



ECOLOGICAL APPRAISAL REPORT:

LAND AT BP GARAGE, 104A FINCHLEY ROAD, LONDON NW3 5EY

For: **Lance Trevelyan**

Estate Management Office
Greenhills Estate
Tilford Road
Tilford
Surrey
GU10 2DZ

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www.wychwoodenvironmental.com

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EXECUTIVE SUMMARY

Proposed development

- Development proposals involve the construction of a new block of flats that will be four storeys and contain approximately 27 units of one, two and three bedroomed flats. The proposals will involve the demolition of the existing buildings present at the site.

Impacts

- The proposed development has low potential to impact foraging and commuting bats.
- The proposed development has the potential to impact nesting birds.
- The site supports habitats that are of negligible ecological value to wildlife with only built structures and hardstanding being present.

Further recommended surveys

- No further surveys are recommended in relation to habitats or protected species.

Proposed mitigation

- Mitigation to reduce the impacts of artificial lighting upon foraging bats is detailed.
- Mitigation to reduce impacts on nesting birds is detailed.

Enhancements

- It is suggested that green roofs are created and planting of value to local wildlife is undertaken as part of the landscaping plan. The proposals should also look to incorporate the provision of integrated bat and bird boxes. This will enhance the site's value to local wildlife post-development.

Report completed by: Nadine Clark MSc BSc MCIEEM

Verified by: Dr. Craig Turner MCIEEM FRGS FLS

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Contacts: Dr. Craig Turner - E: craig@wychwoodenvironmental.com
T: 07760234934, W: www.wychwoodenvironmental.com

1.0 INTRODUCTION

- 1.1 Wychwood Environmental Ltd was instructed by Lance Trevellyan to undertake a Preliminary Ecological Assessment (PEA) to highlight the possible presence of protected species (e.g. bats, badgers, great crested newts, reptiles, and breeding birds) and/or habitat(s) of ecological/conservation value on the proposed development site at: 104A Finchley Road, London, NW3 5EY.
- 1.2 Surveys are necessary to collect information on habitats/protected species to provide necessary guidance and mitigation advice, to ensure that no valuable habitats/protected species are adversely affected by the proposed development.
- 1.3 The survey was completed to inform the Local Planning Authority (LPA) of any material impacts resulting from the proposed development and to ensure compliance with the requirements of the Natural Environment and Rural Communities (NERC) Act (2006) (Section 40) and the Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their Impact within the Planning System (ODPM 06/2005, Defra 01/2005). The legislation relating to protected species is detailed in Annex 1.
- 1.4 Development proposals include the construction of a four storey block of flats with 27 apartments split between one, two and three bedroomed properties. The proposals will involve the demolition of the existing BP filling station at the site to accommodate the new structure. The location of the site is shown in Figures 1-3 (Annex 2). Full details are provided in the planning submission.
- 1.5 Section two of this report describes the methodologies used for survey work. Section three provides the results of these surveys, sections four and five provide discussion and implications for development, with further surveys and mitigation covered in section six and enhancement recommendations are made in section seven.

2.0 METHODOLOGY

Habitat Survey

- 2.1 A Preliminary Ecological Assessment (PEA) of the site was undertaken, following standard extended Phase 1 habitat survey protocols (IEA, 1995), by Nadine Clark BSc MSc MCIEEM on 11th May 2022. This involved systematically walking over the site and classifying each parcel of land based on vegetation, into one of approximately 90 habitat types (JNCC, 2010).
- 2.2 A search for any invasive non-native species, as listed under Schedule 9 of the Wildlife and Countryside Act 1981, as amended,¹ such as Japanese knotweed (*Fallopia japonica*) was also carried out.
- 2.3 Any habitats or features of interest and any sightings, signs or evidence of protected or notable fauna or any potential habitats suitable for such species, were assessed as detailed below:
- The suitability of habitats was assessed for amphibians (including great crested newts, *Triturus cristatus*)²;
 - The suitability of habitats was assessed³ for badgers (*Meles meles*) and any evidence including setts, dung pits/ latrines, badger paths, hairs, bedding, footprints and scratching of trees/ shrubs was noted;
 - The suitability of the habitats was assessed for dormice (*Muscardinus avellanarius*);
 - The suitability of the site was checked for other mammal species (e.g. hedgehog);
 - Buildings with features potentially suitable for roosting bats were assessed following best practice guidelines as outlined by the survey techniques published by the Bat Conservation Trust (BCT)⁴ and Mitchell-Jones and McLeish (2004)⁵. Trees within the

¹ <http://archive.defra.gov.uk/wildlife-pets/wildlife/management/non-native/documents/schedule9-list.pdf>

² Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10(4), 143-155.

³ Badger survey followed guidelines recommended in Harris *et al.* (1989).

⁴ Collins J (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn) (published by Bat Conservation Trust, London).

⁵ Mitchell-Jones A J (2004). *Bat mitigation guidelines*. English Nature.

development area were also assessed for their potential to support roosting bats (following BCT protocols);

- Landscape features such as hedgerows, trees and shrubs were also assessed for their potential suitability for bat foraging and commuting;
- The suitability of habitats was assessed for nesting birds;
- The suitability of habitats was assessed for reptiles.

Desk Study

- 2.4 The Internet database MAGIC⁶ (Multi-Agency Geographic Information for the Countryside) was searched for any areas with statutory designations within a 2km radius of the site.
- 2.5 Noting the scope and scale of the proposed development, which involves the construction of a new property on a site consisting of hardstanding and buildings, a detailed species-level desk study was not deemed necessary, due to the scale of likely impacts.

