

149 Chiltern Road

Ecological Assessment

November 2018

T: 0118 989 10 86
E: info@derekfinnie.com
W: www.derekfinnie.com

20 Soames Place, Mulberry Grove
Wokingham, Berkshire RG40 5AT



COMMISSIONED BY

Mike Nash
149 Chiltern Road
Caversham
Reading
RG4 5JG

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Report Ref: DFA18095

Derek Finnie Associates Ltd

20 Soames Place
Wokingham
Berkshire
RG40 5AT

info@derekfinnie.com

CONTENTS

1	INTRODUCTION.....	1
1.1	Background.....	1
2	METHODOLOGY	2
2.1	Desk Study	2
2.2	Habitat survey	2
2.3	Preliminary Bat Roost Assessment.....	2
2.4	Survey Constraints.....	3
3	SITE DESCRIPTION	4
3.1	Desk Study.....	4
3.2	Field Survey	4
4	EVALUATION.....	8
4.1	Definition of ecological value	8
4.2	Site Evaluation	9
5	SUMMARY	10
	REFERENCES	11
	PLATES	12

TABLES

Table 1.	Assessment criteria for bat roost evaluation.	3
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FIGURES

Figure 1.	Phase 1 Habitat Map	15
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1 INTRODUCTION

1.1 Background

- 1.1.1 Derek Finnie Associates Ltd was commissioned by Mike Nash to undertake an ecological assessment of a property known as 149 Chiltern Road, Caversham, hereafter referred to as the 'Site'.
- 1.1.2 There is a proposal to re-develop the Site with alterations to the existing dwelling within the Site and the construction of a second property. Therefore, there is a need to assess any potential adverse ecological impacts of the proposal, as well as identify areas where biodiversity enhancements can be achieved. To this end, a baseline ecological assessment of the Site was undertaken in November 2018, comprising a desk study data search of publicly available information, a Phase 1 Habitat survey and a preliminary bat roost assessment of the existing dwelling and mature trees within the Site.
- 1.1.3 The following report outlines the methodologies employed throughout the ecological assessment, describes the current ecological status of the Site and discusses the ecological constraints to any future development, as well as options for biodiversity enhancement.

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 The Government's Multi- Agency Geographical Information for the Countryside (MAGIC) database was reviewed for the presence and extent of statutory designated sites within a 2km radius of the Site, extending to 5km for Natura 2000 sites.

2.2 Habitat survey

- 2.2.1 An 'extended' Phase 1 Habitat Survey was carried out on 20th November 2018; this followed the methodology presented by the JNCC (2010). The Phase 1 technique aims to classify each habitat into categories based on the assemblage of plant species present, with the dominant plant species for each habitat being noted. In some cases, sub-divisions or modifications of the standard categories can be made where this is useful in providing further detail.
- 2.2.2 An 'extended' form of the basic methodology was employed to determine whether any notable or protected species of fauna utilise the study area, in particular badgers, bats, amphibians, reptiles and birds. In the absence of direct evidence of these species, an assessment was made on the potential for the site to support such species.

2.3 Preliminary Bat Roost Assessment

Buildings

- 2.3.1 An external inspection of the existing buildings on the Site was undertaken on the 20th November 2018 during good weather, with access being available to all aspects of the building. Leica 10 x 32 BGA binoculars, a CluLite 1 million candlepower torch and a 4m telescopic ladder were used to assist in the search as necessary. The external features of the buildings, particularly the roof and ridge lines were inspected for potential ingress/egress points.
- 2.3.2 After the external inspection, a detailed inspection of the internal void space of the building was undertaken. Evidence of droppings, scratch marks, staining, feeding remains, urine stains and bats themselves were sought throughout the void space. Particular attention was paid to the areas underneath the ridge and joists, especially where the two meet. Evidence of gaps in the roof, indicating access to the outside, was sought, as well as gaps into any cavities that may be present. Again, a CluLite 1 million candlepower torch was used to assist in the search.
- 2.3.3 Features that could be exploited by bats were assessed based on the criteria in Table 1 (after BCT 2016).

