



HINTON PROPERTIES

LAND AT
GROVEFIELD WAY
CHELTENHAM
GLOUCESTERSHIRE

Ecological Assessment

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1. INTRODUCTION

1.1. Background and Proposals

- 1.1.1. Ecology Solutions was originally commissioned by Hunter Page Planning Ltd in July 2006 to undertake an ecological assessment of Land at Grovefield Way, Cheltenham, hereinafter referred to as the Study Area (see Plan ECO1). Further to this, Ecology Solutions were commissioned to undertake updated ecological assessments of the Study Area with further survey work undertaken in September 2011 and May 2013. Part of the Study Area has now been developed into commercial development with associated attenuation features.
- 1.1.2. Ecology Solutions have been commissioned by Hinton Properties to provide an updated Ecological Assessment for the remaining area within the Study Area hereinafter referred to as the Application Site (see Plan ECO2).
- 1.1.3. The development proposals are for the construction of commercial units and offices with areas of associated infrastructure and landscape planting (see Appendix 1).

1.2. Application Site Characteristics

- 1.2.1. The Application Site lies to the west of Cheltenham. It is bounded to the north by the A40 and its associated shelterbelt, existing buildings to the west and the southeast corner, Grovefield Way to the east and North Road West to the south.
- 1.2.1. The vast majority of the Application Site comprises ruderal vegetation with improved grassland, hedgerows, trees, shelterbelt and a stream.

1.3. Ecological Assessment

- 1.3.1. This document assesses the ecological interest of the Application Site. The importance of the habitats within the Application Site is evaluated with due consideration given to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹.
- 1.3.2. Where necessary mitigation measures are recommended so as to safeguard any significant existing ecological interest within the Application Site. Specific enhancement opportunities that are available for habitats and wildlife within the Application Site are detailed where appropriate, with reference to the 'UK Post-2010 Biodiversity Framework'². Finally, conclusions are drawn.

¹CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

² JNCC and Defra (on behalf of the Four Countries' Biodiversity Group) (2012) *UK Post-2010 Biodiversity Framework*. July 2012. <http://jncc.defra.gov.uk/page-6189>

2. SURVEY & ASSESSMENT METHODOLOGY

2.1. The methodology utilised for the survey work can be split into three areas, namely desk survey, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Survey

2.2.1. In order to compile background information on the Application Site and the surrounding area, Ecology Solutions contacted the Gloucestershire Centre for Environmental Records (GCER) in 2013 and 2016. Where appropriate this information is included within this report, although much of it is cited as confidential and can only be made available upon request under the records centre terms and conditions.

2.2.2. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)³ database. This information is reproduced where appropriate on Plan ECO1 and at Appendix 2.

2.3. Habitat Survey

2.3.1. Habitat surveys were carried out in July 2006 in order to ascertain the general ecological value of the Application Site and to identify the main habitats and associated plant species. The Application Site was subject to updated walkover surveys in September 2011, May 2013, September 2016 and February 2018.

2.3.2. The Application Site was surveyed based around extended Phase 1 survey methodology⁴, as recommended by Natural England whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.

2.3.3. Using the above method, the Application Site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.3.4. All the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons. Nonetheless, the timing of the surveys included the optimal period for the habitats present and it is considered that an accurate and robust assessment has been made of the botanical interest.

³ <http://www.magic.gov.uk>

⁴ Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

2.4. Faunal Survey

- 2.4.1. Obvious faunal activity, such as birds or mammals observed visually or by call during the course of the surveys, was recorded. Specific attention was paid to any potential use of the Application Site by protected species, species of principal importance (priority species), or other notable species.
- 2.4.2. In addition, specific surveys were undertaken in relation to bats and Badgers *Meles meles*.
- 2.4.3. Experienced ecologists undertook the faunal surveys with regard to established best practice and guidance issued by Natural England. Details of the methodologies employed are given below.

Bats

- 2.4.4. Field surveys were undertaken within the Application Site with regard had to best practice guidelines issued by, the Joint Nature Conservation Committee (2004⁵) and the Bat Conservation Trust (2016⁶).

Tree Assessment

- 2.4.5. All trees within the Application Site were assessed for their potential to support roosting bats in July 2006, September 2011, May 2013 September 2016 and February 2018. Features typically favoured by bats were searched for, including:
- Obvious holes, e.g. rot holes and old Woodpecker holes;
 - Dark staining on the tree, below the hole;
 - Tiny scratch marks around a hole from bat claws;
 - Cavities, splits and or loose bark from broken or fallen branches, lightning strikes etc; and
 - Very dense covering of mature Ivy over the trunk.
- 2.4.6. In addition, an assessment of the suitability of the habitats to support foraging and commuting bats was undertaken.

Badgers

- 2.4.7. Specific surveys were undertaken within and adjacent to the Application Site, to search for evidence of Badgers in July 2006, September 2011, May 2013, September 2016 and February 2018. Such surveys comprise two main elements. The first of these is a thorough search for evidence of Badger setts. For any setts that were encountered, standard survey practice would record the location of each sett entrance, even if the entrance appeared disused. The following specific information was recorded where appropriate:

⁵ Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2004). *Bat Workers' Manual*. 3rd edition. Joint Nature Conservation Committee, Peterborough.

⁶ Bat Conservation Trust (2016). *Bat Surveys for Professional Ecologist – Good Practice Guidelines 3rd Edition*. Bat Conservation Trust, London.

- i) The number and location of any well used or very active entrances; these are clear of any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.
- ii) The number and location of any inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.
- iii) The number of any disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

2.4.8. Secondly, any evidence of Badger activity such as well-worn paths and run-throughs, snagged hair, footprints, latrines and foraging signs was recorded so as to build up a picture of the use of the Application Site, if any, by Badgers.

3. ECOLOGICAL FEATURES

3.1. The following main habitats / ecological features were identified within the Application Site during the surveys undertaken.

