

Hackney Advice Note: Biodiversity and the Built Environment



1. Introduction

This guide provides information about some of the biodiversity measures that can be incorporated into new developments and regeneration projects. It offers some general principles on the features that Hackney Council expect to see in development applications.

1.1 Biodiversity in the Built Environment

In London's urban environment wildlife is dependent on not only natural and green spaces but also the built environment, including houses, flats, offices, industrial sites, viaducts and other structures. Parks and green spaces can be managed to provide wildlife areas, but in order for wildlife to thrive in our city we also need to provide opportunities for species to utilise our buildings and the spaces around them. Bats, swift, peregrine falcon, mason bee and many other species can thrive in our built environment – provided that appropriate habitats are created for them.

The value of the built environment for biodiversity has been recognised in a number of local, regional and national policies. It is a requirement for developments to consider the impacts they could have on existing biodiversity **and** identify opportunities for enhancement. All new developments should contribute to the enhancement of biodiversity through habitat creation; from nest boxes to living roofs to wildlife friendly landscaping. Biodiversity in the built environment contributes to the green infrastructure of Hackney and the benefits this provides including:

- Public enjoyment accessibility and health and wellbeing
- Ecosystem services such as climate change adaptation, flood alleviation and air quality improvements.

It is recognised that some species associated with the built environment can cause problems, and a few are considered pests, for example Pharaoh ant, German cockroach and brown rat. This guidance takes account of these matters; any measures to promote wildlife's use of buildings need to recognise the need for preventative interventions and management to be considered.

1.2 Biodiversity Assessments

Biodiversity assessments are required to identify:

- Existing habitats and species present on the site (including trees)
- Habitats and wildlife features in the nearby vicinity as these may be impacted by the proposals (for example, through hydrological changes)

Detailed guidance on when surveys are likely to be required is available from the London Borough of Hackney^{vi}. This information will be required as part of the planning validation process so it is essential for proceeding with a planning application. It is particularly important to find out if there are any protected species or habitats either in or near to the development site as this could have a significant impact on the proposals. Once the existing biodiversity value of the site and surroundings has been identified, the details of ways in which a development will protect and enhance biodiversity should be set out. This should include on-site measures such as creating living roofs, planting and artificial nesting and roosting sites, as well as protecting those features that are already used by desirable species. It should also consider wider issues such as contribution to green corridors and green infrastructure in the borough.

1.3 Biodiversity Policy and Legislation

Main pieces of biodiversity policy and legislation relevant to Hackney	
Hackney	Local Development Framework 2010. Core Strategy Policies:
	<i>12 Health and Environment</i>
	<i>24 Design</i>
	<i>26 Open Space Network</i>
	<i>27 Biodiversity</i>
	<i>29 Water and Waterways</i>
	<i>31 Flood Risk</i>
	Sustainable Communities Strategy 2008-18 Priority 6
Planning Contributions SPD	
Area Action Plans Dalston, Hackney Central, Hackney Wick, Manor House	
Sustainable Design Supplementary Planning Document (tbc)	
Public Realm SPD (tbc)	
Regional	The London Plan. Consultation draft replacement plan 2011ii policies:
	<i>2.18 Green Infrastructure</i>
	<i>5.3 Sustainable design and construction</i>
	<i>5.10 Urban greening</i>
	<i>5.11 Green roofs and development site environs</i>
	<i>5.13 Sustainable drainage</i>
	<i>7.18 Protecting local natural space and addressing local deficiency</i>
	<i>7.19 Biodiversity and access to nature</i>
<i>7.21 Trees and woodlands</i>	
<i>7.28 Restoration of the Blue Ribbon Network</i>	
<i>5.7 Public realm</i>	
Connecting with London's nature: The Mayor's Biodiversity Strategy 2002	
The East London Green Grid	
Connecting Londoners with Trees and Woodlands: A Tree and Woodland Framework for London 2005	
National	Natural Environment and Rural Communities Act 2006
	Planning Policy Statement 9
	ODPM Circular 06/2005 Biodiversity and Geological Conservation - Statutory
	Obligations and their Impact Within the Planning System
	Wildlife and Countryside 1981 (as amended)
	Countryside and Rights of Way Act 2000
European	The Conservation (Natural Habitats, &c.) Regulations 1994

1.4 Codes for Sustainable Homes and BREEAM

The Hackney Core Strategy 2010 states that all proposals should be rated against the Code for Sustainable Homes (CSH) for residential developments or BREEAM for non-residential developments. Hackney requires residential developments to be designed to achieve the minimum CSH levels: level 3 from 2010 (affordable homes minimum level 4), level 4 from 2014 and level 6 from 2016.

