8261 Ecological Appraisal fpcr



Hydrock

CHINGFORD ROAD, NOTTINGHAM

**ECOLOGICAL APPRAISAL** 

February 2018

# **FPCR Environment and Design Ltd**

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Figure 1: Phase 1 Habitat Plan

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#### 1.0 INTRODUCTION

- 1.1 This report has been prepared by FPCR Environment & Design Ltd. for Hydrock on behalf of Nottingham City Homes, and details the results of an Ecological Appraisal of a site located north west of Chingford Road, Nottingham (central OS grid reference SK 52184174).
- 1.2 The development proposal comprises the construction of residential dwellings, access roads, a green corridor and enhanced public open space.
- 1.3 The site is dominated by managed amenity grassland, along with longer sward grassland, scrub and trees at the site boundaries. A single building, a pre-fabricated single storey structure, is present within a fenced area towards the east.
- 1.4 The site is bounded on all sides by existing residential development, and by Westbury School to the south.

### 2.0 METHODOLOGY

# **Background**

# **Desktop Study**

- 2.1 In order to compile existing baseline information, the Multi Agency Geographic Information for the Countryside (MAGIC)<sup>1</sup> was accessed.
- 2.2 Further inspection of colour 1:25,000 OS base maps and aerial photographs from Google Earth (maps.google.co.uk) was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.
- 2.3 The search area for biodiversity information was related to the significance of sites and species and potential zones of influence, as follows:
  - 10km around the application area for sites of International Importance (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites).
  - 2km around the application area for sites of National or Regional Importance (Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR)).
  - 1km around the site for Local Nature Reserves (LNR).

# Field survey

- 2.4 A Phase 1 Habitat survey was completed in February 2018 using the standard Extended Phase 1 Habitat Survey Methodology (JNCC, 2010), as recommended by Natural England. This comprised a walkover of the site, mapping and broadly describing the principal habitat types and identifying the dominant plant species present within each habitat type. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.
- 2.5 The standard survey methodology was extended to assess the potential presence of protected species within features such as trees or specific habitats considered for their ecological value and potential to provide suitable habitats for protected species.

http://www.natureonthemap.naturalengland.org.uk/ [Accessed 24.03.17]



2.6 Consideration was given to the potential presence of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)<sup>2</sup>, however this survey does not comprise a comprehensive invasive plant survey and may not have detected emergent stands.

#### Fauna

2.7 During the Phase 1 Habitat Survey, observations, signs of or suitable habitat for any species protected under Part I of the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats & Species Regulations 2017 and the Protection of Badgers Act 1992 were recorded. Consideration was also given to the existence and use of the site by other notable fauna such as Schedule 1 bird species, breeding birds, species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) and Local Biodiversity Action Plan (LBAP) or Red Data Book (RDB) species.

### Badgers Meles meles

- 2.8 The standard methodology as recommended by Harris, Creswell and Jefferies3 was followed to complete a thorough search for evidence which would indicate the presence of badgers both on the site and locally. Evidence of badger occupation and activity sought included:
  - Setts: including earth mounds, evidence of bedding and runways between setts;
  - Latrines: often located close to setts, at territory boundaries or adjacent to favoured feeding areas;
  - Prints and paths or trackways;
  - Hairs caught on rough wood or fencing;
  - Other evidence: including snuffle holes, feeding and playing areas and scratching posts.

### **Bats**

# **Building Assessment**

2.9 External aspects of the building within the site were examined from outside the adjacent security fencing to determine any potential or actual access points and roost sites. Structural features with the potential for use by roosting bats were recorded as were any suitable access points identified. Evidence to substantiate use was also sought including staining from urine and/or fur and the presence of bat droppings in and around features. Indicators that potential access points had not recently been used included the presence of heavy cob-webbing and general detritus around these points.

## **Ground Level Tree Assessment**

- 2.10 The tree assessments were undertaken from ground level, with the aid of a torch and binoculars where required. During the survey Potential Roosting Features for bats such as the following were sought (based on p16, British Standard BS 8596:2015)4:
  - Natural holes (e.g. knot holes) arising from naturally shed branches or branches previously pruned back to a branch collar.

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<sup>&</sup>lt;sup>2</sup> Act of Parliament, 1981. The Wildlife and Countryside Act 1981 (as amended), London: HMSO

<sup>&</sup>lt;sup>3</sup> Harris, S., Cresswell, P. & Jefferies, D. 1989. Surveying for badgers. Occasional Publication of the Mammal Society No. 9. Mammal Society: Bristol.