- Ruderal Vegetation;
- Improved Grassland;
- Hedgerows;
- Trees and Shelterbelt; and
- Stream.

3.2. The locations of these habitat types are shown on Plan ECO2.

3.3. Each habitat is described below with an account of the representative plant species present.

3.4. Ruderal Vegetation

3.4.1. The Application Site was cleared of vegetation and consists mainly of ruderal species which have recolonised the ground.

3.4.2. Species present included Perennial Rye Grass *Lolium perenne*, Bents *Agrostis* sp., Yorkshire Fog *Holcus lanatus*, False Oat Grass *Arrhenatherum elatius*, Cocksfoot *Dactylis glomerata*, Bush Vetch *Vicia sepium*, Yarrow *Achillea millefolium*, Dandelion *Taraxacum* sp, Common Vetch *Vicia sativa*, Creeping Buttercup *Ranunculus repens*, Red Clover *Trifolium pratense*, Ribwort Plantain *Plantago lanceolata*, Rough Sow-thistle *Sonchus asper*, Bristly Oxtongue *Picris echioides*, Creeping Thistle *Cirsium arvense*, Spear Thistle *Cirsium vulgare*, Hogweed *Heracleum sphondylium*, Field Bindweed *Convolvulus arvensis*, Broad-leaved Dock *Rumex obtusifolius*, Broad-leaved Willowherb *Epilobium montanum*, Common Nettle *Urtica dioica*, Goosefoot *Chenopodium* sp., Knotgrass *Polygonum aviculare* and Cow Parsley *Anthriscus sylvestris*.

3.4.3. There is a slight depression within the ruderal vegetation. The depression holds limited water, which would likely dry during Spring/Summer. The wet area supported Algae, Rush *Juncus* and Bulrush *Typha latifolia*.

3.5. Improved Grassland

3.5.1. The boundary of the Application Site includes areas of improved grassland. Species present within the sward include Perennial Rye Grass, Bents, Timothy *Phelum pratense*, Yorkshire Fog, Crested Dogs Tail *Cynosurus cristatus*, False Oat Grass, and Cocksfoot. Herbaceous species include Dandelion, Creeping Buttercup, Red Clover, Ribwort Plantain *Plantago lanceolata*, Bristly Oxtongue *Picris echioides* and Broad-leaved Dock.

3.6. Hedgerows

- 3.6.1. Two hedgerows are present within the Application Site (see Plan ECO2).
- 3.6.2. Hedgerow H1 forms the southern boundary of the Application Site. It is dominated by Hawthorn *Crataegus monogyna* with Elm *Ulmus* sp., Elder *Sambucus nigra*, Wild Privet *Ligustrum vulgare*, Bramble *Rubus fruticosus* and very occasional Dog Rose *Rosa canina*. The ground flora of the hedgerow comprising Lords-and-Ladies *Arum maculatum*, Broad-leaved Dock, Cleavers *Galium aparine* and Common Nettle.
- 3.6.3. Hedgerow H2 forms the western boundary of the Application Site and comprises mature Hawthorn in the main with occasional Elder, Ash *Fraxinus excelsior* and Dog Rose. In addition, Ivy and very occasional White Bryony *Bryonia cretica* are present.

3.7. Trees and Shelterbelt

- 3.7.1. The shelterbelt comprises semi-mature and mature trees and includes Oak *Quercus* sp., Elm, Ash, Sycamore *Acer pseudoplatanus*, Silver Birch *Betula pubescens*, Maple *Acer* sp., Willow *Salix* sp., Hawthorn, Blackthorn *Prunus spinosa*, Elder, Horse Chestnut *Aesculus hippocastanum*, Wayfaring Tree *Viburnum lantana* and Rose *Rosa* sp. The ground flora within the shelterbelt is sparsely vegetated due to the shading trees which is suppressing the growth of the plant understorey.
- 3.7.2. A small row of immature and semi-mature trees are located along the eastern boundary. These trees include Ash, Sycamore, Cherry *Prunus* sp. and Hornbeam *Carpinus betulus*.
- 3.7.3. A number of newly planted trees are located along the northeast boundary and include Silver Birch and Callery Pear *Pyrus calleryana* and Cherry.

3.8. Stream

- 3.8.1. A small stream runs along the northern boundary (see Plan ECO2). The stream is fringed with Hawthorn, Crack Willow *Salix fragilis* and occasional Pendulous Sedge *Scirpus pendulus* and Bramble. As a consequence of shading from the shelterbelt the stream contains no aquatic or emergent vegetation.

4. FAUNAL USE OF THE APPLICATION SITE

4.1. General observations were made during the surveys of any faunal use of the Application Site, with specific attention paid to the potential presence of protected species. Specific surveys were undertaken with regard to bats and Badgers.

4.2. Bats

4.2.1. **Background Records.** Information received from the GCER returned no specific (6 figure grid reference) records of bats within the Application Site, although a historical record of an unidentified bat species occurring within the same grid square as the Application Site in 1991. The closest specific record returned was for a Common Pipistrelle located approximately 0.9km northwest of the Application Site in 2013.

4.2.2. No trees within the Application Site are considered to support roosting bats or have potential to support roosting bats, although it is considered that the hedgerows, trees and stream offer limited suitable navigational and foraging opportunities for bats.

4.3. Badgers

4.3.1. **Background Records.** Information received from the GCER returned no records of Badgers from within the Application Site. The closest record returned for a Badger sett was from 2010 and located approximately 1.2km northwest of the Application Site. The closest record returned for Badger activity was from 2005 for a road casualty located approximately 0.3km northeast of the Application Site.

4.3.2. No evidence of Badgers such as any setts, latrines, mammal paths, snagged hairs, foraging marks or footprints were recorded within or immediately adjacent to the Application Site.

