP will include:
- Description and evaluation of features to be managed;
 - Ecological trends and constraints on site that might influence management;
 - Aims and objectives of management;
 - Appropriate management options for achieving aims and objectives;
 - Prescriptions for management actions;
 - Extent and location/area of proposed works on appropriate scale maps and plans;
 - Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period);
 - Details of the body or organization responsible for implementation of the plan;
 - Ongoing monitoring and remedial measures;
 - Legal and funding mechanism(s) by which the long-term implementation of the plan will be secured; and
 - How contingencies and/or remedial action will be identified, agreed and implemented.

3.2 Background

3.2.1 The following relevant reports for Highgate Studios have been consulted:

- Preliminary Ecological Appraisal (updated 2023);
- Arboricultural report (2023); and
- BREEAM Land Use and Ecology Report (2023).

4 Preliminary Ecological Appraisal

- 4.1.1 The PEA conducted in September 2022 has established that the site is dominated by habitats not considered to be of significant ecological importance. New habitat creation has been proposed to offset minor losses, in conjunction with the landscape proposals.
- 4.1.2 It has concluded that the proposals have sought to minimise impacts and subject to the implementation of appropriate avoidance, mitigation, and compensation measures, it is considered highly unlikely that the proposals will result in significant harm to biodiversity. On the contrary, the opportunity exists to provide a number of biodiversity benefits as part of the proposals.
- 4.1.3 The object of ecological enhancement is to maximise the biodiversity value of the area and protecting the existing ecology on site where possible, in accordance with the proposed new City of London Local Plan 2036, Policy OS3 and guidance aspirations.
- 4.1.4 The site is in a highly urban area and the habitats on the site were of low ecological value.
- 4.1.5 One tree, a Norway maple (*Acer platanoides*), is present in the inner courtyard. It contained negligible bat roosting potential and low nesting bird potential. Overall, it is considered to be of low ecological value. The ornamental planters present on site are also considered to be of negligible ecological value.
- 4.1.6 All buildings to be impacted by the proposed development were assessed to have negligible potential to support roosting bats.
- 4.1.7 The roofs of the buildings contain no loose material. The site is of low potential to support nesting birds. No evidence of nesting was seen of any of the roofs.
- 4.1.8 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.
- 4.1.9 The site is in the Impact Risk Zone for Hampstead Heath Woods (SSSI) but does not require further assessment as the nature of the proposed development is not within the categories where further assessment is required (aviation, quarries, livestock and combustion).
- 4.1.10 There are six Sites of Importance for Nature Conservation (SINCs) within 1km of the site.
- 4.1.11 The Proposed Development will comprise the following habitats: raised planters, rain gardens, façade bound green wall climbers, extensive green roof, intensive green roof and scattered trees.

5 Mitigation as Proposed within the PEA

5.1 Designated Sites and Priority Habitats

- 5.1.1 A Construction Environmental Management Plan (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 SINC (of borough importance) to a level that is not significant.
- 5.1.2 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.
- 5.1.3 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.
- 5.1.4 Within the CEMP is a timetable of construction related activities that will be adhered to and will be submitted alongside the application.

5.2 Bats

- 5.2.1 Building I is being subject to an extension. As the works will involve scaffolding, the features will be able to be fully inspected immediately prior to the removal of the lead flashing on the roof and therefore a precautionary working method is to be carried out instead of further emergence surveys. All features will be fully inspected by endoscope and torches by a level 2 bat licenced ecologist immediately prior to the works. If a bat or bat roost is found during the works, the licenced ecologist will provide advice on methodology going forward including the application for a licence as appropriate.
- 5.2.2 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 roof of building I (where the potential roosting feature is located).

5.3 Nesting Birds

- 5.3.1 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.
- 5.3.2 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:
- 5.3.3 Works must be undertaken in line with a Precautionary Working Method Statement (PWMS);
- 5.3.4 Prior to clearance, an ecologist should carry out a nesting bird inspection of areas to be cleared;
- 5.3.5 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.

5.4 Other mammals – red fox

- 5.4.1 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.
- 5.4.2 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.