<sup>&</sup>lt;sup>4</sup> British Standard BS 8596:2015. *Surveying for Bats in Trees and Woodland*. Guide, October 2015.



- Man-made holes (e.g. cavities that have developed from flush cuts or cavities created by branches tearing out from parent stems.
- Woodpecker holes.
- Cracks/splits in stems or branches (horizontal and vertical)
- Partially detached, loose or platy bark.
- Cankers (caused by localised bark death) in which cavities have developed.
- · Other hollows or cavities, including butt rots.
- · Compression of forks with occluded bark, forming potential cavities.
- Crossing stems or branches with suitable roosting space between.
- Ivy stems with diameters in excess of 50mm with suitable roosting space behind (or where roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk).
- · Bat or bird boxes.
- Other suitable places of rest or shelter not listed above.
- 2.11 Certain factors such as orientation of the feature, its height from the ground, the direct surroundings and its location in respect to other features, may reduce enhance or reduce the potential value.
- 2.12 Based on the above, trees were classified into general bat roost potential groups based on the presence of these features. Table 1 broadly classifies the potential categories as accurately as possible as well as discussing the relevance of the features. This table is based upon Table 4.1 within Chapter 6 in the BCT Good Practice Guidelines5.
- 2.13 Although the British Standard document groups trees with moderate and high potential, these have been separated within Table 1 (as per Table 4.1 in the BCT Guidelines) to allow more specific survey criteria to be applied.

Table 1: Bat survey protocol for trees

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey work (where tree(s) will be likely affected by the proposed development)
Confirmed Roost	Evidence of roosting bats in the form of live bats, droppings, urine staining, mammalian fur oil staining, etc.	A Natural England derogation licence application will be undertaken. This will require a combination of aerial assessment by roped access bat workers and nocturnal survey during appropriate period (May to August).  Replacement roost sites commensurate with status of roost to be provided.  Works to be undertaken under supervision using a good practice method statement.
High Potential	A tree with one or more Potential Roosting Features that are obviously suitable for larger numbers of bats on a more regular basis and	Where the tree(s) will likely be affected by development a combination of aerial assessment by roped access bat workers

<sup>&</sup>lt;sup>5</sup> Bat Conservation Trust, 2016. *Bat Surveys for Professional Ecologists Good Practice Guidelines* 3nd edition.

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Classification Description of Category and Associated Features (based on Potential Roosting Features listed above)		Likely Further Survey work (where tree(s) will be likely affected by the proposed development)	
	potentially for longer periods of time due to their size, shelter protection, conditions (height above ground level, light levels, etc.) and surrounding habitat but unlikely to support a roost of high conservation status (i.e. larger roost, irrespective of wider conservation status). Examples include (but are not limited to); woodpecker holes, larger cavities, hollow trunks, hazard beams, etc.	and/or nocturnal survey during appropriate period (May to August). Following additional assessments, tree may be upgraded or downgraded based on findings. After completion of survey work, some good practice removal operations likely to be required.	
Moderate Potential	A tree with Potential Roosting Features which could support one or more potential roost sites due to their size, shelter protection, conditions (height above ground level, light levels, etc.) and surrounding habitat but unlikely to support a roost of high conservation status (i.e. larger roost, irrespective of wider conservation status). Examples include (but are not limited to); woodpecker holes, rot cavities, branch socket cavities, etc.	Where the tree(s) will likely be affected by development a combination of aerial assessment by roped access bat workers and /or nocturnal survey during appropriate period (May to August). Following additional assessments, tree may be upgraded or downgraded based on findings.  After completion of survey work, some good practice removal operations likely to be required.	
Low Potential Potential Potential Roosting Features but with none seen from ground or features seen only very limited potential. Examples include (but are not limited to); loose/lifted bark, shallow splits exposed to elements or upward facing holes.		No further survey required but some good practice removal operations <b>may</b> be required in certain circumstances.	
Negligible / Negligible/no habitat features likely to be used by roosting bats		None.	

<sup>\*</sup> The Conservation of Habitats & Species Regulations 2010 (as amended) affords protection to % preeding sites+ and % esting places+ of bats. The EU Commission Granimal species of Community interest under the Habitats Directive 92/43/EEC, February 2007 states that these are places where there is a reasonably high probability that the species concerned will return+:

## Limitations

- 2.14 The phase 1 habitat survey was undertaken in February, outside the optimal survey period. However, given the nature of habitats present on-site, being dominated by intensely managed improved grassland, it is considered that a sufficiently robust survey was undertaken and as such this has not significantly affected the overall assessment of on-site habitats.
- 2.15 The building within the site was not accessible for internal survey or detailed external survey. Given the type and condition of the building, it is considered that the limitations to access are not a significant constraint to the overall building assessment.