4.3.3. A previously recorded subsidiary Badger sett located within the shelterbelt in the Study Area was no longer present during the most recent survey in September 2016 and February 2018.

4.4. Reptiles

4.4.1. **Background Records.** Information received from the GCER returned no records of reptiles from within the Application Site. The closest reptile record returned was for a Slow-worm *Anguis fragilis*, located approximately 0.7km south of the Application Site in 2014.

4.4.2. The habitat within the Application Site is not considered suitable for reptiles and therefore no further consideration for the group is given within this document.

4.5. Great Crested Newts

- 4.5.1. **Background Records.** Information received from the GCER returned no records of Great Crested Newt *Triturus cristatus* from within the Application Site. The closest record returned for a Great Crested Newt was located approximately 0.7km southeast of the Application Site in 2004.
- 4.5.2. The slight depression that holds limited water is seasonal and considered unsuitable for Great Crested Newts. The waterlogged ground in the northeast of the Study Area was deemed suboptimal for this species and in any event is separated from the development footprint by the stream which represents a barrier to dispersal.
- 4.5.3. All off-site waterbodies are separated from the Application Site by significant dispersal barriers including the stream and major and minor roads. The closest separated pond is located approximately 300m to the south of the Application Site and it is considered highly unlikely that if Great Crested Newts are using this pond for breeding that they would utilise the Application Site during their terrestrial phase. Therefore, given the above, no further consideration for the group is given within this document.

4.6. Birds

- 4.6.1. **Background Records.** Information received from the GCER returned no specific records of notable bird species from within the Application Site, although a Barn Owl *Tyto alba* (Schedule 1) and House Sparrow *Passer domesticus* (Red List) from the same grid square, recorded in 2012 and 2010 respectively. Given the habitats present, it is considered that these species would not be reliant on the Application Site for foraging purposes.
- 4.6.2. A number of common bird species were seen or heard across the Application Site during the surveys undertaken. Species recorded include Blackbird *Turdus merula*, Chiffchaff *Phylloscopus collybita*, Wood Pigeon *Columba palumbus*, Magpie *Pica pica*, Collared Dove *Streptopelia decaocto*, Blue Tit *Cyanistes caeruleus*, Wren *Troglodytes troglodytes*, Greenfinch *Carduelis chloris* and Robin *Erithacus rubecula*.

4.7. Invertebrates

- 4.7.1. **Background Records.** Information received from the GCER shows several records for scarce or notable invertebrates within the requested search area, although none were recorded from the Application Site.
- 4.7.2. The habitats within the Application Site are expected to support a range of common invertebrate species.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Site Evaluation

- 5.1.1. The latest guidelines for ecological evaluation produced by CIEEM⁷ propose an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.
- 5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe⁸. These are broadly used across the United Kingdom to rank sites so priorities for nature conservation can be attained. For example, current Sites of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.
- 5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.
- 5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.
- 5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England, may be of importance at its northern limits, say in the border country.
- 5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP). The Gloucestershire Biodiversity Action Plan Species Inventory⁹ currently list a number of BAP habitats and species.
- 5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the International level.
- 5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

⁷ Institute of Ecology and Environmental Management (2006). Guidelines for Ecological Impact Assessment in the United Kingdom (version 7 July 2006). <http://www.ieem.org.uk/ecia/index.html>.

⁸ Ratcliffe, D A (1977). *A Nature Conservation Review: the Selection of Study areas of Biological National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

⁹ <http://ukbars.defra.gov.uk/>

5.2. Habitat Evaluation

Designated Sites

- 5.2.1. **Statutory Designations.** There are no statutory designations of nature conservation value within or immediately adjacent to the Application Site. The nearest statutory designated site is Badgeworth SSSI, which is approximately 0.7km to the south of the Application Site (see Plan ECO1).
- 5.2.2. The Application Site is located within the potential Impact Risk Badgeworth SSSI. However, given the distance from the Application Site, commercial development is not considered to have any impact on this SSSI.
- 5.2.3. This SSSI is well removed from the Application Site, separated from the Application Site by housing, roads and a railway line and it is therefore considered that it would not be adversely affected by the proposed development.
- 5.2.4. **Non-statutory sites.** There are no non-statutory designations of nature conservation value within or immediately adjacent to the Application Site. The nearest non-statutory site is the Fiddlers Green Lane Meadow Key Wildlife Site (KWS) which is located approximately 1.1km to the northeast of the Application Site and is separated from it by existing built development, roads and agricultural land (see Plan ECO1). As such it is considered that the proposed development will not directly affect this KWS.
- 5.2.5. On this basis, it is not considered that any detrimental effects will arise as a result of residential proposals at the Application Site to any statutory or non-statutory site of nature conservation interest.

Habitats

- 5.2.6. The majority of habitat within the Application Site is of low ecological interest, consisting of common and widespread species. Those habitats that are of some relative ecological interest within the context of the Application Site include the hedgerows, trees, shelterbelt and stream.

Ruderal vegetation

- 5.2.7. The majority of the Application Site comprises ruderal vegetation and this habitat is of low ecological interest.
- 5.2.8. The proposed development will result in losses of this habitat.
- 5.2.9. **Mitigation and Enhancements.** Loss of this habitat will have low ecological significance and will be compensated for by new areas of grassland habitat and landscape planting which is included as part of the proposed development. It is recommended that wildflower grassland is utilised where possible to enhance the value of new grassland.

Improved Grassland

- 5.2.10. The improved grassland is of low/negligible ecological interest.
- 5.2.11. **Mitigation and Enhancements.** It is considered that no specific mitigation measures would be required for loss/modification of these habitats. However, it is recommended that where possible new areas of public open space are sown with a species-rich seed mixture (such as Emorsgate's Standard General Purpose Meadow Mixture EM2 or similar) and subject to a suitable management regime to enhance the floristic diversity of the Application Site accordingly. This would mitigate for any minor loss of the grassland and would provide habitats of greater ecological value than the current habitats.