Appropriate consideration of biodiversity can contribute to achieving CSH/BREEAM standards for Ecology. Credits are awarded for enhancing site ecology and long-term benefits to biodiversity.

2. Biodiversity Enhancing Landscaping

Landscape schemes can provide for both amenity and biodiversity with careful design. The local context and site ecological surveys will be able to inform appropriate schemes that are able to enhance the biodiversity within the development and improve the wider green infrastructure in the borough.

What the council expects

All development applications should demonstrate the landscaping schemes have considered biodiversity issues. Landscaping proposals should also take into account the provisions of the Biodiversity Action Plan and provide enhancements for target species.

Design principles

A) Retention of existing vegetation where appropriate.

In particular:

- *mature trees*: provide potential nest sites for birds, some can support roosting bats
- *hedges and dense bushes*: provide cover, foraging and nesting sites for birds *local priority species*
- *soil*: in some situations the existing topsoil will contain a seed bank with appropriate local species, retain if possible

B) Incorporating tree planting

The 'right place right tree' principlesⁱⁱⁱ should be used when designing tree planting schemes. Species should primarily be of a locally native mix and where possible of local provenance. In addition to providing biodiversity benefits, appropriate tree planting can create green corridors and contribute towards climate change mitigation.

Recommended tree species	
Large Trees	Small Trees
Ash <i>Fraxinus excelsior</i>	Alder <i>Alnus glutinosa</i>
Beech <i>Fagus sylvatica</i>	Apples <i>Malus spp.</i>
Cherries <i>Prunus avium</i> and <i>P. padus</i>	Field maple <i>Acer campestre</i>
Elm <i>Ulmus procera</i> (NB resistant variants only)	Holly <i>Ilex aquifolium</i>
Oaks <i>Quercus robur</i> and <i>Q. petraea</i>	Pears <i>Pyrus spp.</i>
Small-leaved lime <i>Tilia cordata</i>	Rowan <i>Sorbus aucuparia</i>
White willow <i>Salix alba</i>	Silver birch <i>Betula pendula</i>

Derived from Natural England's 'Plants for Wildlife Friendly Gardens'

C) Wildlife-friendly planting

Native species are often more beneficial for wildlife, but appropriate non-natives can sometimes provide similar resources. Plant dense areas of shrubs to provide cover for birds and nesting habitats and plants which provide nectar, pollen and fruit/berries. Aim to use species listed in the Natural England guide to wildlife friendly planting:

- <http://naturalengland.etraderstores.com/NaturalEnglandShop/NE29>

This provides lists of hedge and shrub species, wildflowers, shading loving species, cultivated plants for borders, drought tolerant species and plants for ponds and marshes. For lists of nectar plants which can be planted so as to provide a continuous sources of nectar, see:

- <http://www.hackney.gov.uk/biodiversity-in-estates-and-gardens.htm>

D) Diversify Grassland areas

Lawn areas could be planted with low-growing native herbs and meadow areas could be used to provide more interest. For advice on how to convert lawns and create wildlife rich meadows see:

- <http://www.hackney.gov.uk/biodiversity-advice.htm>
- www.wildlifetrust.org.uk/cheshire/documents/advice_wildflowers.pdf



Mabley Community Meadow, c. Chris King



**Clapton Park Estate
c. John Little**



**View from Homerton Station
wildflower meadow c. Fran Monks**

3. Installation of Artificial Nesting and Roosting Sites

Artificial nest sites can provide nesting and roosting opportunities for birds, bats and some invertebrates. This is particularly important in urban areas where there are fewer natural nesting sites available. Boxes or bricks can be retro-fitted to existing buildings and incorporated into new developments at little cost.