#### 3.0 RESULTS

# **Desktop Study**

3.1 The MAGIC database was searched to determine the presence of sites of county, national and international importance within close proximity to the site. No internationally designated sites were identified within 10km of the site, no sites of national importance were identified within 2km of the site and no Local Nature Reserves were identified within 1km of the site.

#### **Habitats**

### Habitats/Flora

3.2 Habitat descriptions of the site are provided below. The locations of the habitats described are provided in Figure 1, and a full botanical species list is provided in Appendix A.

### Grassland

- 3.3 The site is dominated by managed amenity grassland, with a sward height of approximately 5-10cm at the time of survey. The sward was largely recorded to be species poor, dominated by grasses including perennial rye-grass *Lolium perenne*, red fescue *Festuca rubra* agg. and Yorkshire-fog *Holcus lanatus*. Herb species recorded within the sward includes ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens* and dandelion *Taraxacum officinale* agg.
- 3.4 Areas of grassland at the margins of the site were recorded to be less intensely managed, with a longer sward height (approximately 20-50cm) and a higher ruderal component. Additional species recorded within the longer sward grassland included false oat-grass *Arrhenatherum elatius*, common nettle *Urtica dioica*, ivy *Hedera helix*, cleavers *Galium aparine*, broad-leaved dock *Rumex obtusifolius* and white dead-nettle *Lamium album*.
- 3.5 The grassland appears to be regularly used for recreational purposes including dog walking, evident from well-used pathways and levels of activity noted during the site survey.

## **Dense/ Continuous Scrub and Trees**

- 3.6 Areas of dense scrub were present along the site boundaries, recorded to be dominated by bramble *Rubus fruticosus* agg., along with occasionally or rarely occurring hazel *Corylus avellana*, blackthorn *Prunus spinosa*, buddleja *Buddleja davidii*, elm *Ulmus* sp. and hawthorn *Crataegus monogyna*.
- 3.7 A number of trees were also present at the site boundaries, largely at the north west, west and south western boundaries. Trees at the site boundaries largely comprised semi-mature specimens including oak *Quercus robur*, sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior* and hawthorn.

# **Hedgerows**

3.8 A small number of short (between c.7-25m), amenity hedgerows were present along the north eastern site boundary forming the curtilage of adjacent residential dwellings. These were largely recorded to comprise garden privet *Ligustrum ovalifolium* and other ornamental species.



## **Building and Hardstanding**

- 3.9 A single building was present within the site, comprising what appeared to be a pre-fabricated single storey building, with a flat roof. This building was surrounded by fencing and appeared to be an extension to the existing school located adjacent to the south eastern site boundary.
- 3.10 Small areas of hardstanding were also present within the site, comprising a tarmac footpath in the north of the site, a concrete cricket strip within the area of amenity grassland, and a path to the building leading from the adjacent school car park.

#### **Fauna**

# **Badger**

3.11 No evidence of badger such as the presence of setts, hairs, latrines or snuffle holes were observed at the time of survey. The site offers very limited suitable foraging habitat for badger in the form intensely managed improved grassland and the limited extent of longer sward grassland at the margins of the site.

#### **Bats**

#### Roosting Bats

- 3.12 The trees at the site boundaries were largely recorded to be in good health and were assessed to have negligible potential to support roosting bats.
- 3.13 The building within the site comprised a relatively new single storey, pre-fabricated building with a flat roof. From the outside this did not appear to support a loft void.
- 3.14 Where the roof overhangs the sides of the building there is a crevice all the way round which could provide opportunities for crevice dwelling bats. The roof structure is considered likely to fluctuate significantly in temperature however, reducing its suitability to roosting bats. Therefore, given the type and nature of the building, it is considered to have negligible potential to support roosting bats.

### Foraging and Commuting Bats

3.15 The main site area provides limited foraging opportunities for bats, however trees and scrub at the site boundaries, largely along the south, west and north western boundaries, provide low value foraging features with potential to be used by bats.

# Reptiles

3.16 The site is dominated by managed amenity grassland which is considered to be unsuitable to support reptile species. The longer sward grassland towards the site perimeter provide opportunities for this group, though are limited in size and isolated from other similar habitats.