Survey Limitations

- 2.6 An initial site assessment such as this is only able to act like a 'snapshot' to record any flora or fauna that is present at the time of the survey. It is, therefore, possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats were assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

Baseline Evaluation Criteria

- 2.7 Based on the desk study and field survey results, an ecological evaluation of the site was undertaken using a combination of evaluation criteria for habitats and species, following the general framework provided by CIEEM⁷ (Table 1).
- 2.8 Where relevant the evaluation was made with reference to the statutory protection afforded to species and habitats. Legal protection does not always correspond to conservation value. Some species (e.g. badgers) are protected for reasons of animal welfare rather than conservation. Others are of national conservation value but are not protected by law (e.g. some Red Data Book species and UK BAP species).

⁶ <https://magic.defra.gov.uk>

⁷ CIEEM (2017). Guidelines for Preliminary Ecological Appraisal (PEA).

Table 1. Ecological value criteria used in the ecological evaluation, as outlined by CIEEM.

Ecological Value	Description and Examples
High	Habitats or features that have high importance for nature conservation, such as statutory designated nature conservation sites of international or national importance or sites maintaining viable populations of species of international or national importance (e.g. Red Data Book species, European protected species).
Medium	Sites designated at a county or district level, e.g. Local Wildlife Site (LWS), ancient woodland site, ecologically 'important' hedgerows or ecological features that are notable within the context of a region, county or district (e.g. a viable area of a Priority Habitat on the county BAP or a site that supports a viable population of a county BAP species).
Low	Sites of nature conservation value within the context of a parish or neighbourhood, low-grade common habitats, such as arable fields and improved grasslands and sites supporting common, widespread species.

3.0 RESULTS

Desk Study

Designated Sites

- 3.1 There are three statutory designated sites present within 2km of the proposed development site. The closest site is Adelaide Local Nature Reserve (LNR) which is located approximately 1.1km to the east of the development site. This LNR is designated for the meadow and pond that it supports which is accessible to the public. Belsize Wood LNR is located approximately 1.2km to the northeast and supports a range of invertebrates within the woodland. St John's Wood Church Grounds LNR is located 1.6km to the south of the development site and includes the church grounds which support woodland and a wildflower glade.
- 3.2 The proposed development site falls within a SSSI Impact Risk Zone but the scale and type of the development, residential, does not fall within the type of planning application that requires consultation with Natural England by the Local Planning Authority. Given the scale of the development which will involve the construction of a block of residential flats on an existing developed site it is highly unlikely that the proposals will result in any significant negative impacts on any of the statutory designated sites.

Protected Species

- 3.3 There are six records for European Protected Species Mitigation Licences within 2km of the site and these records are all for bats. The closest record is approximately 0.4km to the northwest of the development site and this is for the destruction of a resting place for common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*P. pygmaeus*). Approximately 1.6km to the north and 1.7km to the north northwest records are held for mitigation licences for the destruction of a resting place for common pipistrelle. The other five records were for destruction on resting places either for common pipistrelle or soprano and common pipistrelle and were located >1km away to the south or northwest.

Site Location Description

- 3.4 The site is located off Finchley Road, a double lane arterial road, which is present on the southern boundary of the site with College Crescent running along the western and northern boundary of the site (Figures 1 & 2). The eastern boundary of the site is adjacent to

University College School pre-prep buildings and a residential and commercial property. The site consists of the BP filling station forecourt and associated building. The site is located within an area of residential and commercial buildings. The residential properties include blocks of flats and residential houses and buildings which would have originally been large houses which are set within small to moderately large mature grounds. Greenspace in the area predominantly consists of private gardens and tree-lined streets.

Habitat survey

3.5 The habitats recorded on the development site are shown in Photos 1-12 (Annex 2) and Figure 4 (Annex 2). Habitats that could potentially be impacted by the proposed development consist of the following:

- Buildings
- Hard-standing
- Wall
- Trees

3.6 The application site consists of the BP Garage forecourt and associated building with a large retaining wall adjacent to College Crescent (Figure 4, Annex 2). There was a single street tree present adjacent to the southern boundary of the site.

Buildings

3.7 There was one brick built building on site (B1) that was used as the shop and office for the garage (Photograph 1, Annex 2) with an attached metal awning (B2). These buildings are discussed in more detail in relation to their potential to support protected species in section 3.13 - 3.15 below.

Hard-standing

3.8 The whole development site consisted of hardstanding across the forecourt. This habitat was predominantly concrete with no encroachment by vegetation due to the high level of vehicle access across the site (Photograph 2, Annex 2). This habitat was assessed as having negligible ecological value.

Wall

- 3.9 A brick retaining wall was present around the western and northern boundary of the site where the site is adjacent to College Crescent (Photograph 3, Annex 2). This wall was in good condition which had prevented any colonisation of the wall by vegetation. This habitat was assessed as having negligible ecological value. It's potential to support roosting bats is discussed in more detail in 3.16 of this report.

Trees

- 3.10 A single street tree was present immediately adjacent to the southern boundary of the site (Figure 4, Annex 2). This mature false acacia (*Robinia pseudoacacia*) showed evidence of recent pollarding to reduce the crown size (Photograph 4, Annex 2). This tree was assessed for its potential to support roosting bats and the findings are discussed in 3.18 below.
- 3.11 Overall, the habitats within the site were assessed to be of negligible ecological value with only the street tree adjacent to the site offering any ecological value.

Protected Species Survey

Bats

- 3.12 The site has negligible potential to support foraging and commuting bats within the redline boundary as there was no vegetation present and it is heavily lit during operational hours. The mature tree on the adjacent pavement may be used on occasion by foraging bats in the local area.