Trees

- 2.3.4 The mature trees within the Site which have been highlighted for removal to facilitate development or for Health and Safety grounds were subject to a preliminary ground level roost assessment. Potential roost features (PRFs), such as crack, rot holes and plaits, were searched for throughout all trunks and main branches. The trees were then assessed based on the criteria present in Table 1 (after BCT 2016).

Table 1. Assessment criteria for bat roost evaluation.

Suitability	Description
Negligible	Negligible features likely to be used by roosting bats
Low	Buildings: A structure or feature with one or more potential roosts sites that could be used by individual bats opportunistically Trees: A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due its size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by a large number of bats on a more regular basis.

2.4 Survey Constraints

- 2.4.1 Phase 1 survey can be undertaken at any time of the year, although species that flower early in the year may have been missed or under recorded in November. However, given the habitats present within the Site, this is not thought to have affected the results significantly.
- 2.4.2 Access was available to all areas of the Site. No major constraints to the field survey were encountered.
- 2.4.3 The assessment was undertaken in line with the latest sectoral guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM), Bat Conservation Trust – *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (2016) as well as BS 42020: 2013 *Biodiversity – Code of Practice for Planning and Development*.

3 SITE DESCRIPTION

3.1 Desk Study

- 3.1.1 No part of the Site, or the immediate surrounding land is covered by any form of statutory designation on conservation grounds.
- 3.1.2 Clayfield Copse Local Nature Reserve (LNR), the closest statutory site, is located approximately 1.1km to the north of the Site. It is designated for its ancient woodland with service trees and a wild pear tree, bluebells, common orchids and wood anemones as well as the ancient boundary banks and ditches.
- 3.1.3 No other statutory sites are located within 2km of the Site.
- 3.1.4 A Green Link, as defined by Policy DM17, runs past the northern boundary of the Site. Green Links are protected under the Local Plan *“DM17: Green Network: The identified Green Network comprises Local Wildlife Sites, Local Nature Reserves, Areas of Biodiversity Action Plan (BAP) habitats and designated open space plus both existing and potential Green Links, all of which are shown on the Proposals Map. It also includes Biodiversity Opportunity Areas, shown in Figure 4. These Green Links shall be maintained, protected, consolidated, extended and enhanced.”*

3.2 Field Survey

Phase 1 Habitat Survey

- 3.2.1 The Site comprises a detached bungalow and associated garage, set amongst formal residential gardens containing areas of lawn and introduced shrub. Leyland cypress hedgerows form the majority of the boundaries to the Site.
- 3.2.2 The following Phase 1 habitats were identified within the Site:
- Amenity grassland;
 - Introduced shrub;
 - Dry pond;
 - Scattered trees;
 - Hedgerows; and
 - Buildings and hardstanding;
- 3.2.3 Each habitat is described in turn and depicted on Figure 1.

Amenity grassland

- 3.2.4 Amenity grassland, in the form of well-maintained lawn, is perhaps the most abundant habitat within the confines of the Site, more or less surrounding the property. The lawns appear to be regularly cut with the sward height being approximately 30mm at the time of the November 2018 surveys.
- 3.2.5 Species noted within the sward were typical of garden lawns, with perennial rye grass *Lolium perenne*, common bent *Agrostis capillaris*, red fescue *Festuca* sp, white clover



Trifolium repens, creeping buttercup *Ranunculus repens*, dandelion *Taraxacum officinale* agg and daisy *Bellis perennis* all being recorded.

Introduced shrub

- 3.2.6 Numerous area of non-native introduced shrub are present within flower beds through the garden property.

Dry pond

- 3.2.7 A small, artificially lined pond, surround by concrete slabs is located towards the southern point of the garden. At the time of the November 2018 survey the pond was dry and had reportedly been for some time. The remnants of pond lily *Nuphar* sp were noted within the base of the pond.

Scattered trees

- 3.2.8 There are several, small ornamental trees within the Site, predominantly around the periphery of the garden. They are all relatively small specimens with a diameter at breast height (dbh) of less than 150mm. None are native, hence are not considered further in this assessment.

Hedgerows

- 3.2.9 The majority of the boundaries of the Site are delineated by hedgerows, dominated by Leyland cypress *Cupressus × leylandii*. As is normal for this species, the hedgerows are dense with no associated ground flora due the high level of shade created by the foliage.
- 3.2.10 By contrast, the hedgerow which forms the northern boundary of the Site contains a mixture of coniferous and broad-leaved species, although it still dominated by non-native exotic species, although ivy *Hedera helix* and black bryony *Dioscorea communis* were noted.