5.5 Habitat Management Plan

- 5.5.1 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.

6 Creation of Ecologically Valuable Features

6.1 Summary of Enhancement Features

6.1.1 Wildlife boxes are a great way to enhance the development site and promote local biodiversity. These can be incorporated directly into the building or within the proposed planting.

6.1.2 The proposed wildlife boxes to be incorporated include:

- X2 Schwegler 1SP Sparrow Terrace (or similar);
- X2 Schwegler No 24 Brick Box and Schwegler 1B Bird Box (or similar); and
- X2 Schwegler 2F bat boxes (or similar).

6.2 Description & Evaluation of Enhancement Features

Bird Boxes

6.2.1 Bird boxes should be installed on proposed buildings at least 2 meters above ground and should be facing away from potential prevailing wind conditions.

Bird baths and bird feeders

6.2.2 The bird baths and bird feeders should be placed away from vegetation to avoid predators.

Bat boxes

6.2.3 Bat boxes installed across the site should be sited on the mature tree retained on site facing south-east at a minimum height of 3 meters above ground. There must be a clear flight path surrounding the bat boxes in order to allow the roosting bats to have a clear flight path to and from the boxes.

Insect Houses

6.2.4 Insect houses should be installed near the proposed introduced shrub planting and on the green roofs.

6.3 Management of Enhancement Features

Bat Boxes

6.3.1 The bat boxes require very little management and should not be interfered with once they have been installed. Once they have been installed only a suitably qualified and licensed bat ecologist should interfere with the installed box. However, the boxes can be checked on from ground level at regular intervals to ensure the bat box is not damaged or broken by severe weather conditions.

Bird Boxes

6.3.2 The bird boxes installed on site should be cleared out once a year. This should be conducted outside of the nesting bird season (i.e., September – February inclusive). If it is believed birds are still nesting within the boxes a suitably qualified ecologist should undertake a nesting bird check prior to clearing out the bird boxes. The boxes should be cleared out by removing all nesting materials from the box and washed out thoroughly using only boiling water.

Insect Houses

- 6.3.3 Insect houses are fairly low maintenance. It is recommended that the insect houses are inspected at the end of the summer to clean and remove any dead insects.

7 Creation of Ecologically Valuable Habitats

7.1 Proposed Habitats

- 7.1.1 The Proposed Development will comprise the following habitats: raised planters, rain gardens, façade bound green wall climbers, extensive green roof, intensive green roof and scattered trees.

Raised planters / Introduced shrub

- 7.1.2 Species used with the raised planters should all be native where possible. The raised planters could include species which are known to be beneficial for pollinators such as, lavender (*Lavandula angustifolia*), honeysuckle (*Lonicera periclymenum*) and common sunflower (*Helianthus annuus*). Aim for a variety of shrubs that will provide flowers from spring to autumn e.g., ceanothus (*Ceanothus thyrsiflorus*) and mahonia (*Mahonia aquifolium*).
- 7.1.3 Larger shrubs that provide useful blossom and berries for wildlife should be incorporated including rowan (*Sorbus aucuparia*), crab apple (*Malus sylvestris*) and elder (*Sambucus nigra*).
- 7.1.4 Decaying wood provides a nutrient-rich habitat for fungi and invertebrates. Leaving some wood in piles, in both sunny and shaded areas, after coppicing/pruning is recommended to allow the natural processes of nutrient cycling to occur whilst providing habitat, cover and hibernation sites. These wood piles could be integrated within the raised planters.

Rain Garden

- 7.1.5 Rain gardens offer the opportunity to manage rainwater runoff from hard surfaces by planting an attractive, low maintenance, wildlife-friendly space¹.
- 7.1.6 Rain gardens should be designed to help reduce flood risk and improve water quality, biodiversity and public amenity². They can be planted with a wide variety of species.
- 7.1.7 Rain gardens can be planted with a wide range of different plants. These can be selected from these following categories:
- Shrubs – plants with a woody structure and roots that enhance soil stability.
 - Perennial flowering plants – plants that bloom each year and die back in winter, preferably with a long-life span.
 - Grasses – grasses that range from standard turf to taller ornamental grasses that can be particularly effective at filtering pollutants from urban highway runoff.
 - Wildflower seed – the potential use of meadow species that contain perennial and annual flowers, often mixed with grasses, they can thrive in low nutrient and free draining soils.
 - Marginal plants – such as reeds, rushes and sedges, these are suited to damp or waterlogged conditions.