What the Council Expects

Hackney council will expect development to incorporate a range of artificial nesting and roosting sites, with the number reflecting the size and scale of the development. Purpose built features such as bricks are preferable in new developments; as well as blending in with the structure they provide longer lasting benefits and require minimal maintenance. Structures should be intended for species targeted in the Hackney Biodiversity Action Plan including house sparrows, black redstarts, bats and swifts. More details on enhancements for these species are provided in sections 7-10.



Invertebrate wall, c. Grass Roof Company

Design principles

- Ensure the box/brick is appropriate for the target species. The requirements of house sparrows will be different to those of house martins or swifts. Bat boxes/bricks will also be specifically designed to suit their needs.
- Ensure the location is right for the species. Think about the height from the ground, direction of sunlight and wind, and ensuring the box/brick is away from disturbance.
- Provide habitat for the target species. It is particularly important to provide foraging areas for bats in the landscaping design.

Invertebrate features can be incorporated through the use of 'bug hotels' or habitat walls. These are discreet features that are easy and inexpensive to install.

Examples of artificial nesting/roosting sites and habitat walls for invertebrates can be found at the following sites. Please note, the London Borough of Hackney do not recommend specific suppliers.

<http://www.d4b.org.uk/keyConcepts/birdBricks/index.asp>

http://www.bats.org.uk/pages/construction_industry.html

<http://www.grassroofcompany.co.uk/green-roof-containers.htm>

<http://www.londons-swifts.org.uk/MakingHomesForSwifts.htm>

4. Living Roofs and walls

Living roofs and walls provide a range of benefits including:

- *Supporting biodiversity*
- *Increasing energy efficiency through thermal insulation*
- *Aesthetic value*
- *Forming a key part of SUDs by reducing run-off*
- *Providing local cooling*
- *Extending building lifetimes by protecting the fabric of walls and roofs*
- *Noise barrier*
- *Cost savings and enhanced property value*

In urban areas living roofs and walls provide valuable habitats in areas that are often lacking in biodiversity. Living roofs are usually 'green' (vegetated) or 'brown' (rubble-based, with sparse vegetation). They can be fitted to any roof that is flat or gently sloping on new developments or retro-fitted to existing buildings and provide the same benefits. The London Plan includes a policy (5.11A) requiring major developments to incorporate living roofs wherever feasible.



Living roof in central London, c. livingroofs.org

What the Council Expects: living roofs

Hackney council expects major development to, where feasible, incorporate a living roof on approximately 80% of appropriate flat or gently sloping roof space. Small scale development is encouraged to incorporate living roofs into existing or new buildings.

A mixed substrate based living roof with the characteristics described below should be used unless shown to be unfeasible. The design and planting however, should be informed by a site biodiversity assessment and reflect local conditions and species of interest such as black redstarts. The loading requirements of this roof type mean that there may be implications for structural design, which should be considered at an early stage in the design process. It should be noted that living roofs provide a different type of habitat to trees and gardens and therefore do not directly compensate for their loss.

Design Principles: living roofs

The ideal living roof should include a mix of substrates:

- **Growing medium:** The predominate area of roof should be formed of a suitable growing medium with an average depth of 130mm. Substrate depth should vary between 80-150 mm to encourage different plant species, with troughs facing away from the prevailing wind.
- **Wildflowers and herbs:** Wildflower plugs should ideally be planted on the growing medium with 16 plugs per m². This can produce a meadow when grown with grasses. A high proportion of species with biodiversity value should be used, particularly native species as listed below.
- **Aggregate mix:** Rubble and similar material can be used to create habitat resembling brown-field sites and provide habitat for species such as black redstarts. When using recycled materials from development, issues of pollutants should be addressed.
- **Sedum:** The use of sedum mats should be limited unless the only option, as they have limited biodiversity benefits. However, they can be used mixed alongside the above substrates. In all cases wildflowers should be seeded within the mat.
- **Dead wood:** Piles of logs should be placed to provide invertebrate habitat.
- **Shrubs:** In deeper substrate, shrubs with biodiversity value may be planted. This can also create more intensive living roof habitat where access may be given to create amenable garden space. This however will require stronger roofs to account for the additional loading and higher maintenance.