### **Great Crested Newts**

3.17 No waterbodies were identified within the site or within 500m of the site. On-site habitats provided only limited terrestrial opportunities in the form of the managed amenity grassland and the limited extent of longer sward grassland at the margins of the site.



## **Nesting Birds**

- 3.18 Habitats within the site including the trees and scrub offer suitable nesting habitat to a range of common breeding birds including urban and rural fringe species.
- 3.19 The enclosed nature of the site and regular disturbance from recreational use are likely to deter ground nesting birds from attempting to breed within the site.

# 4.0 CONCLUSION AND RECOMMENDATIONS

# **Statutory and Non-statutory Designation**

4.1 There are no statutory sites of international importance within a 10km radius of the site, nor any sites of national importance located within 2km of the site boundary. Similarly there were no statutory sites of local importance within 1km of the site. Subsequently the proposed development is unlikely to effect the conservation status of any sites of nature conservation interest.

#### **Habitats**

- 4.2 The degree to which habitats receive consideration within the planning system relies on a number of mechanisms, including:
  - Inclusion within specific policy (e.g. veteran trees, ancient woodland and linear habitats in NPPF, or non-statutory site designation),
  - Identification as a habitat of principal importance for biodiversity under the NERC Act (2006) and consequently identification as a Priority Habitat within the Local Biodiversity Action Plan (LBAP).
- 4.3 Under the NPPF, development should seek to contribute a net gain in biodiversity with an emphasis on improving ecological networks and linkages where possible.
- 4.4 The main site area comprised managed species poor amenity grassland, with taller sward grassland present at the margins of the site, considered to be of limited botanical and ecological interest. Other habitats present within the site considered to be of limited botanical or ecological interest include scrub and a modern building. The loss of these habitats would not result in significant adverse impacts to ecology and nature conservation.
- 4.5 Trees present at the site boundaries are considered to be of greater ecological value in the context of the site. It is recommended that the boundary habitats are retained where possible, maintaining a green corridor around the proposed development. Where trees will be lost to the proposed development, it is recommended that this is mitigated through native species tree planting within areas of public open space.

# Fauna

4.6 Principal pieces of legislation protecting wild species are Part 1 of the Wildlife and Countryside Act 1981 (as amended) (WCA) and the Conservation of Habitats and Species Regulations 2017. Some species, for example badgers, also have specific protective legislation (Protection of Badger Act 1992). The impact that this legislation has on the Planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation . Statutory Obligations and their Impact within the Planning System.



- 4.7 This guidance states that as the presence of protected species is a material consideration in any planning decision, it is essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions for example.
- 4.8 The implications that various identified species or those that are thought reasonably likely to occur may have for developmental design and programming considerations are outlined below.

### **Badger**

- 4.9 Badgers are protected by statute under Schedule 6 of the Wildlife and Countryside Act (1981) and the Badger Act (1992). This legislation protects animals and their setts from wilful or reckless harm, persecution or damage.
- 4.10 The site provides very limited foraging opportunities, with no evidence of badger such as the presence of setts, hairs, latrines or snuffle holes recorded within the site during the survey work undertaken. As such, the development proposals are considered unlikely to have an impact on this species, and the presence of badger is not considered to pose a constraint to the proposed development.

#### **Bats**

4.11 All UK species of bats are listed on the Conservation of Habitats and Species Regulations 2017, making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal. Bats are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a species of bat or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection. Some bat species, including soprano pipistrelle, are NERC Species of Principal Importance.

### Roosting Bats . Trees and Buildings

- 4.12 A number of largely semi-mature trees were present at the site boundaries, all assessed to have negligible potential to support roosting bats.
- 4.13 A single building within the south east of the site was considered likely to have negligible potential to support roosting bats.
- 4.14 On this basis, roosting bats are not considered to be a constraint to the proposed development.

# Foraging and Commuting

4.15 Limited opportunities for foraging and commuting behaviour are present within the site, largely located at the site boundaries. It is recommended that the boundary habitats are retained and buffered from the proposed development where possible, with an appropriate lighting scheme implemented to minimise the incidence of artificial lighting of habitat corridors.