Façade bound green wall

¹ RHS (2023) <https://www.rhs.org.uk/garden-features/rain-gardens>

² Urban Design London (2015) *Designing Rain Gardens: A Practical Guide*

- 7.1.8 A variety of plants can be used within façade bound green walling. Such species include herbs, fruits, grasses, and ferns. Façade bound green walls can be created in areas of shade or sun.
- 7.1.9 Such plant species which could be incorporated into the façade bound green wall habitat:
- Ivy (*Hedera helix*);
 - Evergreen jasmine (*Trachelospermum jasminoides*);
 - Leather flower (*Clematis*);
 - Wisteria (*Wisteria*);
 - Climbing roses (*Rosa setigera*).
- 7.1.10 It is important for the client to research which type of green wall is most suitable for the development. Plants can be rooted in the ground, in intermediate planters or on rooftops.
- 7.1.11 Green walls can provide important habitat, shelter, nesting opportunities and food sources for wildlife, including birds and invertebrates. They also act as stepping-stones for wildlife, increasing the connectedness of the area.

Extensive green roof

- 7.1.12 Extensive green roofs normally have a shallow growing medium and are designed to be relatively self-sustaining. Extensive green roofs are often planted with, or colonised by, mosses, succulents, wildflowers and grasses that are able to survive using shallow low-nutrient substrates.
- 7.1.13 The use of native plant species which can support local biodiversity is recommended to increase species richness and vegetation cover. Plant diversity can be increased if various microclimates (e.g., the inclusion of sunny and shaded areas) and topographies are created.
- 7.1.14 Characteristics of an extensive green roof to note include:
- Light weight (typically less than 250 kg per m² saturated density);
 - Low maintenance;
 - Shallow substrates (typically 80 mm to 150 mm),
 - Not designed for public access.
- 7.1.15 Vegetation to be included within the extensive green roof planting should be sturdy and drought tolerant species. Such species examples include:
- Sedum species, these are succulent plants the inclusion of some native species is favourable;
 - Other small sturdy succulent plant species;
 - Wildflowers which thrive on low nutrient and free draining soils;
 - Small herbs, bulbs and alpine plants;
 - Grasses should be limited to selection from a small group of non-aggressive slow-growing grass species.

Intensive green roof

- 7.1.16 Intensive green roofs have deep, rich substrates meaning that the vegetation planting is broad and can include planting such as lawn turf, shrubs, hedging, trees. Intensive green roofs are generally accessible and contain features similar to those in traditional gardens.

7.1.17 Intensive green roof systems involve using substrate depths usually above 200 mm. Intensive green roofs often create a larger weight loading on the roof which should be considered by the client during the design phase³.

7.1.18 Characteristics of an intensive green roof to note include:

- Heavy in weight (typically over 250 kg per m² saturated weight),
- High maintenance (regular visits),
- Deep substrates (over 150 mm and up to 1000 mm);
- Can be designed for limited or full public access.

Urban trees

7.1.19 The proposed development will incorporate a thirty-one of new trees which will be beneficial to the local area.

7.1.20 Some of the proposed trees include species which would be valuable to the local ecology of the area and the wider context of increasing greenery across London. 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*).

7.1.21 The proposed tree strategy will aim to create distinctive areas of character incorporating the use of semi-mature trees, an instant sense of establishment and maturity.

7.1.22 Many of the trees will have incorporate suitable underplanting to help form biodiverse corridors at ground and canopy level.

7.1.23 Birches feature strongly in the site; birches are a native pioneering species that establish quickly.

7.1.24 Deciduous trees have been proposed with light canopies.

7.2 Management & Evaluation of habitats

Raised Planters

7.2.1 Leave pruning herbaceous plants until the end of winter to allow birds access to seeds and provide habitat for wildlife; avoid pruning during the bird nesting season (March – August).