Recommended wildflower and herb species

<i>Agrimonia eupatoria</i> / Agrimony	<i>Linaria vulgaris</i> / Common toadflax
<i>Anthyllis vulneraria</i> / Kidney vetch	<i>Lotus corniculatus</i> / Bird's-foot trefoil
<i>Briza media</i> / Quaking-grass	<i>Malva moschata</i> / Musk mallow
<i>Centaurea nigra</i> / Common knapweed	<i>Origanum vulgare</i> / Wild marjoram
<i>Echium vulgare</i> / Viper's-bugloss	<i>Plantago media</i> / Hoary plantain
<i>Galium verum</i> / Lady's bedstraw	<i>Primula veris</i> / Cowslip
<i>Festuca ovina</i> / Sheeps fescue	<i>Prunella vulgaris</i> / Selfheal
<i>Hypericum perforatum</i> / Perforate St. Johnswort	<i>Ranunculus acris</i> / Meadow buttercup
<i>Knautia arvensis</i> / Field scabious	<i>Ranunculus bulbosus</i> / Bulbous buttercup
<i>Koeleria macrantha</i> / Crested hair-grass	<i>Reseda lutea</i> / Wild mignonette
<i>Leontodon autumnalis</i> / Autumn hawkbit	<i>Sanguisorba minor</i> / Salad burnet
<i>Leontodon hispidus</i> / Rough hawkbit	<i>Silene vulgaris</i> / Bladder campion
<i>Leucanthemum vulgare</i> / Oxeye daisy	

What the Council expects: living walls

Hackney's preferred type of living wall is extensive. These are more sustainable, as they potentially do not need a watering system, are low maintenance and have higher biodiversity benefits, particularly for birds. They are also considerably cheaper. Conversely intensive green walls are formed of containers of plants fastened into a grid system.

Design Principles: living walls

- Several different species of climbing plants should be used. Suitable species include clematis and honeysuckle.
- Creepers can be grown on up a modular trellis system; a grid in which creepers can be grown away from the wall, preventing damage from species such as English Ivy. A cable and wire-rope system can also be used; this provides greater design flexibility.
- Drainage must be considered. The run-off from the adjacent roof can be recycled for use in watering climbing plants.
- The design of each living wall should be based on the functions it will be required to perform, including biodiversity, amenity or sound insulation.

Detailed advice on the structure and design of living roofs and walls is available at:

www.greenroofs.net/components/com_lms/flash/Green%20Walls%20Intro%20908b.pdf

www.livingroofs.org

<http://mayor.london.gov.uk/archive/mayor/strategies/sds/docs/living-roofs.pdf>

5. Sustainable Urban Drainage Systems (SUDS)

SUDS are drainage methods that take account of environmental and amenity issues. They provide more sustainable methods than conventional drainage by:

- *reducing localised flooding by containing and dispersing stormwater*
- *protecting or enhancing water quality*
- *creating habitats*
- *improving the appearance of sites*

SUDS can include:

- *Rainwater harvesting*
- *Permeable paving*
- *Living roof wetland features such as swales and ponds*
- *Soft landscaping*



Wetland habitat at the Stoke Newington reservoir, c. Matthew Frith

What the Council Expects

Hackney Council expects all new development to utilise sustainable urban drainage systems (SUDs) unless there are practical reasons for not doing so, as according to the London Plan policy 5.13.A. Small-scale developments can utilise permeable pavements and soil and planted areas positioned adjacent to walls to collect roof run-off.

Design principles

The biodiversity value of SUDS will be greatest in schemes that utilise swales, ponds and wetlands as these provide wildlife habitat.

- Landscaping should be multifunctional to provide biodiversity and amenity value whilst providing features to filter and store water.
- Vegetation such as reedbeds can be installed to help filter water. Planting reeds would also contribute to the Hackney Biodiversity Action Plan.