Stream

- 5.2.12. The stream is considered to be of limited ecological value and will be unaffected by the proposed development.
- 5.2.13. **Mitigation and Enhancements.** Pollution control measures may be required in order to prevent adverse impacts on this feature from contaminated runoff during the construction and operational phases.
- 5.2.14. Management of the shelterbelt, such as thinning of bankside trees would provide an enhancement over the current situation. Greater light penetration would assist colonisation by aquatic plant species although the majority of the stream lies out with the Application Site.

Hedgerows

- 5.2.15. All of the hedgerows within the Application Site are species-poor and dominated by Hawthorn. It is considered that none of the hedgerows within the Application Site would be classed as important (based on ecological criteria) within the Hedgerows Regulations 1997.
- 5.2.16. The proposed development retains all existing hedgerows within the Application Site.
- 5.2.17. **Mitigation and Enhancements.** The retained hedgerows within the Application Site should be fenced according to current British Standards before construction work commences in order to protect roots from compaction. Fences should remain in place until construction work is complete within the vicinity of the hedgerow. In addition, no activity, storage of materials, liquids of any sort or source will be permitted within the protective fencing at any time.
- 5.2.18. The proposed planting of trees and shrubs with the proposed development will enhance the ecological value of the Application Site post development. It is recommended that all new planting utilise native species or those of known benefit to wildlife.

Trees and Shelterbelt

- 5.2.19. The trees and shelterbelt are of some ecological interest and are to be retained as part of the proposed development.
- 5.2.20. **Mitigation and Enhancements.** All retained trees should be identified prior to the commencement of any works and appropriate measures will be undertaken to prevent any harm to these trees from construction activities. These measures include identifying root protection zones and implementing fencing and signage around these zones to avoid tracking of heavy machinery compacting the soils.
- 5.2.21. Any losses to trees will be compensated for by way of new planting throughout the Application Site. It is recommended that the new planting comprise a significant proportion of native species and those of known benefit to wildlife.
- 5.2.22. It is recommended that the shelterbelt is brought under an appropriate management regime to enhance the ecological value.

Faunal Evaluation

Bats

- 5.2.23. **Legislation.** All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended) (“the Habitats Regulations”). These include provisions making it an offence to:
- Deliberately kill, injure or take (capture) bats;
 - Deliberately disturb bats in such a way as to be likely to significantly affect:-
 - (i) the ability of any significant group of bats to survive, breed or rear or nurture their young; or to hibernate; or
 - (ii) to affect significantly the local distribution or abundance of the species concerned;
 - Damage or destroy any breeding or resting place used by bats;
 - Intentionally or recklessly obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).
- 5.2.24. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.
- 5.2.25. The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence.

Such actions do not have to be deliberate for an offence to be committed.

- 5.2.26. In accordance with the Habitats Regulations the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:
1. the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
 2. there must be no satisfactory alternative; and
 3. the favourable conservation status of the species concerned must be maintained.
- 5.2.27. Licences can usually only be granted if the development is in receipt of full planning permission.
- 5.2.28. Seven species of bat are Priority Species, these are *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, Noctule *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared, Greater Horseshoe *Rhinolophus ferrumequinum* and Lesser Horseshoe *Rhinolophus hipposideros*.
- 5.2.29. **Application Site Usage.** No trees within the Application Site are considered to support roosting bats or have potential to support roosting bats, although it is considered that the hedgerows, trees, shelterbelt and stream offer limited suitable navigational and foraging opportunities for bats.
- 5.2.30. Mitigation and enhancement measures have been proposed which will ensure that opportunities for foraging and navigating bats remain.
- 5.2.31. **Mitigation and Enhancements.** Areas which may be utilised by foraging bats, such as the hedgerows and shelterbelt, are to be retained. It is recommended that the all retained habitat is subject to appropriate management measures to improve its quality in terms of foraging opportunities for bats.
- 5.2.32. New planting as part of the proposed development will enhance foraging and navigational opportunities for bats.
- 5.2.33. If deemed necessary, a sympathetic lighting regime associated with the new proposals would minimise light spillage into key areas, such as the retained hedgerows within the Application Site, and the adjacent hedgerows, which would maintain foraging and navigational opportunities in these areas in the form of 'dark corridors'. It is recommended that the use of sodium or LED lights, which produce less light spillage than other types of lighting and have low / no UV content, or UV-filtered lights should be considered to reduce the light spillage on existing bat flight lines. In addition, the spillage of the light can be reduced further through use of low-level lights and the employment of lighting 'hoods' which

will direct light below the horizontal plane, preferably at an angle less than 70 degrees.

- 5.2.34. As an enhancement, bat boxes, such as Schwegler 1FF boxes (Appendix 3), will be erected on suitable retained trees. This model of bat box is known to be attractive to a number of the smaller bat species, including Pipistrelle bats, which are known from the local area. This measure will provide enhanced roosting opportunities within the Application Site.