Buildings and hardstanding

- 3.2.11 The Site contains a detached bungalow, located towards the centre of the Site, with a double detached garage located towards the south east of the main dwelling. The property is surrounded by hardstanding in the form of a concrete driveway, parking spaces and footpaths.
- 3.2.12 Three, single skinned, partially dilapidated wooden sheds are located close to the south western corner of the Site.

Preliminary Bat Roost Assessment

The bungalow

- 3.2.13 The bungalow is a brick built structure with a pitch, gable style roof. The building is approximately 50 years old and is currently occupied and in sound condition throughout (Plates 1 and 2).

- 3.2.14 The roof is finished with interlocking, ridge clay tiles which are intact and tight with one another; no gaps or missing tiles were noted (Plate 3). The ridge line, which runs more or north west to south east, is also intact.
- 3.2.15 There are no hanging tiles or weatherboarding on any aspect of the building.
- 3.2.16 The wooden soffit and fascia boards are in sound condition throughout, with no potential gaps which would allow bat ingress being noted (Plate 4).
- 3.2.17 Externally, no potential ingress points were encountered.
- 3.2.18 Internally, the joists and rafters within the voids are of a simple design, with the trusses being of a Fink style. Nail plates are absent at the major junctions; however, any potential gaps are minimal and deemed too small to provide suitable bat roosting features. A moderate build-up of cobwebs was present around the junctions and throughout the void spaces in general, suggesting a lack of bat activity (Plates 5 - 6). No staining or scratch marks were noted along any of the beams, and there was no evidence of feeding remains. No droppings were noted despite a thorough inspection and the distinct smell often associated with bat roosts was absent.
- 3.2.19 The roof lining is intact throughout. The gable end walls are constructed from breezeblock. There is the occasional area of missing mortar as is typical of this type of construction, but none were deemed of sufficient depth to offer roosting opportunities.
- 3.2.20 No evidence of bat activity was encountered within the roof void of the house was noted.

Garage

- 3.2.21 The double garage located on the south eastern side of the main bungalow supports a flat roof and was assessed as having negligible potential to support roosting bats (Plate 7).

Sheds

- 3.2.22 Three, interconnected, dilapidated sheds are present in the south west of the garden. They appear to have been constructed from various off-cuts of wood, ranging from sheets of plywood to wooden stakes. They are all single skinned and, given the state of disrepair, were assessed as having negligible potential to support roosting bats.

Other fauna

- 3.2.23 Due the well-maintained nature of the sward, being extremely short and lacking any structural diversity, the probability of the Site supporting reptiles has been assessed as negligible.
- 3.2.24 Although the pond appears to have once contained water, it does not now. It also reportedly contained numerous gold fish. This, combined with the artificial nature of the waterbody, the concrete surround and the small nature of the pond reduces its value as an amphibian habitat. Hence, the potential for protected amphibians to be within the Site has been assessed as negligible.

- 3.2.25 The Site may support a limited number of common and widespread bird species associated with the urban environment, but given the non-native nature of the habitats within the Site, any bird species assemblage is unlikely to be noteworthy.
- 3.2.26 The Site does not contain any habitats which have the potential to support any other specially protected species, or species of a raised conservation status.