Building B1

- 3.13 Building B1 consisted of a two-storey brick building used as a shop on the ground floor and an office on the first floor (Photographs 1 & 5, Annex 2) which is proposed to be demolished to accommodate the development proposals. The building had a slate tile or slate-effect roof in a hipped configuration with a fibre-glass clock turret on the centre of the roof. The tiles were close-fitting with only a few minor gaps under a row of tiles on the northern elevation although these gaps were considered too small to accommodate bat access. The windows were uPVC and well fitting with no obvious gaps around them. The soffit boxes were in good condition with no gaps around the edge where they met the wall and all brickwork and mortar was intact (Photograph 6, Annex 2).

- 3.14 Internally, building B1 had a single large enclosed roof void which ran the length of the property. This void was approximately 1.5m to the roof apex by 6m wide and 12m long. The structure of the roof was cluttered with numerous wooden joists throughout the void present (Photograph 7, Annex 2). Bitumen felt was present under the tiles throughout the void. It was possible to access the inside of the clock tower from the void (Photograph 8, Annex 2). No evidence of bats was found during the internal inspection. Overall, due to the lack of external features suitable for roosting bats, and no evidence of roosting bats within the roof void, Building B1 was assessed as having negligible potential to support roosting bats.

Building B2

- 3.15 Building B2 consisted of a metal awning over the filling station forecourt. This structure was connected to the western elevation of Building B1 (Photograph 9, Annex 2) with lead flashing present and with no gaps present. The awning roof consisted of metal and composite flat roof with the underside consisting of metal panelling which was tightly fitting with no obvious gaps around the structure which could provide roosting opportunities for bats (Photograph 10, Annex 2). Overall, building B2 was assessed as having negligible potential to support roosting bats.

Walls

- 3.16 The retaining wall along the northern boundary of the site consisted of a brick built wall extending up to approximately 6m in the northeastern corner of the site. The wall was in good condition with no obvious gaps in the mortar that could be used by roosting bats. This retaining wall was assessed as having negligible potential to support roosting bats.
- 3.17 The adjacent shop with residential properties above on the southeastern side of the site abuts the proposed development and the scheme will join with this wall. Therefore, this wall was assessed for its potential to support roosting bats. The brickwork was in poorer condition than the buildings on site and there were some missing sections of mortar near ground level but these did not appear to create crevices or provide access into the wall (Photograph 11, Annex 2). A crack was present up the wall where the brickwork met a concrete panel and at the level this could be view, this crack was shallow and not suitable for roosting bats (Photograph 12, Annex 2). Overall, this adjacent wall was assessed as having negligible potential to support roosting bats.

Adjacent Street Tree

- 3.18 The false acacia adjacent to the southern boundary of the site was assessed for its potential to support roosting bats. Although the trunk had rough bark, no features such as rot holes, callus rolls or lifted bark was present that could provide suitable features for roosting bats. The tree was assessed as having negligible potential to support roosting bats.

Amphibians and Reptiles

- 3.19 The proposed development site consisted of buildings and hardstanding with no vegetation present. The habitats present on site were not suitable to support a population of reptiles or amphibians.

Nesting birds

- 3.20 The buildings on site had low potential to support nesting birds.

Badgers and other mammals

- 3.21 No evidence of badgers using the site was recorded. There is no habitat that could be considered potentially suitable for supporting badgers or hedgehog and the site is poorly connected to good quality habitat for these species.

4.0 ECOLOGICAL EVALUATION

Designated Nature Conservation Sites

Statutory Designated Sites

- 4.1 There are three statutory designated sites within 2km of the proposed development site with the closest over 1km away. The proposals are small scale and impact no habitat of ecological value. Therefore, it is highly unlikely that the proposals will negatively impact any statutory designated sites. The development does not fall within an SSSI impact consultation zone for the proposed scale and type of development. As such, it is unlikely that this will require the Local Authority to consult Natural England to assess the impact.

Habitats

- 4.2 The site supports the following dominant habitats: buildings, walls and hard-standing. The site as a whole could be considered to support habitats of **negligible** ecological value. Only the adjacent street tree on the southern boundary had site level value to wildlife.

Protected Species

Flora

- 4.3 None of the species recorded during the survey are specifically protected by the Wildlife and Countryside Act 1981 (as amended) or considered nationally or locally rare (see Preston et al., 2002⁸). Also, none of the species recorded are listed as Species of Principal Biological Importance on Section 41 of the NERC Act 2006 or as Priority Species on the national BAP (UK BAP, 2007⁹).

- 4.4 Enhancements for the development site in relation to landscaping are recommended in Sections 6 and 7.

Fauna

- 4.5 Buildings B1 and B2, the retaining wall and adjacent wall were all assessed as having negligible potential for roosting bats and no evidence of bats was found during the site

⁸ Preston, C.D., Telfer, M.G., Arnold, H.R., Carey, P.D., Cooper, J.M., Dines, T.D., Pearman, D.A., Roy, D.B. & Smart, S.M. 2002. *The changing flora of the UK*. Department for Environment, Food and Rural Affairs, London.

⁹ UKBAP (2007) Report on the Species and Habitat Review: Report by the Biodiversity Reporting and Information Group (BRIG) to the UK Standing Committee, June 2007

survey. The adjacent street tree was assessed as having negligible potential to support roosting bats and a low potential to support foraging and commuting bats.

- 4.6 The site was unsuitable to support common reptiles and amphibians with no vegetation present and limited connectivity to suitable habitat for these species.
- 4.7 The site had a negligible potential to be used by foraging hedgehogs if they are present within the wider immediate area. The site had no evidence of badgers accessing the site and had negligible potential to support foraging badgers.
- 4.8 The buildings on site had a low potential to support nesting birds during the spring/summer.

