



MACGREGOR-SMITH LIMITED

PLOT 5610,
HATFIELD BUSINESS PARK,
HERTFORDSHIRE

Ecological Appraisal

November 2018
7954.EcoApp.vf

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1. INTRODUCTION

1.1. Background

- 1.1.1. Ecology Solutions was commissioned in October 2018 by Macgregor-Smith Limited on behalf of Arlington, to complete an ecological appraisal of Plot 5610, Hatfield Business Park, Hertfordshire (see Plan ECO1). Hereafter referred to as the site.
- 1.1.2. The site is proposed for a new industrial building with associated parking and infrastructure.

1.2. Site Characteristics

- 1.2.1. The site is located within Hatfield Business Park and represents one of the undeveloped plots. To the north of the site lies existing residential development with associated gardens and infrastructure. To the west, east and south of the site is the continuation of Hatfield Business Park.
- 1.2.2. The site consists largely of semi-improved grassland, with a rougher grassland sward apparent around the boundaries. A treeline and tall ruderal vegetation is apparent in the western area of the site.

1.3. Ecological Assessment

- 1.3.1. This document assesses the ecological interest of the site. The importance of the habitats within the site is evaluated with due consideration given to the current 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 site and, where appropriate, potential enhancement measures are put forward and reference made to both National and Local Biodiversity Action Plans (BAP), now being referred to as priority habitats / species.

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. SURVEY METHODOLOGY

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

2.2. Desk Study

2.2.1. In order to compile background information on the site and the surrounding area, Ecology Solutions contacted Hertfordshire Environmental Records Centre (HERC).

2.2.2. Information received is referenced within this report and illustrated where appropriate on Plan ECO1.

2.2.3. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)² database. This information is reproduced at Appendix 1, and where appropriate illustrated on Plan ECO1.

2.3. Habitat Survey

2.3.1. Habitat surveys were carried out in October 2018 in order to ascertain the general ecological value of the site and to identify the main habitats and associated plant species.

2.3.2. The study area was surveyed based around extended Phase 1 survey methodology³, 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 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. The survey work was undertaken outside the optimal period for botanical surveys, however given the habitats present and the species evident at the time of survey, it is considered an accurate assessment of the habitats present has been made.

²<http://www.magic.gov.uk>

³Joint 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 survey was recorded. Specific attention was paid to any potential use of the site by protected species, priority species (formerly referred to as BAP species), or other notable species.
- 2.4.2. In addition to general observations of faunal activity, specific surveys were undertaken for the potential presence of bats and Badger *Meles meles* within and adjacent to the site.
- 2.4.3. Experienced ecologists following established best practice and guidance issued by Natural England undertook the fauna surveys. Details of the methodologies employed are given below.

Bats

- 2.4.4. All trees within the site were assessed for their potential to support roosting bats. Features typically favoured by bats or evidence of past use by bats were sought, 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 bats' claws;
 - Cavities, splits and or loose bark from broken or fallen branches, lightning strikes etc.; and
 - Very dense covering of mature Ivy over trunk.
- 2.4.5. The site and features therein were also appraised for their likely value to foraging and dispersing bats.

Badgers

- 2.4.6. Ecology Solutions undertook a survey of Badger activity across the site in October 2018.
- 2.4.7. The survey was extended to cover adjacent land of up to 30 metres away from the site, where possible, within habitat considered suitable for Badgers. This was considered necessary as any potential impacts that the development may have upon badgers setts located within adjacent habitat would also have to be considered:
- 2.4.8. Evidence of any Badger activity was identified in the following ways:
- Identification of Badger setts on the basis of their size and location;
 - Inspection of spoil heaps for footprints or discarded hair;
 - Presence of dung pits or latrines;
 - Presence of well-used mammal pathways; and
 - Presence of other indications of Badger activity including signs of foraging or hair caught in fences.

3. ECOLOGICAL FEATURES

3.1. Habitat surveys were undertaken at the site and study area in October 2018.

3.2. The following main habitat / vegetation types were identified within the study area during the surveys undertaken:

- Semi-improved Grassland;
- Rough Grassland;
- Treeline / Wooded Belt;
- Tall Ruderal Vegetation; and
- Bare Ground.

3.3. The locations of these habitats are shown on Plan ECO2.

3.4. Semi-improved Grassland

3.4.1. Plot 5610 consists largely of semi-improved grassland that appears to be subject to an infrequent mowing management regime (see Photograph 1).