4 EVALUATION

4.1 Definition of ecological value

- 4.1.1 While some level of subjectivity is unavoidable when apportioning value to ecological features and resources, certain parameters and points of reference can be used to help ensure consistency. Those used in this appraisal are explained below.
- 4.1.2 Sites already possessing statutory or non-statutory nature conservation designations will have been subjected to some form of evaluation process in the past, and their importance defined at a geographical scale (e.g. international, national, local). For these, evaluation will generally reaffirm their qualifying attributes, or in some cases may identify where designation may no longer be appropriate.
- 4.1.3 Factors such as extent, naturalness, rarity, fragility and diversity are all relevant to the determination of ecological value, and for the evaluation of sites and habitat features outside designated sites, these and other criteria as described by Ratcliffe (1977), may be applied. Ratcliffe's criteria are integral to the procedure for selecting both Sites of Special Scientific Interest and many non-statutory designation systems in the UK, and therefore remain an accepted standard for site evaluation.
- 4.1.4 In applying these criteria, attention may be drawn to the relative scarcity or abundance of features within the survey area and in the wider geographical context. Some criteria are however absolute and not relative to scale. Ancient woodland, for example, is fragile irrespective of whether it is being considered in an international or local context. Similarly, the value of an otherwise poor habitat may be elevated if it is central to the survival of a rare species.
- 4.1.5 Where evaluation is important for the purposes of informing decisions related to land-use planning and development control, the above approach needs to be supplemented by consideration of whether individual species are subject to legal protection, or whether habitats or species are present which have been identified as 'priorities' for biodiversity conservation in the UK. Planning authorities have a statutory duty to further biodiversity objectives and the presence of such resources may be material to the determination of development control decisions.
- 4.1.6 Further indications of conservation status for individual species are provided by reference to the Red Data Book system, the Vascular Plant Red Data List for Great Britain (Cheffings and Farrell 2006) or for birds by reference to the Birds of Conservation Concern (Eaton *et al.* 2015) This divides birds into three lists; Red List (birds of high conservation concern), Amber List (birds of moderate conservation concern) and Green List (not of conservation concern).
- 4.1.7 Scales of comparison varying from the international to the context of the local area may be used to define the measure of importance attached to individual features. The definition of geographic terms can vary, but in this evaluation the geographic frame of reference contained within the CIEEM guidelines (CIEEM 2018) is used.

4.2 Site Evaluation

Designated Sites

- 4.2.1 No part of the Site or the immediate surrounding land is covered by any formal designation on conservation grounds. A Green Link, as defined by Policy DM17, runs past the northern boundary of the Site and would be unaffected by the proposals.

Habitats

- 4.2.2 No habitats of ecological value have been identified within the Site; all are highly managed, artificial in nature and are dominated by non-native species.

Species

- 4.2.3 No specially protected species, or species of a raised conservation status, have been identified within the Site and the Site was assessed as having negligible potential to support such species.
- 4.2.4 Overall, the Site was assessed as having negligible ecological value. As such, the proposed re-development of the Site would have negligible ecological impact.

5 SUMMARY

- 5.1.1 An ecological assessment of a property known as 149 Chiltern Road, including an Extended Phase 1 Habitat survey and a preliminary bat roost assessment, was undertaken in November 2018. The Site was found to contain a detached bungalow and associated garage set in formal, well maintained gardens. As such the Site was assessed as having negligible ecological value. No evidence of protected species was encountered throughout the survey and the Site was assessed as having negligible potential to support such species.
- 5.1.2 Due to the paucity of biodiverse valuable receptors within the Site, there appears to be no reason, on ecological grounds, that would prevent the proposed re-development of the Site.

REFERENCES

- BCT 2016. *Bat Surveys – Good Practice Guidelines, 3rd Edition*. Bat Conservation Trust, London.
- Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. 2000. *Bird Census Techniques. Second Edition*. Academic Press
- Charter Institute of Ecology and Environmental Management (CIEEM) 2018. *Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland Third Edition*. CIEEM, Winchester.
- Cheffings, C.M. & Farrell, L. (eds), 2005. *The Vascular Plant Red Data List for Great Britain*. Joint Nature Conservation Committee.
- Eaton MA, Aebischer NJ, Brown AF, Hearn R, Lock L, Musgrove AJ, Noble DG, Stroud D, and Gregory RD. 2015. Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds*. **108**: 7080-746.
- JNCC 2010. *Handbook for Phase 1 habitat survey - A technique for environmental audit*. Joint Nature Conservation Committee, Peterborough.
- Ratcliffe. D.R. 1977 *A Nature Conservation Review (Volumes 1 & 2)*. Cambridge University Press.