5.0 RECOMMENDATIONS

- 5.1 Wherever possible, negative ecological impacts should be avoided. If this is unavoidable then mitigation and compensation measures will be proposed for adverse ecological effects. In addition, it is best practice to seek positive biodiversity benefits through enhancement measures, in particular with regard to Priority Habitats and Species listed on the national and local Biodiversity Action Plans and the NERC Act 2006.
- 5.2 CIEEM (2017)¹⁰ endorses the following principle, recommended by the Royal Town Planning Institute (2019)¹¹ for optimising the biodiversity outcomes of planning decisions.
- 5.3 New benefits: seek to provide net benefits for biodiversity over and above requirements for mitigation and compensation.
- 5.4 The provision of compensation/enhancements helps local planning authorities in meeting requirements as stipulated under the National Planning Policy Framework¹², which states that sustainable development should seek to achieve net gains in biodiversity for nature.

¹⁰ CIEEM (2017) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

¹¹ <https://www.rtpi.org.uk/practice/2019/november/biodiversity-in-planning/>

¹² National Planning Policy Framework. (2018) Department of Communities and Local Government.

6.0 MITIGATION & FURTHER SURVEY

Designated sites

- 6.1 The development proposals must ensure no long-term significant impact on any statutory or non-statutory designated sites as per national and local planning policy. Given the size and nature of the proposed development is unlikely to have any negative effects on any of the sites designated for their conservation significance within 2km of the site.

Habitats

- 6.2 No further habitat surveys are required (based on current proposals). Best practice should be followed (i.e. S5837:2012 Trees in Relation to design, demolition and construction – Recommendations) to ensure that the street tree present on the southern boundary to be retained is not adversely affected.
- 6.3 The proposed development will look to create green roofs as part of the proposals and these should look to include plant species which will be of value to local wildlife. Any provision of green or brown roofs will be an enhancement to the site post-development.

Bats

- 6.4 The two buildings, B1 and B2, on site were assessed as having negligible potential to support roosting bats with no suitable external features present. The retaining wall, adjacent property wall on the eastern boundary and the adjacent street tree on the southern boundary of the development were all assessed as having negligible potential. No further surveys are required in relation to roosting bats. The site supports no potential foraging and commuting habitat for bats currently given the lack of habitat and the high level of lighting during operational hours but the adjacent street tree has low potential to support foraging bats. Artificial lighting should be avoided where possible post development to enhance the site's value to local bats. If artificial lighting is required, it must be managed in a way whereby it will not impact upon bats within the area. Annex 3 details the Bat Conservation Trust guidelines on lighting mitigation. External lighting for the proposed new development should be positioned low to the ground, with downward facing baffles and set on timers or motion sensors. Warm white LED lights have the least impact upon bats.

Amphibians and Reptiles

- 6.5 The site is unsuitable for common reptiles and amphibians with the habitat consisting of buildings and hardstanding. No further surveys are required and no mitigation measures are required during construction.

Breeding birds

- 6.6 The buildings on the site could potentially support a number of nesting bird species. It is recommended that demolition of the buildings occurs outside the bird nesting season, which is generally accepted to extend from March - August inclusive (although dates vary by species and are subject to prevailing weather conditions). If this is not possible the area to be demolished should be inspected for evidence of nesting activity by a suitably experienced ecologist no more than 24 hours in advance of clearance. If this identifies any nesting activity the habitat feature should be left undisturbed until nesting ceases.

Mammals

- 6.7 The habitats on site were not suitable for foraging badgers and hedgehogs if they are present in the immediate area. No further surveys are required and no mitigation measures recommended in relation to these species.

7.0 ENHANCEMENTS

7.1 In line with local and national policy (NPPF 2021¹³), and the requirement to deliver a 10% biodiversity net gain as detailed in the Environment Act 2021¹⁴, the new development should seek to provide biodiversity enhancements. The following suggestions would enhance the site for wildlife.

Green Roofs

7.2 The proposed development will use the entire footprint of the site for the building with landscaping proposed through the provision of green roofs. These roofs could be planted with species-rich turf or alternatively different sized brown roof substrates and dead wood habitat which can also be planted with sedum species. Details of types of living roofs can be found within the GLAs Living Roofs and Walls Technical Report: Supporting London Plan Policy¹⁵.

Bat Boxes

7.3 The inclusion of bat 'bricks' into the new development should be considered. These integrated boxes can be rendered over leaving just a small access gap or faced with brick or materials to match the design of the building.

Integrated Bird Boxes

7.4 Another recommended enhancement is the inclusion of integrated universal nest boxes within the buildings. These boxes can also be rendered over or faced with brickwork to match the development scheme to ensure they match the design and are unobtrusive. These style of integrated box, which were originally designed for swifts are suitable for a range of species including swift (*Apus apus*), house sparrow (*Passer domesticus*), blue tit (*Cyanistes caeruleus*), great tit (*Parus major*) and starling (*Sturnus vulgaris*) to nest in. At least four boxes should be included within the scheme.

Biodiversity Net Gain (BNG)

7.5 The enhancement measures will be formalized as part of a BNG assessment for the site.

¹³ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

¹⁴ <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

¹⁵ <https://www.london.gov.uk/sites/default/files/living-roofs.pdf>

8.0 REFERENCES

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London.

Department of Communities and Local Government (March 2012) *National Planning Policy Framework*.

Institute of Environmental Assessment (1995) *Guidelines for Baseline Ecological Assessment*.