3.4.2. The grassland is dominated by coarse grass species which include Cocksfoot *Dactylis glomerata*, False Oat-grass *Arrhenatherum elatius*, Yorkshire Fog *Holcus lanatus* and Annual Meadow Grass *Poa annua*. Red Fescue *Festuca rubra* is also present but in isolated patches. Forb species present include Oxeye Daisy *Leucanthemum vulgare*, Yarrow *Achillea millefolium*, Ribwort Plantain *Plantago lanceolata*, Common Knapweed *Centaurea nigra*, Common Ragwort *Senecio jacobaea*, Meadow Vetching *Lathyrus pratensis*, Common Vetch *Vicia sativa subsp. segetalis*, Red Clover *Trifolium pratense*, Hogweed *Heracleum sphondylium*, Creeping Cinquefoil *Potentilla reptans*, Creeping Buttercup *Ranunculus repens*, Wild Carrot *Daucus carota*, Dovesfoot Cranesbill *Geranium mole*, Smooth Cat's-ear *Hypochaeris glabra*, Creeping Thistle *Cirsium arvense*, Common Nettle *Urtica dioica* and Cleavers *Galium aparine*.

3.5. Rough Grassland

3.5.1. A thin strip of rough grassland is apparent along the southern and northern boundary of the semi-improved grassland, where there does not appear to be any active management such as mowing (see Photograph 2).

3.5.2. The species composition of the rough grassland is similar to that of the semi-improved grassland, however False Oat-grass is the dominant grass species, with Cocksfoot, Yorkshire Fog and Annual Meadow Grass still apparent but at a lower density. Other species recorded include, Bristly Ox-tongue *Helminthotheca echioides*, Common Ragwort, Colts-foot *Tussilago farfara*, Yarrow, Ribwort Plantain and Broadleaved Plantain *Plantago major*, Common Vetch, Meadow Vetchling, Creeping Cinquefoil, Common Nettle and Black Medick *Medicago lupulina*. Hawthorn *Crataegus monogyna*, Willow

Salix and Oak *Quercus robur* saplings are also present in this habitat.

3.6. **Treeline / Wooded Belt**

- 3.6.1. A treeline and small wooded belt is present along the western boundary of the site.
- 3.6.2. This habitat comprises young and semi-mature Dogwood *Cornus sanguinea*, Silver Birch *Betula pendula*, Field Maple *Acer campestre* and Blackthorn *Prunus spinosa*. Bramble *Rubus fruticosus* is also present.
- 3.6.3. In addition, two standalone Goat Willow *Salix caprea* are present within the semi-improved grassland.

3.7. **Tall Ruderal Vegetation**

- 3.7.1. An area of tall ruderal vegetation dominates the north western area of the site (see Photograph 3). Species present include Bramble, Creeping Thistle, Teasel *Dipsacus sylvestris*, Hogweed, Cocksfoot and False Oat Grass.

3.8. **Bare Ground**

- 3.8.1. Several patches of bare ground are present within the site (see Photograph 4). Opportunistic species such as Red Fescue, Bramble, Creeping Cinquefoil and Colts-foot have begun to recolonise these areas.

3.9. **Background Records**

- 3.9.1. No recent records for protected or notable plant species were returned by the data search.

4. WILDLIFE USE OF THE SITE

4.1. General observations were made during the surveys of any faunal use of the site with specific attention paid to the potential presence of protected species.

4.2. Badgers

4.2.1. No Badger setts or field signs associated with this species were recorded within or immediately adjacent to the site.

4.2.2. Owing to the location of the site and its surrounding area it is not deemed to offer any reasonable foraging or dispersal opportunities for Badgers. Owing to the lack of suitable habitat around the site, the presence of Badgers is extremely unlikely. No further consideration to this species is required.

4.2.3. Only two records from the last ten years for Badger were returned by the data search. Both records were recorded in a location within the same 10km grid square as the site. Both records are for dead Badgers at the side of the road.

4.3. Bats

4.3.1. None of the trees associated with the site have developed any features that could support roosting bats. The neighbouring buildings offer no opportunities for roosting bats. The grassland and trees may provide some limited opportunities for foraging bats, however, the artificial lighting associated with the adjacent warehouse as well as the road to the north and east may act as a deterrent for any foraging bats.