## Reptiles

- 4.16 The site is dominated by managed amenity grassland which is considered to be unsuitable to support reptile species. Habitats which provide limited opportunities for this species group are present within the site in the form of longer sward grassland at the site margins, albeit these are very limited in extent. Furthermore, the site is bound and isolated from areas of suitable habitat by existing residential development. On this basis, it is considered unlikely that reptiles are present within the site.
- 4.17 It is nevertheless recommended that precautionary measures are employed during ground vegetation clearance works to safeguard any individual reptiles in the very unlikely event they are present within the site during works. It is proposed that a mitigation strategy will be implemented such as the use of passive displacement techniques during an appropriate time of year to remove suitable habitats within the construction area and steer any reptiles present towards retained suitable habitat.

### **Great Crested Newt**

4.18 No waterbodies were identified within the site or within 500m of the site. As such it is considered highly unlikely that GCN are present within the site and therefore this species is not considered to pose a constraint to the proposed development.

#### **Birds**

- 4.19 The Wildlife and Countryside Act 1981 (as amended) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions to recklessly or intentionally:
  - Kill, injure or take any wild bird;
  - Take, damage or destroy the nest of any wild bird while in use or being built;
  - Take or destroy the egg of any wild bird.
- 4.20 Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are specially protected at all times.
- 4.21 In addition to statutory protection, some bird species are classified according to their conservation status, such as their inclusion on the Red and Amber lists of Birds of Conservation Concern (BoCC) in the UK<sup>6</sup>:
  - Red list species are those that are Globally Threatened according to IUCN criteria; those
    whose population has declined rapidly (50% or more) in recent years; and those that have
    declined historically and not shown a substantial recent recovery.
  - Amber list species are those with an unfavourable conservation status in Europe; those with a
    population or range that has declined moderately (between 25% and 49%) in recent years;
    those whose population has declined historically but made a substantial recent recovery; rare
    breeders; and those with internationally important or localised populations.
  - Green list species fulfil none of the above criteria.

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<sup>&</sup>lt;sup>6</sup> Eaton, M. A., Brown, A. F., Noble, D. G., Musgrove, A. J., Hearn, R. D., Aebischer, N. J., Gibbons, D. W., Evans, A., & Gregory, R. D. 2009. Birds of Conservation Concern 3: The population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 102: 296-341.



- 4.22 The trees and scrub within the site provide potential nesting and foraging habitat for a range of common bird species potentially present in the local area, most likely common and widespread species given the habitats present but potentially including a range of NERC list species such as song thrush *Turdus philomelos*, house sparrow *Passer domesticus*, starling *Sturnus vulgaris* (all BoCC Red list species), and dunnock *Prunella modularis* (Amber list).
- 4.23 Small areas of habitats providing opportunities for nesting birds may be lost as a result of the development, however opportunities for this species group will continue to be available within the site in the long term in the form of the garden areas. Therefore there will be no overall negative impact on local populations of nesting birds, and this species group is not considered to pose a constraint to development.
- 4.24 Any removal of suitable nesting vegetation should occur outside of the bird breeding season (March to September inclusive) to minimise the risk of disturbance to breeding birds. If this is not possible, such vegetation/buildings must be checked prior to removal by a suitably experienced ecologist. If active nests are found, vegetation / buildings should be left untouched and suitably buffered from works until all birds have fledged. Specific advice should be sought prior to undertaking site clearance.

# **Habitat Creation and Enhancement Proposals**

- 4.25 The opportunity exists to deliver a net benefit for local wildlife and provide biodiversity enhancements, in line with the aims of the NPPF. It is recommended that the proposed area of public open space (POS) include the following within the landscape planting scheme:
  - Native species grassland mix such as a combination of flowering lawn mix (e.g. Emorsgate Seeds EM1) for more formal areas, and general meadow mix (e.g. Emorsgate Seeds EM3) for less formal areas (following manufacturers guidelines);
  - To mitigate for the loss of any potential bird nesting and foraging habitat on the site it is recommended that the scheme includes native and/or ornamental tree and shrub planting around the edge of the site, with preference given to species of wildlife value i.e. berry, flower and fruit-bearing species such as crab apple Malus sylvestris, hawthorn, rowan Sorbus aucuparia, holly Ilex aquifolium and guilder-rose Viburnum opulus to enhance foraging opportunities for local wild fauna; and
  - For any areas of surface water attenuation, to consider seeding the margins with native species mixes that are able to withstand seasonal inundation such as Emorsgate Seeds EM8 (following manufacturers guidelines).
  - As good practice, to minimise potential effects to the local bat population, lighting should be carefully designed adjacent to existing and new potential bat foraging areas including tree groups, waterbodies, hedgerows and other commuting lines, as well as potential roost sites including bat boxes. Where artificial lighting cannot be avoided the lighting scheme should be designed with reference to the Bat Conservation Trust and Institute of Lighting Professionals guidance<sup>7,8,9</sup> and designed to reduce spill and be downwardly directional. All new lighting should meet the current environmental standards of good practice in order to reduce potential

<sup>&</sup>lt;sup>7</sup> Bat Conservation Trust. 2009. *Bats and Lighting in the UK*. Bats and the Built Environment Series.