JNCC (2010) *Handbook for Phase 1 Habitat Survey: a technique for environmental audit*. JNCC, Peterborough.

MAGIC Site Check Report. Available: www.magic.gov.uk.

Mitchell-Jones, J. (2004) *Bat Mitigation Guidelines*. Natural England.

Mitchell-Jones, A.J. and Mc Leish, A.P. (2004) *Bat Workers Manual*. JNCC

Annex 1 – Protected Species Legislation.

Plants

All wild plants are protected against unauthorised removal or uprooting under Section 13 of the Wildlife and Countryside Act 1981 (as amended). Plants listed on Schedule 8 of the Act (e.g. triangular club rush and Deptford Pink) are afforded additional protection against picking, uprooting, destruction and sale. Bluebell is protected against sale only.

Amphibians (Common Species)

Common amphibian species (i.e. common frog, common toad, smooth newt and palmate newt) are afforded partial legal protection under UK legislation, i.e. Schedule 5, Section 9 (5) of the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. This legislation prohibits:

- sale
- transportation
- advertising for sale

Badgers

Badger is a widespread and generally common species. However, they are legally protected under The Protection of Badgers Act 1992, which is based primarily on the need to protect badgers from baiting and deliberate harm or injury. Under this legislation it is illegal to:

- Wilfully kill, injure, take, or cruelly ill-treat a badger, or attempt to do so
- Possess any dead badger or any part of, or anything derived from, a dead badger
- Intentionally or recklessly interfere with a sett by disturbing badgers whilst they are occupying a sett, damaging or destroying a sett, causing a dog to enter a sett, or obstructing access to it

A badger sett is defined in the legislation as *“any structure or place, which displays signs indicating current use by a badger”*.

Bats

All bat species are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017. Together, this legislation makes it illegal to:

- Intentionally or deliberately take, kill or injure a bat
- Damage, destroy or obstruct access to bat roosts
- Deliberately disturb bats

A bat roost is defined in the legislation as *“any structure or place which a bat uses for shelter or protection”*. Roosts are protected whether or not bats are present at the time. If a development activity is likely to result in disturbance or killing of a bat, damage to its habitat or any of the other activities listed above, then a licence will usually be required from Natural England.

Birds

The bird breeding season generally lasts from early March to September for most species. All birds are protected under the Wildlife and Countryside Act (1981) (as amended) and the Countryside & Rights of Way Act 2000. This legislation makes it illegal, both intentionally and recklessly to:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is being built or in use;
- Take or destroy the eggs of any wild bird; and
- Possess or control any wild bird or egg unless obtained legally.

Birds listed under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended) (e.g. barn owl and kingfisher) are afforded additional protection, which includes makes it an offence to disturb a bird while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Great crested newts

Great crested newts and their habitat are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017. This makes it an offence to kill, injure or disturb great crested newts and to destroy any place used for rest or shelter by a newt. The great crested newt is also listed on Annexes II and IV of the EC Habitats Directive and Appendix II of the Bern Convention. If a development activity is likely to result in disturbance or killing of a great crested newt, damage to its habitat etc, then a licence will usually be required from Natural England.

Reptiles

There are six native species of reptiles in the UK, including the slow-worm (*Anguis fragilis*), viviparous lizard (*Zootoca vivipara*), grass snake (*Natrix natrix*) and adder (*Vipera berus*), smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*), which are afforded varying degrees of protection under UK and European legislation.

Slow-worm, viviparous lizard, adder and grass snake are protected under Schedule 5, Section 9 (1 and 5) of the Wildlife and Countryside Act 1981 (as amended) and the Countryside & Rights of Way Act 2000 against deliberate or reckless killing and injuring and sale.

Otters

Otters are fully protected under the Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Damage or destruction of a breeding site or resting place
- Deliberate disturbance of otters as:
 - to impair their ability:
 - to survive, breed, or reproduce, or to rear or nurture young;
 - to hibernate or migrate
 - to affect significantly the local distribution or abundance of the species

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

Annex 2 – Plans, Figures and Photographs.



Figure 1 – Approximate location of the site (red outline). Image taken from Google Earth (May 2022).



Figure 2 – Approximate location of the site (red outline) within the wider landscape. Image taken from Google Earth (May 2022).



Figure 3 – Site application boundary (red line) from tp bennett drawing no. F0100.



Figure 4 – Modified plan, showing the main habitats on site; dark grey – buildings; light grey – hard-standing; black dashed line – retaining wall; green circle- tree.