4.3.2. A total of 12 records of Common Pipistrelle *Pipistrellus pipistrellus* were returned by the desk study. The closest and most recent record for this species was returned in 2006 within the same 1km grid square as the site. Nine records of Brown Long-eared Bat *Plecotus auritus* and three records of Noctule *Nyctalus noctula* were returned. The closest record for these species was returned in 2003 within a 1km grid square 0.4km west of the site at its closest point. An unidentified *Myotis Myotis* sp. was recorded in 2003 within a 1km grid square approximately 0.4km west of the site at its closest point.

4.4. Hedgehogs

4.4.1. No evidence of Hedgehog *Erinaceus europaeus* was recorded by Ecology Solutions. The habitats on site are thought to offer suitable opportunities for foraging and dispersal. The tall ruderal vegetation and small wooded belt also provide some hibernation potential for this species.

4.4.2. No recent records for this species were returned by the data search.

4.5. Other Mammals

- 4.5.1. Evidence of grazing Rabbit *Oryctolagus cuniculus* were recorded on site. There is no evidence of any protected small mammals present within the site.
- 4.5.2. No records of any European protected mammal species such as Otter *Lutra lutra* or Dormouse *Muscardinus avellanarius* were returned from the search area. It is therefore considered that these species are absent from the immediate area and would not present a constraint to a proposed development at the site. One record of Water Vole *Arvicola amphibius* was returned, dating from 1987; however, the site is devoid of habitats suitable for this species. Three Brown Hare *Lepus europaeus* records were returned, with the closest and most recent being from approximately 1.2km west of the site in 2013.

4.6. Birds

- 4.6.1. There is no suggestion that the site is of any particular ornithological. However, the trees and tall ruderal vegetation does offer limited nesting and foraging opportunities for locally present bird species.
- 4.6.2. Carrion Crow *Corvus corone*, Blackbird *Turdus merula* were noted flying over the site during the October 2018 survey.
- 4.6.3. Several records for species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) were returned by the data search. These species include Barn Owl *Tyto alba*, Fieldfare *Turdus pilaris*, Redwing *Turdus iliacus*, Crossbill *Loxia curvirostra*, Quail *Coturnix coturnix*, Hobby *Falco subbuteo*, Red Kite *Milvus milvus*, Kingfisher *Alcedo atthis*, Green Sandpiper *Tringa ochropus*, Greenshank *Tringa nebularia*, and Black-tailed Godwit *Limosa limosa*.
- 4.6.4. The closest records for Fieldfare, Redwing, Hobby, Red Kite, Green Sandpiper and Greenshank, were all recorded at a location approximately 0.2km north-west of the site in 2013.
- 4.6.5. Barn Owl, Quail, Kingfisher and Black-tailed Godwit were all recorded within the same 1km grid as the site. Barn Owl, Kingfisher, Black-tailed Godwit were most recently recorded in 2013. A single Crossbill record was returned in 2012 within a 1km grid square approximately 1.3km south of the site at its closest point.

4.7. Reptiles

- 4.7.1. No reptiles were observed during the survey work undertaken. The grassland present on site lacks the tussocky nature favoured by common reptile species. The site is also very isolated from further suitable habitat, therefore the presence of common reptiles on site is considered unlikely. No further consideration to this group is required.

- 4.7.2. No records of any reptile species from the past 20 years were returned as part of the desk study.
- 4.7.3. No reptiles were recorded by Ecology Solutions during a 2017 reptile survey on a nearby plot (Plot 5000) with considered preferential reptile suitability to that provided by the site.

4.8. **Amphibians**

- 4.8.1. There are no waterbodies present on site. An ornamental pond is present 20 metres to the north west of the site. Given the ornamental nature of the pond, being surrounded by hardstanding with vertical sides it is not considered to offer opportunities for breeding amphibians.
- 4.8.2. The tall ruderal vegetation within the site offers some limited potential for amphibians during their terrestrial phase. However, the presence of any protected amphibian species on site is considered unlikely. No further consideration to this group is required.
- 4.8.3. No recent records of any amphibians, including Great Crested Newt *Triturus cristatus*, were returned by the data search exercise.