Badgers

- 5.2.35. **Legislation.** The Protection of Badgers Act 1992 consolidates the previous Badgers Acts of 1973 and 1991. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain, with particularly high populations in the southwest.
- 5.2.36. As well as protecting the animal itself, the 1992 Act also makes the intentional or reckless destruction, damage or obstruction of a Badger sett an offence. A sett is defined as “any structure or place which displays signs indicating current use by a Badger”. ‘Current use’ of a Badger sett is defined by Natural England as “how long it takes the signs to disappear, or more precisely, to appear so old as to not indicate “current use”.¹⁰
- 5.2.37. In addition, the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence by constituting ‘cruel ill treatment’ of a Badger.
- 5.2.38. ‘Interim guidance’ issued by Natural England in September 2007 specifically states *“it is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed.”*
- 5.2.39. Further, more recent guidance produced by Natural England in 2009 states that Badgers are relatively tolerant of moderate levels of disturbance and that low levels of disturbance at or near to Badger setts do not necessarily disturb the Badgers occupying those setts. However, Natural England’s guidance continues by stating that any activity that will, or is likely to cause one of the interferences defined in Section 3 (such as damaging a sett tunnel or chamber or obstructing access to a sett entrance) will continue to be licensed.
- 5.2.40. In addition, this latest guidance no longer makes reference to any 30m/20m/10m radius as a threshold for whether a licence would be required. Nonetheless, it is stated that tunnels may extend for 20m so care needs to be taken when implementing excavating operations within the vicinity of a sett and to take appropriate

¹⁰ http://www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pd

precautions with vibrations and noise, etc. Fires / chemicals within 20m of a sett should specifically be avoided.

- 5.2.41. This interim guidance allows greater professional judgement as to whether an offence is likely to be committed by a particular development activity and therefore whether a licence is required or not. For example, if a sett clearly orientates southwards into an embankment it may be somewhat redundant to have a 30m-exclusion zone to the north.
- 5.2.42. It should be noted that a licence cannot be issued until a site is in receipt of a full and valid planning permission and that generally licences are not granted between December and June inclusive to avoid disruption to the Badger breeding cycle.
- 5.2.43. Local authorities are therefore obliged to consult Natural England over any work which is considered likely to adversely affect Badgers.
- 5.2.44. **Application Site Usage.** No evidence of Badgers such as any setts, latrines, mammal paths, snagged hairs, foraging marks or footprints were recorded within or immediately adjacent to the Application Site.
- 5.2.45. A previously recorded subsidiary Badger sett located within the shelterbelt in the Study Area was no longer present during the most recent survey in September 2016 and February 2018.
- 5.2.46. **Mitigation and Enhancements.** Although the Badger sett is no longer present within the Study Area, as a precautionary measure, a further check will be undertaken prior to development to assess if any new setts have been excavated within the Application Site. In the event that new sett entrances are recorded advice will be sought on whether a Natural England licence is required for proposed works.
- 5.2.47. Additional precautionary measures during the construction phase of development will be undertaken to safeguard any Badgers that may commute within the Application Site.
- 5.2.48. Any trenches or deep pits that are to be left open overnight should be provided with a means of escape should a Badger enter. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water.
- 5.2.49. Any trenches/pits should be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger get stuck in a trench it will likely attempt to dig itself into the side of the trench, by forming a temporary sett. Should a trapped Badger be encountered, Ecology Solutions should be contacted immediately for further advice.

- 5.2.50. The storage of topsoil or other 'soft' building materials within the application site should be given careful consideration. Badgers will readily adopt such mounds as setts, which would then be afforded the same protection as established setts. So as to avoid the adoption of any mounds, they should be subject to daily inspections.
- 5.2.51. The recommended provision of new areas of species-rich grassland within the park would provide new suitable foraging opportunities for Badgers. It is further recommended that new berry/fruit bearing species are planted within the site to provide new seasonal foraging resources for Badgers over the existing situation. Such enhanced foraging opportunities would offset the loss of areas of lower quality foraging habitat.

Birds

- 5.2.52. **Legislation.** Section 1 of the Wildlife and Countryside Act 1981 (as amended) is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.
- 5.2.53. **Application Site Usage.** A number of habitats within the Application Site may support nesting birds, particularly the hedgerows, trees and shelterbelt. The majority of other habitats present are of limited value to birds, and the existing features offering the most opportunities at the present time are common in the surrounding area.
- 5.2.54. **Mitigation and Enhancements.** Losses to features of potential value to breeding birds would be compensated for through new tree planting as part of the proposed development.
- 5.2.55. Clearance of any suitable nesting vegetation, including tree felling, will be undertaken outside the bird nesting season (March to July inclusive) to avoid any potential offence. Should the above timing constraints conflict with any timetabled works, works will commence only after a suitably qualified ecologist has undertaken checks to ensure no nesting birds are present. If nesting birds are found to be present during checks then clearance would need to be delayed until young have fledged.
- 5.2.56. As an enhancement, nest boxes will be erected of retained trees to increase the ornithological interest at the site. Nest boxes of varying designs will be utilised to maximise the species complement attracted to the Application Site (Appendix 4).

Invertebrates

- 5.2.57. **Application Site Usage.** The Application Site itself is currently not considered to be of significant value to invertebrates.
- 5.2.58. **Mitigation and Enhancements.** Deadwood within the Application Site should be retained *in situ* wherever possible and if any

vegetation clearance works are carried out, then log piles should be created within the Application Site.

- 5.2.59. The recommended creation of new areas of species-rich grassland and the planting of new native trees would provide new opportunities for a range of invertebrates. The implementation of other measures recommended above would also likely provide know-on benefits for invertebrates.

6. POLICY BACKGROUND

6.1. The planning policy framework that relates to nature conservation at the Application Site is issued nationally through the National Planning Policy Framework (NPPF) and locally through policies within the Cheltenham Borough Council Local Plan, which will eventually be replaced by the Local Development Framework and the Joint Core Strategy.