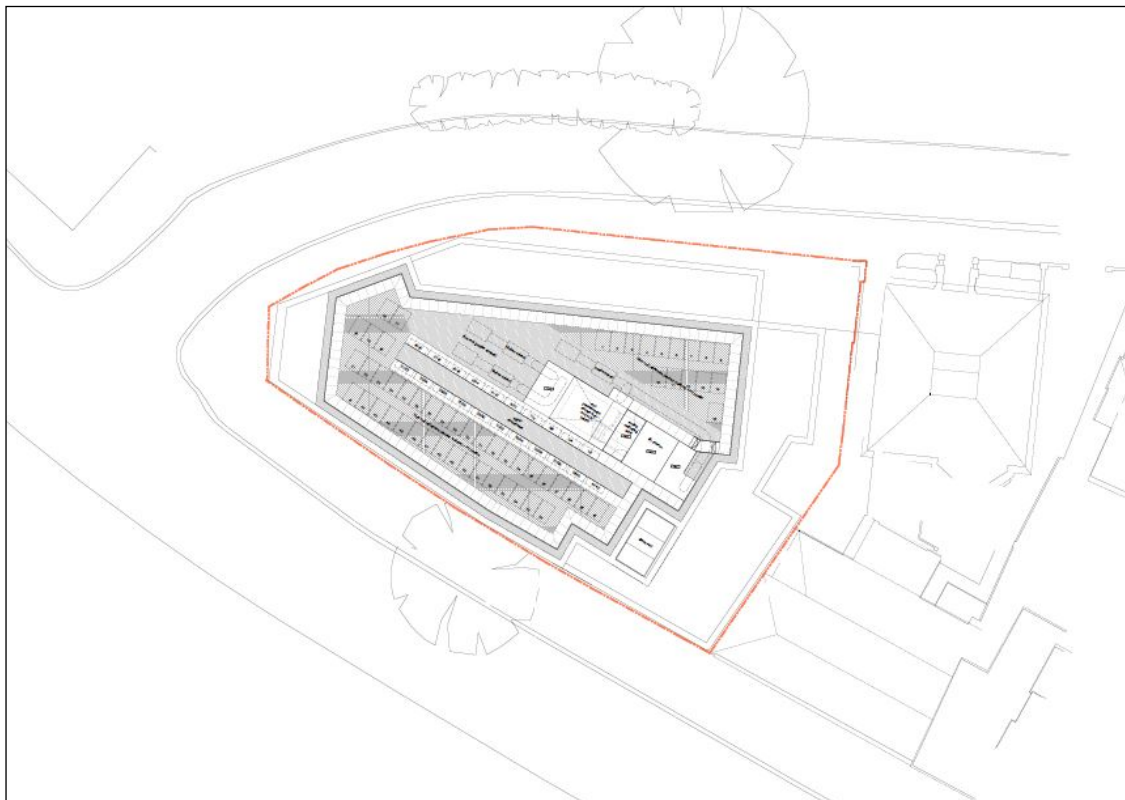


Figure 4 – Block Plan of proposed block of flats. Taken from tp bennett drawing D 0110



Photograph 1 – View of Site looking north with the two storey brick building (B1) with attached metal awning (B2).



Photograph 2 – View looking east over the garage forecourt showing the extent of the hardstanding on site.



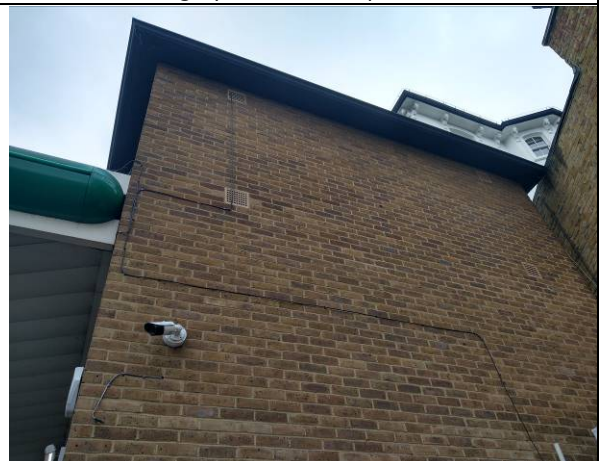
Photograph 3 – Retaining wall present along the northern boundary of the site adjacent to College Crescent.



Photograph 4 – False acacia street tree adjacent to the site's southern boundary. Note the reduced crown as a result of tree surgery in the recent past.



Photograph 5 – View of the hipped roof of Building B1 showing the close-fitting tiles and ornamental clock tower in the centre of the roof



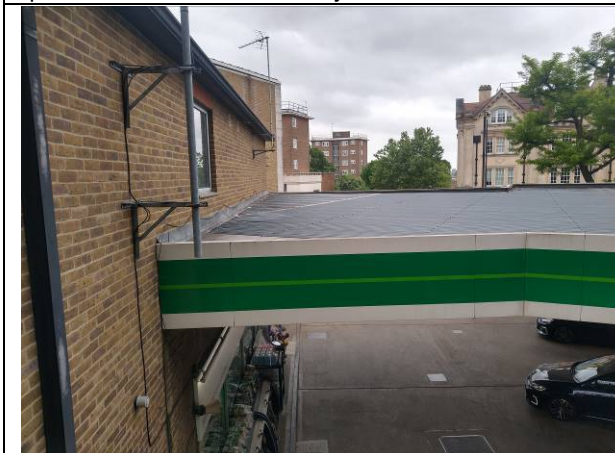
Photograph 6 – Southern elevation of the B1 showing tight fitting soffits.



Photograph 7 – Enclosed roof void of Building B1 showing the bitumen felt under the tiles and cluttered space with numerous wooden joists.



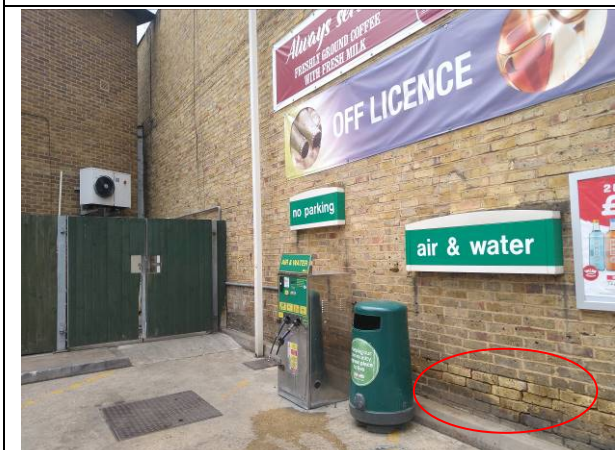
Photograph 8 – Inside view of the fibre-glass clock tower present on the roof of Building B1.



Photograph 9 – Building B1 to the left where it joins with Building B2.