7.2.2 Cut back/prune/coppice established the vegetation in rotation to provide a range of ages and structures from young growth through to decaying wood. When possible, leave standing dead shrubs within the planters.

7.2.3 Weed between the vegetation until vegetation is established and use a mulch to prevent water loss. Weeding infrequently allows wild annual plants, which are of value to birds and insects, to grow and provides another food source for the birds.

Façade bound green wall

7.2.4 Once a green wall has been installed and the plants are established, it is imperative that the green wall is maintained.

7.2.5 Green wall maintenance includes the inspection of the green wall for any pests and diseases, selectively pruning larger foliage to allow light to reach all plants and monitoring the green wall's moisture levels.

³ GRO (2021) *The GRO Green Roof Code*

- 7.2.6 It is advised that green walls are inspected and maintained on a regular basis, - one to two times per month. However, this will depend on which type of green wall is being incorporated.

Rain Garden

- 7.2.7 In terms of maintenance, rain gardens require regular maintenance to perform adequately.
- 7.2.8 During the establishment of the rain garden habitat, vegetation should be inspected bi-weekly.
- 7.2.9 Vegetated areas must be inspected at least once each year for to ensure against any unwanted growth. Unwanted growth should be removed from the rain garden and any dead plants should be removed and replaced.
- 7.2.10 Maintenance of the rain garden should include pruning overgrown material in the garden annually when the plants are dormant. Maintenance should also include the removal of dead plant material and deadhead flowers. This will encourage dense, new vegetative growth⁴.
- 7.2.11 The rain garden is to be inspected twice each year to determine if permeability of the bed has decreased.

Extensive green roof

- 7.2.12 Extensive green roofs are intended to be low maintenance, typically no more than one to three visits needed a year.
- 7.2.13 Minimal irrigation and maintenance are provided during establishment. When correctly designed and installed, irrigation is generally only required in the initial establishment phase and then very rarely afterwards.
- 7.2.14 Extensive green roofs tend to only need to receive minimal management and usually no irrigation or fertilisation is required. Irrigation or fertilisation may be required initially until plants become established. During extended periods of dry weather, it is advisable to monitor green roofs and irrigate only if necessary and ideally at night.
- 7.2.15 Maintenance for green roofs will require the removal of weeds and some potential top up of fertiliser depending on which species are used for the extensive green roof. If plants are encroaching areas where they are unwanted, remove them and use them to fill in gaps of sparse vegetation elsewhere on the roof.
- 7.2.16 Weeds and unwanted vegetation should be removed manually without the use of chemical pesticides. If moss is becoming excessive, it may be necessary to examine the drainage to ensure it is not allowing the roof to stay too damp for other plants.
- 7.2.17 Monitor the membrane for leaks and avoid over watering, which puts additional stress on the membrane.

Intensive green roof

- 7.2.1 Maintenance will vary according to the particular type of vegetation and the requirements of the site and client. Intensive green roof systems require a higher level of maintenance, including regular irrigation.

Urban Trees

- 7.2.2 The Defra Metric 3.1 suggests that it will take 10 years for standard time to reach target condition for all proposed trees post construction. Therefore, it is imperative these trees are well managed

⁴ Rutgers (2018) Rain Garden Maintenance Manual

and maintained to increase their biodiversity value. Maintenance for the retained and proposed trees should be sought from an arboricultural consultant.

8 Maintenance Schedule

8.1.1 The report outlines the management operations needed to maintain the new habitat enhancement measures. The below table shows the timing for maintenance of enhancement features provide to improve biodiversity on site.

Table 8-1: 5-Year Maintenance Schedule for enhancement features: showing months in which the listed task can be conducted.

Task	J	F	M	A	M	J	J	A	S	O	N	D
Bat boxes												
Bird boxes												
Insect houses												

Table 8-2: Maintenance tasks for enhancement features: showing timings and the parties responsible for carrying out the task.