More detailed guidance on SUDS design is available at:

www.ciria.org/suds/index.html

<http://www.environment-agency.gov.uk/business/sectors/39909.aspx>

6. Lighting

Artificial lighting can adversely impact on a number of species and all developments should consider and minimise the impacts of lighting schemes. Schemes near to woodlands, hedgerows and waterways can be particularly harmful to biodiversity.

Bats are known to be particularly effected as lighting schemes can impact on their behaviour and ability to survive. Bats are protected by through UK law under the Wildlife and Countryside Act and Habitats Regulations. Some invertebrates, e.g. moths and glow-worm are also known to be effected by certain artificial lighting.

What the Council Expects

Where there is the possibility of a lighting scheme impacting on habitats or species of importance, the Council require a biodiversity survey and assessment to be carried out. Details of triggers and our requirements are available in the Hackney Advice Note – Biodiversity Validation and Biodiversity Assessments, available at:

[http://www.hackney.gov.uk/Assets/Documents/Hackney Advice Note - Biodiversity Validation and Biodiversity Assessments.pdf](http://www.hackney.gov.uk/Assets/Documents/Hackney_Advice_Note_-_Biodiversity_Validation_and_Biodiversity_Assessments.pdf)

Design principles

- Lighting should only be used where it is really needed and levels should be as low as guidelines and Secure by Design principles allow.
- Lighting should be directed to the area of need and not allowed to spill onto natural features or areas of known wildlife activity. Hoods and shields can be used to help with this.
- Lighting columns should be as short as possible to keep light at a low level.
- Limiting the time lights are on can provide periods of darkness.

Further guidance on lighting design including details of different lamp types is available from the Bat Conservation Trust at:

http://www.bats.org.uk/pages/bats_and_lighting.html

http://www.bats.org.uk/data/files/bats_and_lighting_in_the_uk_final_version_3_may_09.pdf

7. Species Advice Note: Black redstart *Phoenicurus ochruros*



Black redstart c. J. Law

The Black redstart is a small robin-sized bird that has adapted to live at the heart of towns and cities. The birds use areas of 'wasteland' vegetation for feeding. Because of their specialist requirements there are only about 100 pairs of black redstart in the UK, however the species has been recorded in Hackney and are Hackney BAP priority species. They are protected by the Wildlife and Countryside Act 1981 and are a London BAP species.

As cities are regenerated and tidied up there are fewer brownfield areas for the birds to use. However, black redstart habitat requirements can be met through appropriately designed mitigation as part of the planning process.

What the Council Expects

Development proposals should assess the likelihood of potential impacts on all protected and priority species, including Black redstart. Brownfield sites of biodiversity value should be protected or otherwise compensated where possible. Where space is limited, mixed substrate living roofs can be used to compensate for loss.

Design principles

- An aggregate mix present on the original site should be used as long as pollutant worries do not exist. In London this is likely to be a mixture of crushed brick and concrete graded from 25mm to dust and left to colonise with plants naturally. This should be contoured with troughs of 50mm and peaks of 150mm.
- Nesting box provision will not normally be necessary for this species.

For more information see:

www.blackredstarts.org.uk

8. Species Advice Note: Bats

Over the last century bat numbers have declined and many species are now rare. Because of this all species of bat found in the UK are highly protected under national and international law. Nine different species of bat have been recorded in Hackney (as at 2011):

- Daubenton's Bat
- Natterer's Bat
- Lesser Noctule Bat
- Noctule Bat
- Nathusius's Pipistrelle
- Soprano Pipistrelle
- Common Pipistrelle
- Brown Long-eared Bat
- Vespertilionidae sp.