Photograph 10 – Metal panelling on the underside of Building B2's roof which was close fitting with no obvious gaps.



Photograph 11 – Wall of adjacent property on the south eastern boundary showing section of missing mortar highlighted in red.



Photograph 12 – Concrete panel with minor gap along the edge where it met the brickwork on the wall of the property adjacent to the eastern boundary.

Annex 3 – Lighting guidance - the impact of artificial light on bats

The following basic set of guidelines is summarized from the latest Guidance Note (08/18)¹⁶ provides a concise checklist of points to consider with any lighting scheme:

- *Use professional lighting design engineers to model and predict light spill so that it can be avoided.*
- *Reduce light levels to the minimum necessary to meet legal and safety requirements.*
- *Reduce horizontal and upward/downward light spillage to the minimum achievable. The use of cowling, masks, louvers etc. and limiting the height of lighting columns may be important depending on the design of the lighting units. No bare bulbs. Lighting should only light the target area.*
- *Use non-reflective surfaces within the area to be lit to minimise indirect (reflected) spillage of light. The use of planting or other structures to add screening.*
- *Reduce the duration of lighting. The use of lighting ‘curfews’ can also be helpful - especially in the vicinity of bats roosts. For example, the emergence of bats, typically within the hour after sunset, may be disrupted (delayed) by raised light levels and this may result in a loss of feeding opportunities.*
- *Consider the type of light to be used and whether a different type or design may reduce potential impacts on bats and other wildlife. Narrow spectrum lighting with minimal UV emission should be used.*
- *Use ‘screen planting’ to limit light spill into dark areas.*
- *Use narrow spectrum light sources to lower the range of species affected by lighting, as research has shown that spectral composition does impact biodiversity.*
- *Use light sources that emit minimal ultra-violet light*
- *Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue short wave length content they should be of a warm / neutral colour temperature <4,200 kelvin.*

For more details, please refer to:

<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

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

<http://www.batsandlighting.co.uk/index.html>

¹⁶ <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

Annex 4 – Gardening for bats.

GARDENING FOR BATS

All sixteen species of bats in the UK eat insects, and need a good supply of these from spring through to the autumn. By growing flowers attractive to a range of insects, our gardens can become important feeding stations for bats, birds and other wildlife.



Many plants depend on insects

We grow flowers in our gardens for our own enjoyment. But colour and perfume are really the plants' way of advertising themselves to insects. Sweet nectar and protein-rich pollen are bait to encourage insects to visit. In return, pollen is carried from one flower to another on their bodies so the flowers are fertilised.

Bats need insects

Flying uses a lot of energy, so bats have huge appetites. All our UK bats eat insects. Five species, including the long-eared bat, prefer moths, but most bats rely more heavily on flies as food than any other insect group. Especially important are craneflies, and a range of midge families and their relatives. Pipistrelles, the bats most likely to visit your garden, depend on catching very large numbers of tiny insects, some of which are pests.

Flower shape and insect tongues

Flowers with long narrow petal tubes, such as evening primrose and honeysuckle, are visited by moths and butterflies. Only their long tongues can reach deep down to the hidden nectar. Short-tongued insects include many families of flies and some moths. They can only reach nectar in flowers with short florets. By planting a mixture of flowering plants, vegetables, trees and shrubs, you can encourage a diversity of insects to drop in and refuel.

Follow these general rules

- ? Plant flowers varying not only in colour and fragrance, but also in shape.
- ? Daisies and daisy-like flowers are open with a mass of shallow florets.
- ? Pale flowers are more easily seen in poor light.
- ? Single flowers have more nectar than double varieties
- ? Native wild flowers or those closely related are most useful
- ? Flowers with landing platforms and short florets such as daisy or carrot family attract many insects.
- ? Many flowering vegetables such as beans and courgettes are also good for insects.

Plant trees and shrubs

These are important in providing

- food for insect larvae
- food for adult insects
- shelter for flying insects

- roosting opportunities for bats.

In a small garden, choose trees that can be coppiced – cut down to the ground every few years - to allow new shoots to spring from the base. Young shoots and leaves will support leaf-eating insects, even if they do not produce flowers. Hawthorn and elder are useful small trees.

Create a wet area

A pond, a marshy area, even a half-tub made into a mini-pond can attract insects. Many of the tiny flies favoured by bats start life in water as aquatic larvae.

Say NO to insecticides

Chemical pesticides kill natural predators and so may do more harm than good. They reduce bats' insect prey, and surviving insects carry traces of poison.

Encourage natural predators

Hoverflies, wasps, ladybirds, lacewings, ground beetles and centipedes are the gardener's friends. As natural predators they help keep the balance, eating many pests.

- ? Allow some weeds to grow to provide ground cover for natural predators
- ? Grow favourites of hoverflies and other predators close to the flowers and vegetables that tend to become infested.
- ? Leave hollow-stemmed plants to overwinter as shelter for ladybirds.
- ? Leave heaps of dead leaves and brushwood undisturbed for hedgehogs.
- ? Most garden birds are effective predators. Provide them with regular food and water.

Prevent a CATastrophe

Many bats and other small mammals fall prey to Britain's most dangerous four-legged predator, the domestic cat. Cats do not need to stay out all night. Bring you cat in an hour before sunset so bats can emerge undisturbed.

(Send for our special leaflet on cats and bats.)

The Bat Conservation Trust, 15 Cloisters House
8 Battersea Park Road, London SW8 4BG
Tel 0845 1300 228 Fax 020 7627 2628
enquiries@bats.org.uk www.bats.org.uk
Registered Charity no 1012361 Company limited by guarantee, registered in England no 271282

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Gardening for bats

Aim at having flowers in bloom through the year, including both annuals and herbaceous perennials.