Ecological enhancement feature/habitat	Contributing activities	Timing	Responsible parties
Bird boxes	Monitoring and cleaning	Annually outside of nesting bird season (September-February)	Landscape management company appointed by the Client
Insect houses	Monitor/clean	Annually, at the end of summer	Landscape management company appointed by the Client
Bat boxes	Monitor	Annually, December/January	Bat licenced ecologist
Raised planters	Monitor/maintenance	Leave pruning herbaceous plants until the end of winter. Avoid pruning during the bird nesting season (March – August). Cut back/prune/coppice established vegetation.	Landscape management company appointed by the Client
Façade bound green wall	Monitor/maintenance	Green walls need to be inspected and maintained on a regular basis, one to two times per month.	Landscape management company appointed by the Client
Rain garden	Monitor/maintenance	During the establishment of the rain garden habitat,	Landscape management company appointed by the Client

		<p>vegetation should be inspected bi-weekly.</p> <p>Vegetated areas must be inspected at least once each year for to ensure against any unwanted growth. Unwanted growth should be removed from the rain garden and any dead plants should be removed and replaced.</p>	
Extensive green roofs	Monitor	During establishment and extended periods of dry weather	Landscape management company appointed by the Client
	Irrigate	Extended periods of dry weather (if necessary), at night	Landscape management company appointed by the Client
Intensive green roofs	Monitor	Regularly, throughout the year	Landscape management company appointed by the Client
	Irrigate	<p>The intensive green roof should have a system in-build for a reservoir of water capacity to give a longer drying out period.</p> <p>Fertiliser will need to be added at regular intervals, as the nutrient supplies in the soil will quickly become exhausted.</p>	Landscape management company appointed by the Client
Standard trees	Maintenance inspection	Annual visual inspection of trees	Suitably Qualified Arborist

9 Monitoring & Remedial Actions

- 9.1.1 The LEMP will be reviewed annually and updated accordingly to take account of any changes to management prescriptions and identify any contingencies/remedial action accordingly. Its review will ensure that the identified ecological objectives are achieved.
- 9.1.2 At least an annual inspection will be undertaken of all habitats on-site, with any incidents or damage reported as soon as this is noticed.
- 9.1.3 If the delivery of the LEMP cannot be implemented, appropriate action will be taken to identify and rectify failings by revising the plan. In this instance where there are any areas of successes, these would be promoted and applied further while minimising failures in order to maximise improvement in the updated LEMP. A report will be drafted following the inspection to detail the remedial actions required, and how they will be agreed and implemented.
- 9.1.4 No specific monitoring is required in respect of any protected or notable species as confirmed by the PEA (Assystem, 2023).

10 Mechanisms to Secure Delivery

10.1 Legal and Funding Mechanisms

- 10.1.1 The requirement associated with BREEAM ties the client into the provision of the 5-year management. This will be funded by the owner of the site.

10.2 Persons Responsible

- 10.2.1 The landscape management company appointed by Client will be responsible for implementing the LEMP. As required, they will employ specialist contractors to undertake specified tasks. The building owner will be responsible to fund the implementation of the LEMP.
- 10.2.2 It is understood the below contact will be responsible for appointing the management company and ensuring the measures described in this management plan are implemented: The contractor will be responsible for implementation of the ecological enhancements and the Client will be responsible for maintenance and following the management plan.
- 10.2.3 The ecology and biodiversity information will be included in the operational management report by Client. The details of the landscape management company will be updated when it is known who will be leading the monitoring and maintenance of on-site habitats.

Appendix A Relevant Legislation

A.1 The Environment Act 2021

- A.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):
- A.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.
- A.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.
- A.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”.

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

- A.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.
- A.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.

- A.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.

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

- A.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).
- A.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.
- A.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.

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

- A.4.1 V The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife.
- A.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.

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

- A.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.

A.6 UK Biodiversity Action Plan

- A.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.
- A.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.

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

- A.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.
- A.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.

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

- A.8.1 Birds of Conservation Concern 4: the Red List for Birds was published in December 2015.
- A.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.

A.9 Protection of Badgers Act 1992

- A.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.
- A.9.2

AEIL Limited
Innovation Centre
1 Evolution Park
Blackburn
BB1 2FD

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