PLATES



Plate 1. General view of the front of the property



Plate 2. General view of the rear of the property



Plate 3. Typical view of the roof tiles



Plate 4. Typical view of the soffit and fascia



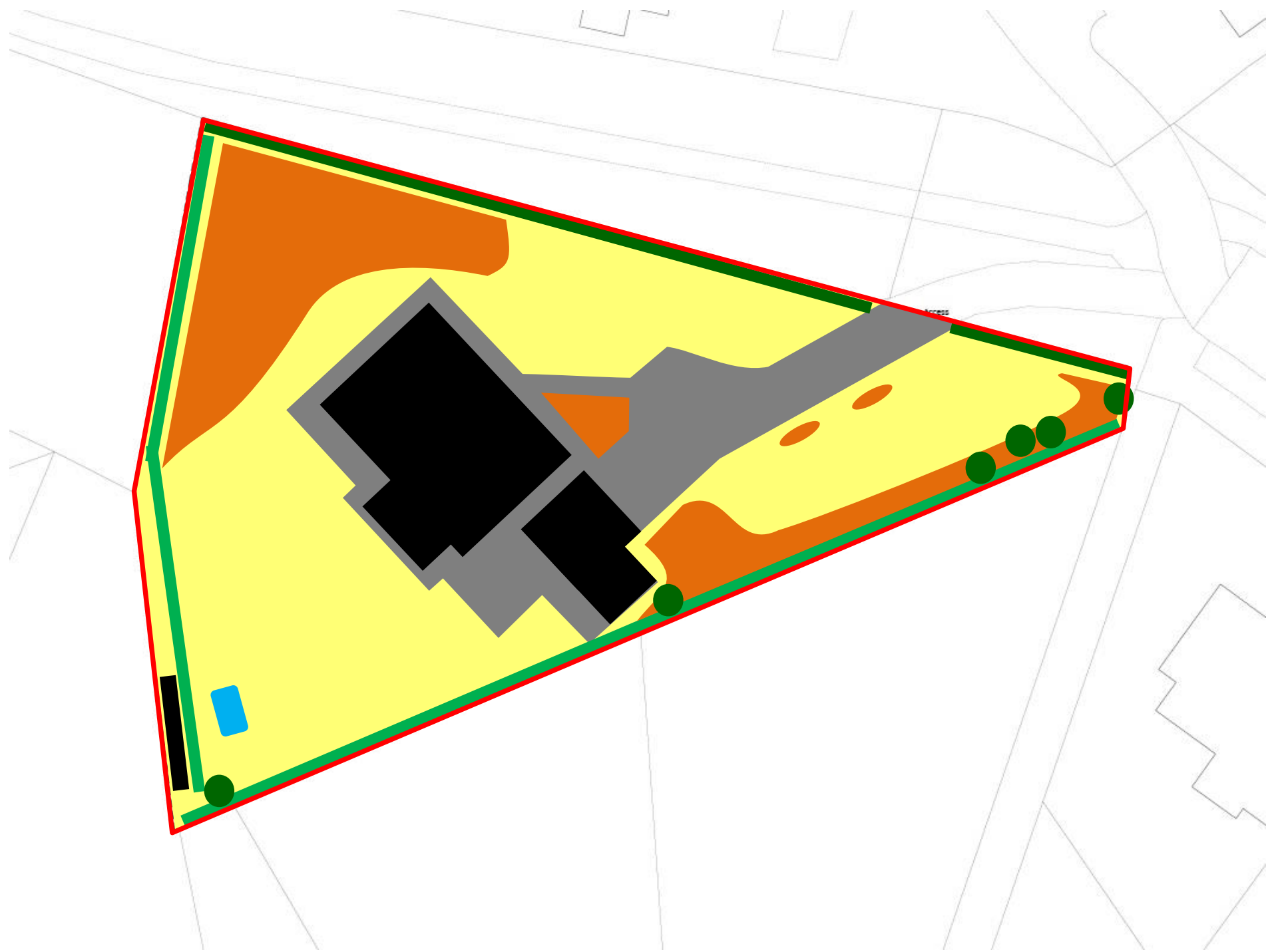
Plate 5. Typical view of the internal void space



Plate 6. Typical view of the internal void space



Plate 7. General view of the garage



Legend:

-  Amenity Grassland
-  Introduced shrub
-  Hardstanding
-  Building
-  Dry pond
-  Scattered tree
-  Mixed hedge
-  Coniferous hedge
-  Site boundary

Do not scale



Drawing No: Figure 1

Title: Phase 1 Habitat Map

Date: November 2018

Project: 149 Chiltern Road

Client: Mike Nash



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