Pipistrelle bat, c. Alison Fure

What the Council Expects

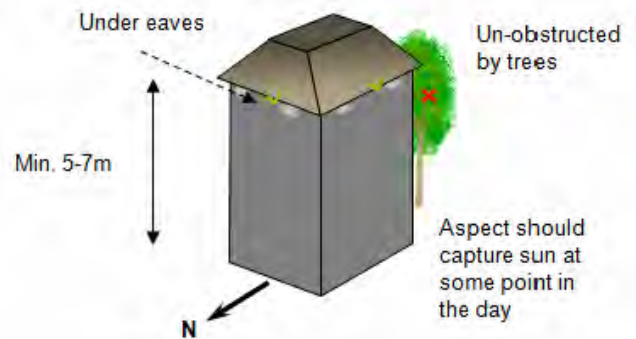
Development proposals should assess the likelihood of potential impacts on all protected and priority species, including bats. If bats are present or suspected to be present, species assessments and licenses may be required. Bats use a range of habitats and structures across Hackney and the Council is working to ensure that bat conservation is at the forefront of our planning decisions. All major developments should seek to incorporate bat bricks/boxes into designs, particularly if near to watercourses or lines of trees. Numbers will depend on the scale of development and enhancement necessary. Boxes/bricks should only be placed if foraging habitat is available.

Design principles

There are a diversity of bat boxes/bricks to suit different developments. Which types are most successful is not well understood; however they should be made of rough material such as 'woodcrete', brick or untreated rough sawn wood. Entrance slits should be 15mm to 120mm wide to minimise drafts and at the bottom to allow self-cleaning. Please note that Hackney Council does not recommend any particular companies.

For detailed information see www.bats.org.uk

Location for bat boxes/bricks



9. Species Advice Note: House sparrow *Passer domesticus*

House sparrows were once a common urban bird, however populations have declined drastically, with 68% declines in London since 1994. House sparrows are now UK BAP, London BAP and Hackney BAP priority species. From on-going research, it appears the ecological requirements of house sparrows are different from most bird species in London. House sparrows are associated with human buildings, tend to nest in colonies and feed on seeds, insects and general scraps.



What the Council Expects

Development proposals should assess the likelihood of potential impacts on all protected and priority species, including House sparrow. Developments should seek to incorporate more than one nest box according to the specifications below, if feasible. Provision of habitat is also necessary if providing nest boxes. Removal of hedges and shrubs should be avoided or otherwise replaced if possible.

Design Principles

Nest boxes should follow the specifications shown. Nest boxes should be fixed at least 2-5m above ground level near each other and under building eaves (if possible), facing away from prevailing winds. Habitats to encourage for house sparrows include:

- **Lawns** with long grasses (>20cm) uncut during winter /early spring.
- **Small annuals** such as fat hen, groundsel, dandelion, vetches and chickweed.
- **Herbaceous plants** such as nettle, geranium and nightshade
- **Hedgerows** such as Hawthorn, elder, blackthorn and buddleia
- **Dense scrub and thick bushes** including Cotoneaster, firethorn and Berberis.
- Minimal chemical treatments should be used.



For more information on nest box designs:

www.dt4u.com/dtsystems/bbsparrow.php

www.nestbox.co.uk/House-Sparrow

10. Species Advice Note: Swift *Apus apus*

Swifts migrate to Hackney from Africa every summer, returning to the same nest and remaining only three months. After fledging, they don't land for 3 years – sleeping, feeding, drinking, bathing – and unique to swifts – even mating on the wing. Swift numbers have halved in the past 12 years; this is likely to partly reflect a lack of nesting sites. Swifts have adapted to living alongside humans within the open eaves and gables of buildings. Individuals and their nests are protected by the Wildlife and Countryside Act 1981 and are a Hackney priority species.

What the Council Expects

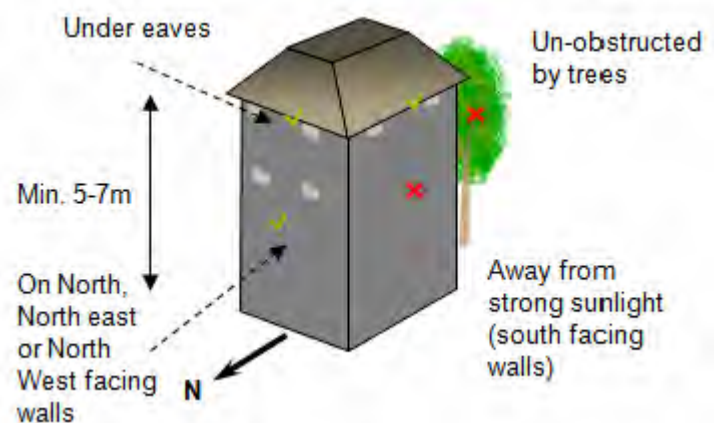
Development proposals should assess the likelihood of potential impacts on all protected and priority species, including Swift. New builds and renovations should install artificial bricks or boxes. In particular developments over 7m high should include a band of swift bricks/nests around the top of buildings according to the design specifications given. Internal nest boxes are favoured by the Council.