6.2. National Policy

National Planning Policy Framework

- 6.2.1. The NPPF sets out the Government's requirements for the planning system and was adopted on the 27th March 2012.
- 6.2.2. The key element of the NPPF is that there should be '*a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking*' (paragraph 14). It is important to note that this presumption '*does not apply where development requiring Appropriate Assessment under the Birds or Habitats Directives is being considered, planned or determined*' (paragraph 119).
- 6.2.3. Policies in the NPPF include reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 109) and ensuring that Local Authorities place appropriate weight to statutory and non-statutory nature conservation designations, protected species and biodiversity.
- 6.2.4. The NPPF also considers the strategic approach which Local Authorities should adopt with regard to the protection, enhancement and management of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.
- 6.2.5. Paragraph 118 of the NPPF comprises a number of principles which Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments, provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for, applying the protection given to European sites to potential SPAs, possible SACs, listed or proposed Ramsar sites and sites identified (or required) as compensatory measures for adverse effects on European sites, and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats unless the need for, and benefits of, the development in that location clearly outweigh the loss.
- 6.2.6. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.3. Local Policy

Cheltenham Borough Local Plan (second review) (2006)

- 6.3.1. Policy guidance concerning development and nature conservation is provided within the Cheltenham Borough Local Plan (second review) (adopted June 2006).
- 6.3.2. Eight policies within the Cheltenham Borough Local Plan are relevant to nature conservation within the Subject Site. Policy CP1 and CP2 relate in part to nature conservation and are concerned with the conservation and enhancement of wildlife and statutory and non-statutory sites through sustainable development; policies GE5 – GE7 are concerned with the protection of trees and wildlife habitats; policy NE1 provides protection for protected species; policies NE2 and NE3 are concerned with the protection of internationally, nationally and locally important designated site for nature conservation, as well as safeguarding locally important habitats and species.

Cheltenham Borough Local Development Framework (LDF)

- 6.3.3. The Local Development Framework will eventually supersede the current local plan once it is completed and adopted.
- 6.3.4. The Joint Core Strategy, which will be an integral part of the Local Development Framework for the area, is still in preparation and has yet to be adopted. Within the emerging Joint Core Strategy, Policy SA1 is concerned with a number of strategic allocations within the area, with allocation A6 including the Application Site (South Cheltenham / Leckhampton).
- 6.3.5. Policy SD10 also relates to nature conservation referring to biodiversity and the protection / enhancement of internationally, nationally and locally designated sites and protected species.

6.4. Discussion

- 6.4.1. It is considered that any development, following the recommendations in this report would fully accord with national and local policy and will avoid any significant impacts on any designated sites for nature conservation. The potential presence of protected species is acknowledged and measures to safeguard these put forward, where necessary, whilst those habitats of ecological importance have been identified and measures recommended to ensure their protection.
- 6.4.2. In conclusion, implementation of the measures set out in this report enable development of the Application Site to fully accord with planning policy for ecology and nature conservation at all administrative levels.

7. SUMMARY AND CONCLUSIONS

- 7.1. Ecology Solutions was originally commissioned by Hunter Page Planning Ltd in July 2006 to undertake an ecological assessment of Land at Grovefield Way, Cheltenham, hereinafter referred to as the Study Area. Further to this, Ecology Solutions were commissioned to undertake updated ecological assessments of the Study Area with further survey work undertaken in September 2011 and May 2013.
- 7.2. Part of the Study Area has now been developed in the commercial development with associated attenuation features.
- 7.3. Ecology Solutions have been commissioned by Hinton Properties to provide an updated Ecological Assessment for the remaining area within the Study Area hereinafter referred to as the Application Site.
- 7.4. The Application Site was surveyed based around extended Phase 1 survey methodology, as recommended by Natural England, in June 2006 and updated walkover surveys were carried out in September 2011, May 2013, September 2016 and February 2018. In addition, specific surveys were undertaken within the Application Site in respect of bats and Badgers.
- 7.5. There are not considered to be any significant adverse effects on any statutory or non-statutory sites of nature conservation interest from any development proposals.
- 7.6. None of the trees within the Application Site itself were recorded as having developed features suitable to support roosting bats. The provision of new bat boxes within the Application Site will provide new roosting opportunities for bats over the existing situation.
- 7.7. Although the Badger sett is no longer present within the Study Area, as a precautionary measure, a further check will be undertaken prior to development. In addition, as a precautionary approach measures during the construction phase of development will be undertaken to safeguard any Badgers that may commute within the Application Site.
- 7.8. The recommended planting of species-rich grassland and trees will provide new opportunities for birds and bats, while the provision of new bird and bat boxes within the Application Site will provide new roosting and nesting opportunities for birds.
- 7.9. Further recommendations have been made to safeguard other protected and notable species present within the Application Site. Recommendations have also been made to achieve ecological enhancements for such protected/notable species wherever possible.
- 7.10. In conclusion, through the implementation of the safeguards and recommendations set out within this report it is considered that any development proposals will accord with planning policy with regard to nature conservation at all administrative levels.

PLANS

PLAN ECO1

Study Area Location and Ecological Designations



KEY

-  STUDY AREA
-  SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
-  LOCAL NATURE RESERVE (LNR)
-  KEY WILDLIFE SITE (KWS)
-  GLOUCESTERSHIRE WILDLIFE TRUST NATURE RESERVE (GWT)
-  ANCIENT AND SEMI-NATURAL WOODLAND
-  ANCIENT REPLANTED WOODLAND