<sup>&</sup>lt;sup>8</sup> Bat Conservation Trust. 2011. Statement on the Impact and Design of Artificial Light on Bats.

<sup>&</sup>lt;sup>9</sup> Institute of Lighting Professionals. 2011. *Guidance notes for the reduction of Obtrusive Light.* 



light pollution and use the lowest intensity possible for its purpose. This will minimise light spill onto foraging routes and minimise potential disturbance caused through the lighting of corridors and potential roost sites. Adherence to the above guidance would ensure that the overall impact to bats caused by lighting the site will be negligible;

- 4.26 Development within the site also provides the opportunity to increase the value of the site for faunal species. As such the following enhancements are recommended:
  - To provide enhanced roosting opportunities for the local bat population it is recommended that
    a selection of bat box types are provided on suitable retained trees or incorporated into the
    gable ends of detached garages or residential properties.
  - Further enhancements for the local breeding bird population can also be provided throughout
    the site with the implementation of a range of bird boxes on retained mature trees and/or
    residential dwellings.

#### 5.0 SUMMARY OF RECOMMENDATIONS

- 5.1 It is recommended that **boundary vegetation be retained**, where possible.
- 5.2 Any trees lost to development should be replaced via **new native tree planting**. It is additionally recommended that the **area of public open space be sown with appropriate native species grassland mixes**.
- 5.3 An appropriate lighting scheme should be implemented within the proposed development in order to minimise the impact of development on nocturnal species, including foraging and commuting bats.
- 5.4 Habitats within the site provide very limited opportunities for reptiles. Therefore it is recommended precautionary measures including **directional strimming** are undertaken to safeguard reptile species in the highly unlikely event that they are present during construction.
- The site provides suitable opportunities for nesting birds. Any removal of suitable nesting vegetation should occur outside of the bird breeding season (March to September inclusive) to minimise the risk of disturbance to breeding birds. If this is not possible, such vegetation should be checked prior to removal by a suitably experienced ecologist. If active nests are found, vegetation should be left untouched and suitably buffered from works until all birds have fledged. Specific advice should be sought prior to undertaking site clearance.
- 5.6 The opportunity exists within the proposed development to create habitats of value for faunal species within areas of POS such as **wildflower grassland and native tree/shrub planting**.
- 5.7 It is recommended that **bat and bird boxes** are incorporated within the proposed development to increase the value of the site for faunal species.



# **APPENDIX A: BOTANICAL SPECIES LIST**

Common name	Scientific name	Abundance (DAFOR)			
Amenity and Long Sword Grassland					
Broad-leaved dock	Rumex obtusifolius	0			
Cleavers	Galium aparine	0			
Cocksfoot	Dactylis glomerata	0			
Common nettle	Urtica dioica	0			
Creeping Buttercup	Ranunculus repens	F			
Creeping thistle	Cirsium arvense	0			
Dandelion	Taraxacum officinale agg.	0			
False oat-grass	Arrhenatherum elatius	0			
lvy	Hedera species	0			
Lesser stitchwort	Stellaria graminea	R			
Perennial rye-grass	Lolium perenne	D			
Red fescue	Festua rubra	F			
Ribwort plantain	Plantago lanceolata	F			
Slender speedwell	Veronica filiformis	R			
White-clover	Trifolium repens	0			
White dead-nettle	Lamium album	R			
Yorkshire fog	Holcus lanatus	0			
Scrub and Trees					
Alder	Alnus species	0			
Ash	Fraxinus excelsior	0			
Blackthorn	Prunus spinosa	0			
Bramble	Rubus fruticosus agg.	D			
Butterfly bush	Buddleja	R			
Cherry	Prunus avium	R			
Elm	Ulmus species	R			
English oak	Quercus robur	0			
Hawthorn	Crataegus monogyna	0			
Hazel	Corylus species	Т			
Holly	Ilex aquifolium	R			
Sycamore	Acer pseudoplatanus	D			