4.9. **Invertebrates**

- 4.9.1. Given the habitats present it is likely that the site supports a range of common and widespread invertebrates, but there is no evidence to suggest that any more notable or scarce species would be present.
- 4.9.2. Two notable species were recorded in the locality of the application site. The closest Small Heath *Coenonympha pamphilus* records refer to a location approximately 0.5km west of the site in 2010. The most recent Small Heath record is of up to three individuals approximately 1.5km southwest of the site in 2013. A White-letter Hairstreak *Satyrrium w-album* record from 2011 refers to a location approximately 1.6km south of the site.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Ecological Evaluation

- 5.1.1. The guidelines for ecological evaluation produced by CIEEM 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 Ratcliffe⁴. 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 a site 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 Hertfordshire BAP has been considered as part of this assessment and are referenced where relevant.
- 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.

5.2. Habitat Evaluation

Designated Sites

- 5.2.1. **Statutory Designations.** There are no statutory designated sites of nature conservation interest within or adjacent to the site.

⁴Ratcliffe, 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.

- 5.2.2. The nearest statutory designated site is that of Howe Dell Local Nature Reserve (LNR) which is located approximately 2km to the southeast of the site (see Plan ECO1). The LNR is sufficiently removed and buffered from the site as to be unaffected by the proposed development.
- 5.2.3. Sherrardspark Wood Site of Special Scientific Interest (SSSI) is located approximately 4.0km north of the site at its closest point, beyond agricultural land, residential development, the River Lea and a golf course (see Plan ECO1). Sherrardspark Wood SSSI is designated for its significant area of mature Sessile Oak *Quercus petraea* high forest, a habitat rare in lowland England, and also contains a diverse flora and important invertebrate habitat.
- 5.2.4. The site falls within Impact Risk Zones associated with the Sherrardspark Wood SSSIs such that Natural England consider potential development within this zone has the potential to impact the SSSI in some way. However, the development types considered of potential risk at this distance from the SSSIs are limited to applications for uses such as aviation, pig and poultry farming and industrial combustion. As such it is not considered that the proposed development would have any effect on the locally present statutory designated sites.
- 5.2.5. **Non-statutory Designations.** There are a number of non-statutory designated sites in the vicinity of the site, although none are present either within or adjacent to the boundaries of the site (see Plan ECO1). The nearest non-statutory designation is Furzefield Wood Local Wildlife Site (LWS) located approximately 1.2km north west of the site. The LWS is designated for its ancient and semi-natural broadleaved woodland.
- 5.2.6. Given the scale and type of the proposed development it is considered that all locally present non-statutory designated sites are sufficiently removed from the site as not to be affected either directly or indirectly by the proposed development.

Habitats

- 5.2.7. The majority of the habitats within the site are of negligible ecological interest and their loss to facilitate the proposed development would be of limited significance.
- 5.2.8. It is recommended that new landscape planting associated with the proposed development include a high proportion of native species of known wildlife value.

5.3. Faunal Evaluation

Bats

- 5.3.1. **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 2017

("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:-
 - (i) be likely to impair their ability to survive, to breed, or to rear or nurture their young, or to hibernate or migrate; or
 - (ii) 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).

- 5.3.2. While the legislation is deemed to apply when bats are not in residence, Natural England guidance suggests that certain activities such as reroofing can be completed outside sensitive periods when bats are not in residence provided these do not damage or destroy the roost.
- 5.3.3. 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.
- 5.3.4. 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.
- 5.3.5. Licences can be granted for development purposes by an 'appropriate authority'. In England, the 'appropriate authority' is Natural England (the government's statutory advisors on nature conservation). European Protected Species licences permit activities that would otherwise be considered an offence.
- 5.3.6. European Protected Species licences are available from Natural England in certain circumstances, and permit activities that would otherwise be considered an offence.
- 5.3.7. 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.
- 5.3.8. Licences can usually only be granted if the development is in receipt of full planning permission.

5.3.9. **Site Usage.** None of the trees associated with the site have developed any features that could support roosting bats. The neighbouring buildings offer no opportunities for roosting bats. The grassland and trees may provide some limited opportunities for foraging bats, however, the artificial lighting associated with the adjacent warehouse as well as the road to the north and east may act as a deterrent for any foraging bats. It is not considered that any locally present bat species that could utilise the site for foraging would be reliant on the foraging opportunities to maintain their favourable conservation status.