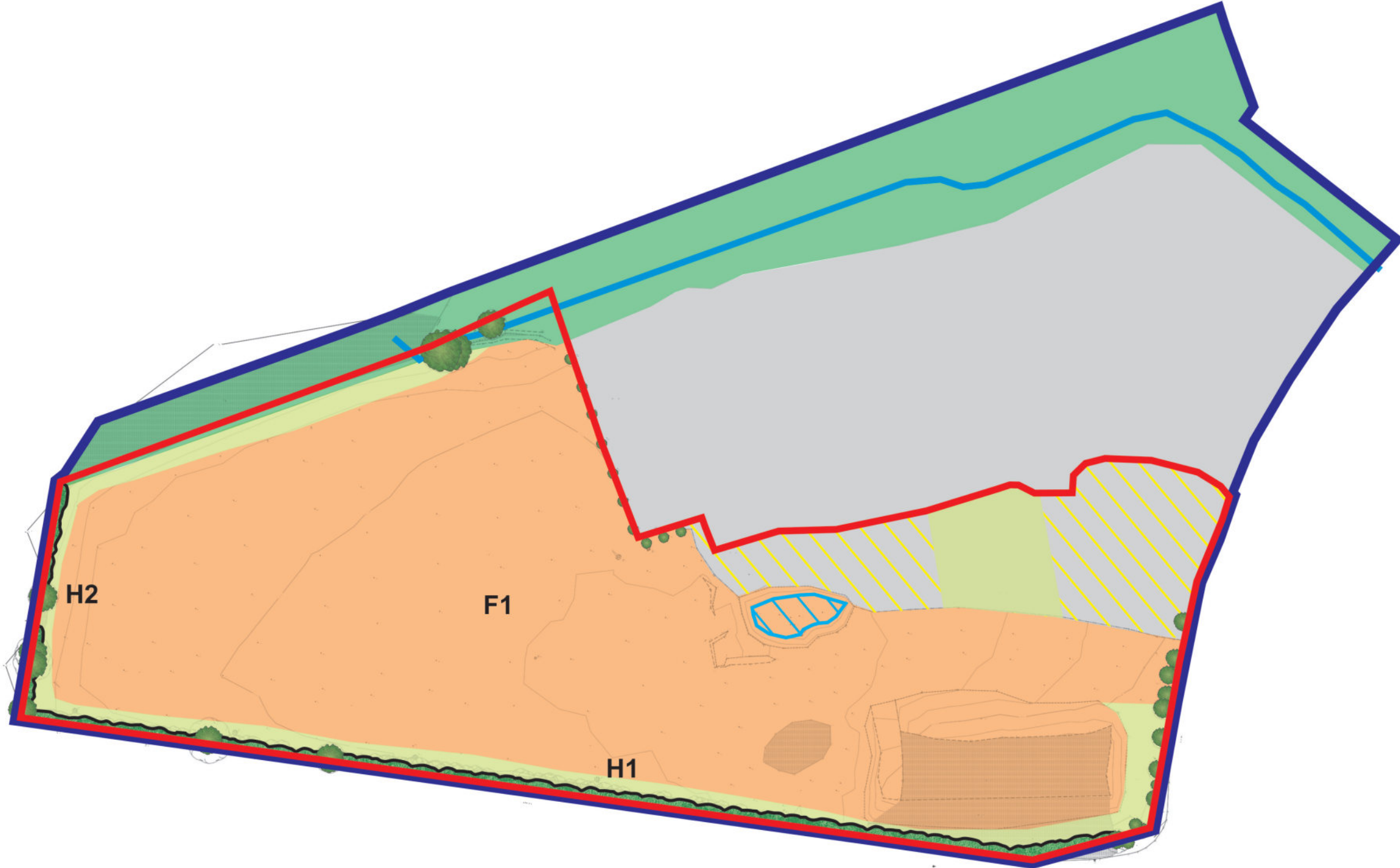
ecology solutions ltd

4087: LAND AT GROVEFIELD WAY,
CHELTENHAM

PLAN ECO1: STUDY AREA
LOCATION & ECOLOGICAL
DESIGNATIONS

PLAN ECO2

Ecological Features



- KEY:**
- APPLICATION SITE
 - STUDY AREA
 - RUDERAL VEGETATION
 - IMPROVED GRASSLAND
 - SHELTER BELT
 - TREES
 - HEDGEROW
 - WET AREA
 - STREAM
 - SITE OFFICE / STORAGE AREA
 - NEWLY CONSTRUCTED DEVELOPMENT



4087: LAND AT GROVEFIELD WAY,
CHELTENHAM

PLAN ECO2:
ECOLOGICAL FEATURES

APPENDICES

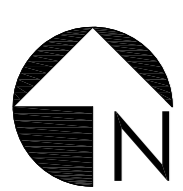
APPENDIX 1

Proposed Block Plan

Figured dimensions only are to be taken from this drawing

- Preliminary Comment Planning
 Tender Construction Record
 Legal

REVISIONS			
REV	DATE	DESCRIPTION	CHECKED BY
A	03/08/17	SCHEDULE OF ACCOMMODATION ADDED - EXISTING VEGETATION IDENTIFIED	
B	22/09/17	KERB LINE AMENDED ADJACENT TO COSTA	



SCHEDULE OF ACCOMMODATION		
UNIT	APPLICATION SITE	GROSS INTERNAL AREA (SQM)
Costa	Detailed application	204
Aldi	Detailed application	1742
Happy Days Nursery	Detailed application	502
Office 1	Detailed application	2279
Office 2	Detailed application	2755
Office 3	Outline application	5451
Office 4	Outline application	2279