Design principles

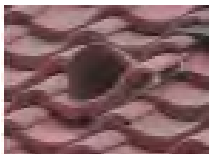
Unless shown to be infeasible, swift nests should be incorporated as shown. Swift bricks are one way of blending swift nests with a building's design.

There are however a diversity of external boxes and internal build methods, detailed by swift conservation www.swift-conservation.org/ and www.london-swifts.org.uk

One method is to create internal boxes placed flushed to the wall with holes leading to narrow exists which dissuade starlings. Existing buildings can also have swift bricks fitted.



Roof tile adapted to swifts



Swift bricks



c. Jeffrey Dennis

c. Ben Genovese

External swift boxes



11. Guidance for biodiversity enhancements in developments

The table below provides some examples of biodiversity enhancements that Hackney Council recommends for different types of development. This table is not exhaustive and enhancements should be devised in accordance with the site Biodiversity Assessment. Please note, detailed guidance regarding biodiversity surveys and assessments is included in Hackney Advice Note: Biodiversity Validation and Biodiversity Assessments.

Code	Development Definition	Biodiversity enhancing landscaping	Artificial nesting/roosting sites	Living roofs and walls	SUDS
E01	Largescale major dwelling developments	<p>Include biodiversity elements (as outlined in section 1: Biodiversity Enhancing Landscaping) in at least 50% of landscaping area.</p> <p>Existing habitats to be retained wherever possible.</p> <p>Tree planting to follow 'right place right tree principles'. 30% of trees to be planted to be large species trees.</p>	<p>Install a minimum of 2 artificial sites per appropriate façade. Target species should be selected based on the biodiversity assessment and liaison with the Council.</p> <p>Buildings over 7m high should include a band of swift and/or bat bricks around the top of the building.</p> <p>Where appropriate, developments near to watercourses should install kingfisher and/or sand martin features in the watercourse.</p>	<p>80% of appropriate roofspace (i.e. flat or gently sloping, excluding industrial plant and area taken up with renewable technology) should be biodiverse, substrate-based extensive green roof of a varied depth between 80mm and 150mm.</p> <p>Design should be in line with the London Living Roofs and Walls Technical Report and the Environment Agency Green Roof Toolkit.</p>	<p>Wherever possible, SUDS design must maximise amenity and biodiversity benefits and maximise areas of landscaping and/or other permeable surfaces.</p> <p>Living roofs can contribute to SUDS, particularly where there is limited space for landscaping.</p>
E02	Largescale major offices/ R&D/ light industry developments				
E03	Largescale major general industry/ storage/ warehousing developments				
E04	Largescale major retail distribution and servicing developments				
E05	Largescale major gypsy and traveller sites developments				
E06	All other largescale major development				
E07	Major dwellings				
E08	Major office				
E09	Major industrial				
E10	Major retail				
E11	Smallscale major gypsy and traveller sites development				
E12	Other major developments				