Below are some suggestions, but this is by no means an exhaustive list. See what grows well in YOUR garden, and what seems most attractive to insects.

Flowering times are approximate, varying in different areas. Regular dead-heading extends flowering period in many flowers. A=annual, HA=hardy annual, HHA=half-hardy annual, P=perennial, W=wild flower.

Flowers for borders			
St John's Wort	Hypericum	P	March-
marigolds	Calendula	H/A	March – Oct.
aubretia	a. deltoidea	P	March-June
honesty	Lunaria rediva	HB	March
forget-me-not	Myosotis sp.	A/P	March - May
elephant ears	Begonia	P	April
Wallflowers	Erysimum	B	April - June
Cranesbills	Geranium sp	P	May – Sept.
Yarrow	Achillea	P	May -
Poppies	Papaver sp.	A	May - July
Dames violet	Hesperis matronalis	P	May - August
Red Valerian	Centranthus ruber	P	May – Sept.
Poached egg plant	Limnanthes	HA	June – Aug.
Knapweed	Centaurea nigra	P	June- Sept.
Phacelia		HA	June – Sept.
Ox-eye daisy	Leucanthemum vulgare	P	June – Aug.
Evening primrose	Oenothera biennis	B	June-Sept.
Candytuft	iberis umbellata	HA	June – Sept.
Sweet William	Dianthus barbatus	B	June - July
Blanket flowers	Gaillardia	P	June -
Verbena	V.bonariensis	HHA	June – Oct.
Scabious	knautia arvensis	P	July-Aug.
Night-scented stock	matthiola bicolor	HA	July-Aug
Pincushion flower	Scabious sp.	A/P	July – Sept.
Cherry pie	heliotrope	HHA	July – Oct.
Mexican aster	Cosmos sp.	A/P	July – Oct.
Cone flower	Rudbeckia sp.	A/P	August-Nov.
Mallow	lavatera sp.	P	August-Oct.
Michaelmas daisy	Aster sp.	P	August-Sept.
Ice plant 'Pink lady'	Sedum spectabile	P	Sept.
Herbs – both leaves and flowers are fragrant			
Fennel	Foeniculum vulgare		July – Sept.
Bergamot	Monarda didyma		June - Sept
Sweet Cicely	Myrrhis odorata		April - June
Hyssop	Hyssopus officinalis		July - Sept
Feverfew	Tanacetum parthenium		June – Sept.
Borage	Borago officinalis		May – Sept.

Rosemary	Rosemary officinalis	March - May
Lemon balm	Melissa officinalis	
Coriander	Copriatum sativum	June - August
Lavenders	Lavendula sp.	
Marjoram	Origanum sp	
Trees, shrubs and climbers important to insects		
Oak	Quercus sp.	large gardens only
Silver birch	Betula pendula	
Common alder	Alnus glutinosa	Suitable for coppicing
Hazel	Corylus avellana	Suitable for coppicing
Elder	Sambucus nigra	Small
Pussy willow	Salix caprea	Suitable for coppicing
Hawthorn	Crataegus monogyna	Suitable for coppicing
Honeysuckle	Lonicera sp.	grow a variety for succession.
Dog rose	Rosa canina	Climber
Bramble	Rubus fruticosus	Climber
Ivy	hedera helix	Climber
Buddleia	Buddleia davidii	shrub
Guelder rose	Viburnum opulus	shrub
Gorse	Ulex sp.	shrub
Plants for pond edges and marshy areas		
Purple loosestrife	Lythrum salicaria	W June – Aug.
Meadow sweet	Filipendula ulmaria	W June – Sept.
Lady's smock	Cardamine pratensis	W April - June
Water mint	mentha aquatica	W July – Sept.
Angelica	Angelica sylvestris	W July – Sept.
Hemp agrimony	Eupatorium cannabinum	W July – Sept.
Marsh marigold	Callitriche palustris	W March – May
Creeping Jenny	Lysimachie nummularia	W May - August
Fringed water lily	Nymphaeoides peltata	W June – Sept.
Water forget-me-not	Myosotis scorpioides	W June – Sept.

Allow part of your lawn to grow long in summer and cut in autumn, removing the clippings. Avoid using fertilizers.
Compost heaps are good producers of insects too.

Add a seat to watch your garden come to life!

Native Plant Species Recommended

Hedging/shrubs (60cm whips)	
Blackthorn	<i>Prunus spinosa</i>
Hawthorn	<i>Crataegus monogyna</i>
Common Dogwood	<i>Cornus sanguinea</i>
Guelder Rose	<i>Viburnum opulus</i>
Holly	<i>Ilex aquifolium</i>
Elder	<i>Sambucus nigra</i>
Field Maple	<i>Acer campestre</i>
Hazel	<i>Corylus avellana</i>
Spindle	<i>Euonymus europaeus</i>
Trees (regular standard size)	
Apple	<i>Malus spp.</i>
Cherry	<i>Prunus spp.</i>
Field Maple	<i>Acer campestre</i>
Hornbeam	<i>Carpinus betulus</i>
Rowan	<i>Sorbus aucuparia</i>
Wild Service	<i>Sorbus torminalis</i>
English Oak	<i>Quercus robur</i>
Shrubs/Herbaceous plants (formal beds)	
Use species attractive to pollinators e.g bees, butterflies, moths. See this selection of RHS plants for pollinators: http://www.rhs.org.uk/Gardening/Sustainable-gardening/Plants-for-pollinators (see Appendix 4)	
Note – all specimens should be of British native stock from reputable suppliers.	