CLIENT _____

PROJECT **Phase 2
Corinthian Park
Grovefield Way
Cheltenham**

TITLE **Proposed Block Plan**

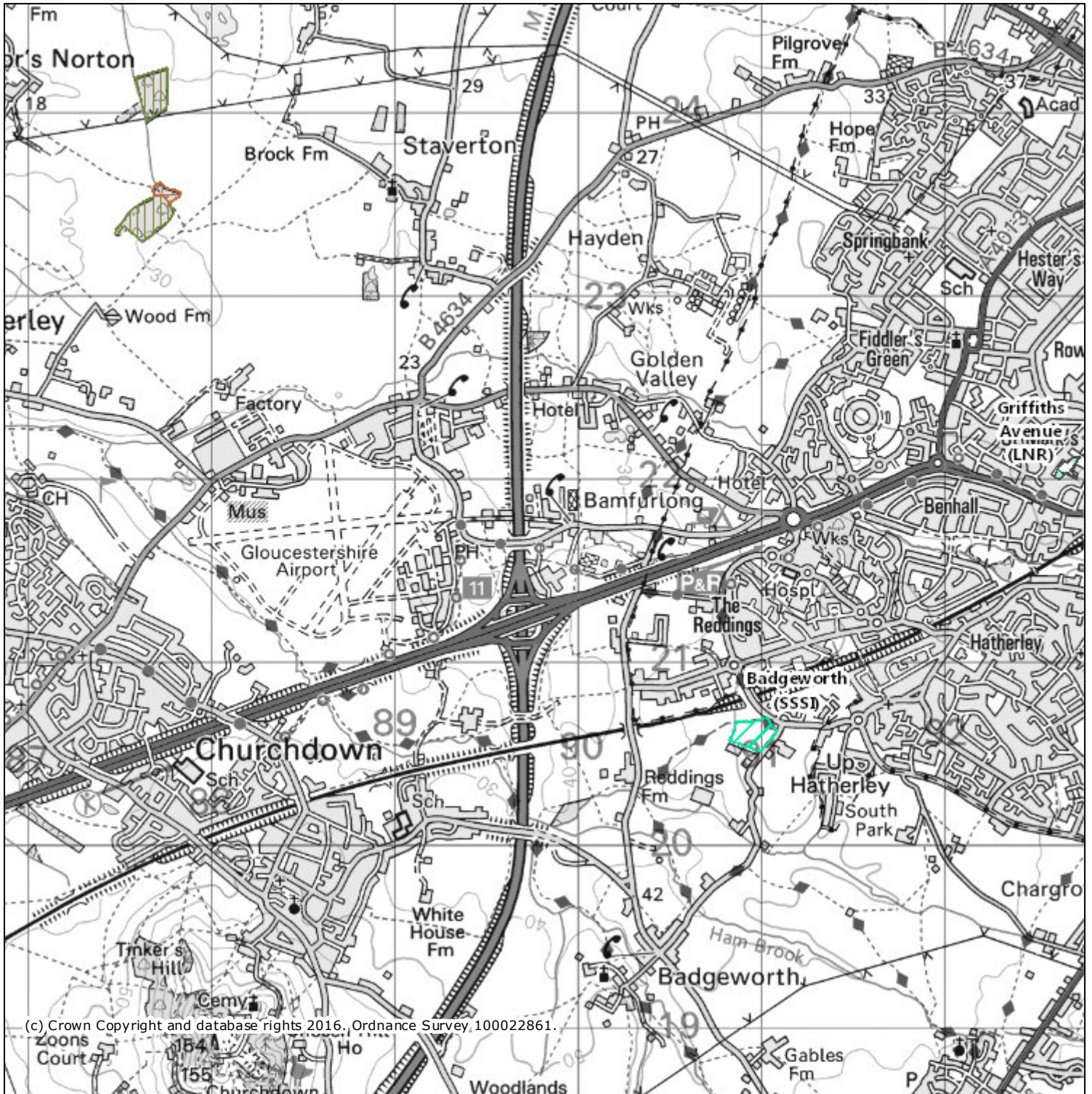
SCALE @ A0 1:500 DATE 21-06-17

DRAWING 178 96 REV B

DRAWN BY LT CHECKED BY DW

APPENDIX 2

Information downloaded from MAGIC





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Legend

-  Local Nature Reserves (England)
-  National Nature Reserves (England)
-  Ramsar Sites (England)
-  Sites of Special Scientific Interest (England)
-  Special Areas of Conservation (England)
-  Special Protection Areas (England)

Ancient Woodland (England)

-  Ancient and Semi-Natural Woodland
-  Ancient Replanted Woodland

Projection = OSGB36

xmin = 384100

ymin = 218400

xmax = 395500

ymax = 224800

Map produced by MAGIC on 27 October, 2016.

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APPENDIX 3

Suitable Bat Box Examples

Bat Boxes

Schwegler bat boxes are made from 'woodcrete' and have the highest rates of occupation of all types of box.

The 75% wood sawdust, clay and concrete mixture is ideal, being durable whilst allowing natural respiration and temperature stability. These boxes are rot and predator proof and extremely long lasting.

Boxes can be hung from a branch near the tree trunk or fixed using 'tree-friendly' aluminum nails.



1FF Bat Box

The rectangular shape makes the 1FF suitable for attaching to the sides of buildings or in sites such as bridges, though it may also be used on trees. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats.

Woodcrete (75% wood sawdust, concrete and clay mixture)

Width: 27cm

Height: 43cm

Weight: 8.3kg

APPENDIX 4

Suitable Bird Box Examples

Bird Boxes

Schwegler bird boxes have the highest rates of occupation of all types of box. They are designed to mimic natural nest sites and provide a stable environment with the right thermal properties for chick rearing and winter roosting. Boxes are made from 'Woodcrete'. This 75% wood sawdust, clay and concrete mixture is breathable and very durable making these bird boxes extremely long lasting.



1B Bird Box

This is the most popular box for garden birds and appeals to a wide range of species. The box can be hung from a branch or nailed to the trunk of a tree with a 'tree-friendly' aluminium nail.

Available in four colours and three entrance hole sizes. 26mm for small tits, 32mm standard size and oval, for redstarts.

2H Bird Box

This box is attractive to robins, pied wagtails, spotted flycatcher, wrens and **black redstarts**.

Best sited on the walls of buildings with the entrance on one side.

Schwegler boxes have the highest occupation rates of all box types. They are carefully designed to mimic natural nest sites and provide a stable environment for chick rearing and winter roosting. They can be expected to last 25 years or more without maintenance.



2M Bird Box

A free-hanging box offering greater protection from predators.

Supplied complete with hanger which loops and fastens around a branch.

With standard general-purpose 32mm diameter entrance hole.

Schwegler boxes have the highest occupation rates of all box types. They are carefully designed to mimic natural nest sites and provide a stable environment for chick rearing and winter roosting. They can be expected to last 25 years or more without maintenance.