Code	Development Definition	Biodiversity enhancing landscaping	Artificial nesting/roosting sites	Living roofs and walls	SUDS
E13	Minor residential	Include biodiversity elements (as outlined in section 1: Biodiversity Enhancing Landscaping) in at least 50% of landscaping area. Existing habitats to be retained wherever possible. Tree planting to follow 'right place right tree principles'.	Install a minimum of 2 artificial sites per appropriate façade. Target species should be selected based on the biodiversity assessment and liaison with the Council. Buildings over 7m high should include a band of swift and/or bat bricks around the top of the building.	80% of appropriate roofspace (i.e. flat or gently sloping, excluding industrial plant and area taken up with renewable technology) should be biodiverse, substrate-based extensive green roof of a varied depth between 80mm and 150mm. Design should be in line with the London Living Roofs and Walls Technical Report and the Environment Agency Green Roof Toolkit.	Wherever possible, SUDS design must maximise amenity and biodiversity benefits and maximise areas of landscaping and/or other permeable surfaces. Living roofs can contribute to SUDS, particularly where there is limited space for landscaping.
E14	Minor office				
E15	Minor industrial				
E16	Minor retail				
E17	Minor gypsy and traveller sites development				
E18	Other minor developments				
E19	Minerals				
E20	Change of use				
E21	Householder	Existing habitats to be retained wherever possible.	Install a minimum of 1 artificial site per appropriate façade. Target species should be selected based on the biodiversity assessment and liaison with the Council.	Biodiverse substrate-based roofs if possible (see above). Sedum roofs will be considered as an alternative.	
E22	Advertisements				
E23	Listed buildings alterations	Guidance will depend on type of alteration or proposals. Advice given above should be followed where relevant to proposals.			
E24	Listed building consent to demolish				
E25	Conservation area consents				
E26	Certificate of lawfulness				

Code	Development Definition	Biodiversity enhancing landscaping	Artificial nesting/ roosting sites	Living roofs and walls	SUDS
E27	Notifications – adjoining boroughs, electricity generating stations and overhead lines	<p>Guidance will depend on type of alteration or proposals. Advice given above should be followed where relevant to proposals.</p>			
OTH	<p>Other not included above. For LBH includes:</p> <ul style="list-style-type: none"> - Applications for discharge of conditions; - Revisions and modifications to existing or approved schemes, except where a new application involved; - Applications for consent, agreement or approval required by a condition or limitation attached to a grant of planning permissions (as defined by Article 21 of TandC Planning Act); - Applications for felling licenses, TPO's, TCA's, hedgerow removal, high hedges etc; - Applications, determinations and approvals under Part 23 of Schedule 2 (development by telecommunications code system operators) or under Part 31 of Schedule 2 (demolition of buildings); - Applications for Hazardous Substances consents under the Planning (Hazardous Substances) Regulations 1992. 	<p>Guidance will depend on type of alteration or proposals. Advice given above should be followed where relevant to proposals.</p>			

12. Further Guidance

Hackney Council

Biodiversity in Hackney www.hackney.gov.uk/biodiversity

Biodiversity in Estates and Gardens <http://www.hackney.gov.uk/biodiversity-in-estates-and-gardens.htm>

Biodiversity Advice <http://www.hackney.gov.uk/biodiversity-advice.htm>

Planning Guidance Notes <http://www.hackney.gov.uk/ep-documents-forms-2.htm>

Hackney Advice Note: Biodiversity Validation and Biodiversity Assessments

[http://www.hackney.gov.uk/Assets/Documents/Hackney_Advice_Note -
_Biodiversity Validation and Biodiversity Assessments.pdf](http://www.hackney.gov.uk/Assets/Documents/Hackney_Advice_Note_-_Biodiversity_Validation_and_Biodiversity_Assessments.pdf)

Other organisations

Bat Conservation Trust www.bats.org.uk

Design for Biodiversity www.d4b.org.uk

Greenspace Information for Greater London (GiGL) www.gigl.org.uk

Institute of Ecology and Environmental Management www.ieem.net

London Biodiversity Partnership www.lbp.org.uk

London Wildlife Trust www.wildlondon.org.uk

Natural England www.naturalengland.org.uk

References

i See Frith, M. and Sargent, G. (2004), Buildings, Habitats Volume 1, CIWEM.

ii Available at: <http://www.london.gov.uk/shaping-london/london-plan/docs/london-plan.pdf>

iii See 'Connecting Londoners with Trees and Woodlands: A Tree and Woodland Framework for London' [http://www.forestry.gov.uk/pdf/ltwf_full.pdf/\\$FILE/ltwf_full.pdf](http://www.forestry.gov.uk/pdf/ltwf_full.pdf/$FILE/ltwf_full.pdf)