5.3.10. **Mitigation.** It is recommended that existing vegetation on the boundaries be retained wherever possible, as well as ensuring that the lighting scheme for the proposed development has due regard to the potential presence of foraging and commuting bats.

Hedgehogs

5.3.11. **Legislation.** Hedgehog is a species of principal importance for the conservation of biodiversity under Section 41 (England) of the NERC Act 2006.

5.3.12. The NERC Act 2006 requires the Secretary of State to:

...take such steps as appear... to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any published under this section, or...promote the taking by other of such steps.

5.3.13. **Site Usage.** No evidence of Hedgehogs was recorded during the survey work undertaken. The habitats on site are thought to offer good opportunities for foraging and dispersing Hedgehogs. The tall ruderal vegetation and small wooded belt provide some limited hibernation potential for this species.

5.3.14. **Mitigation and Enhancement.** It is recommended that ground cover be cleared outside the winter hibernation period (October to April inclusively) or checked for this species as part of the clearance works. The landscape scheme should include a range of native species which will continue to offer foraging and dispersal opportunities for this species. Furthermore, it is recommended the boundaries of the site remain permeable for Hedgehogs to allow for continued access and dispersal.

Birds

5.3.15. **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

5.3.16. **Site Usage.** Carrion Crow and Blackbird were noted flying over the site during the October 2018 survey. The trees and tall ruderal vegetation offers limited nesting foraging opportunities for locally present bird species.

- 5.3.17. **Mitigation and Enhancements.** As a precaution to avoid a possible offence, it is recommended that any tree felling or removal of suitable nesting habitat be undertaken outside the breeding season (which is typically March to July inclusive) or checked for nesting birds by an ecologist immediately prior to removal.
- 5.3.18. New planting undertaken as part of the proposed development should include native species. This would offer new foraging and nesting habitats for a variety of birds. The inclusion of bird boxes such as Schwegler 1SP sparrow Terrace and Schwegler 1MR Avianex Wall Nest Box on new buildings within the site would offer new nesting opportunities and provide some ecological gains.

6. SUMMARY AND CONCLUSIONS

- 6.1. Ecology Solutions was commissioned in October 2018 by Macgregor-Smith Limited, on behalf of Arlington, to complete an ecological assessment of Plot 5610, at Hatfield Business Park, Hertfordshire.
- 6.2. The site is proposed for a new industrial building with associated parking and infrastructure.
- 6.3. There are no statutory designated sites of nature conservation interest within or adjacent to the site. The nearest statutory designated site is that of Howe Dell Local Nature Reserve (LNR), located approximately 2km to the southeast of the site. The LNR is sufficiently removed and buffered from the site as to be unaffected by the proposed development.
- 6.4. There are a number of non-statutory designated sites in the vicinity of the site, although none are present either within or adjacent to the boundaries of the site. The nearest non-statutory designation is Furzefield Wood LWS approximately 1.2km north west of the site at its closest point. It is considered that all locally present non-statutory designated sites are sufficiently removed from the site as not to be affected either directly or indirectly by the proposed development.

Habitats

- 6.5. The site was subject to extended Phase 1 habitat surveys in October 2018. The majority of the habitats within the site are of negligible intrinsic ecological interest and their loss to facilitate the proposed development would be of no significance
- 6.6. It is recommended that new landscape planting associated with the proposed development include a high proportion of native species.
- 6.7. **Badgers.** No evidence of Badgers were recorded within or immediately adjacent to the site. The location of the site and the surrounding area is not deemed to offer any reasonable foraging and dispersal opportunities for Badgers. Owing to the lack of suitable habitat around the site, the presence of Badgers is extremely unlikely.
- 6.8. **Bats.** None of the trees associated with the site have developed any features that could support roosting bats. The site is likely to offer some limited opportunities for foraging bats but given the nature of the habitats present it is not likely to support a large assemblage of species, nor be of such importance to support the favourable conservation status of any local population. New planting undertaken as part of the proposed development should include native species, this would offer new foraging habitat.
- 6.9. **Hedgehog.** No evidence of Hedgehogs was recorded during the survey work undertaken. The habitats on site are thought to offer good opportunities for foraging and dispersing hedgehogs. The tall ruderal vegetation and small wooded belt also provide some hibernation potential for this species. It is recommended that ground cover be cleared outside the winter hibernation period (October to April inclusively) or subject to checks during this timeframe. The landscape scheme should include a

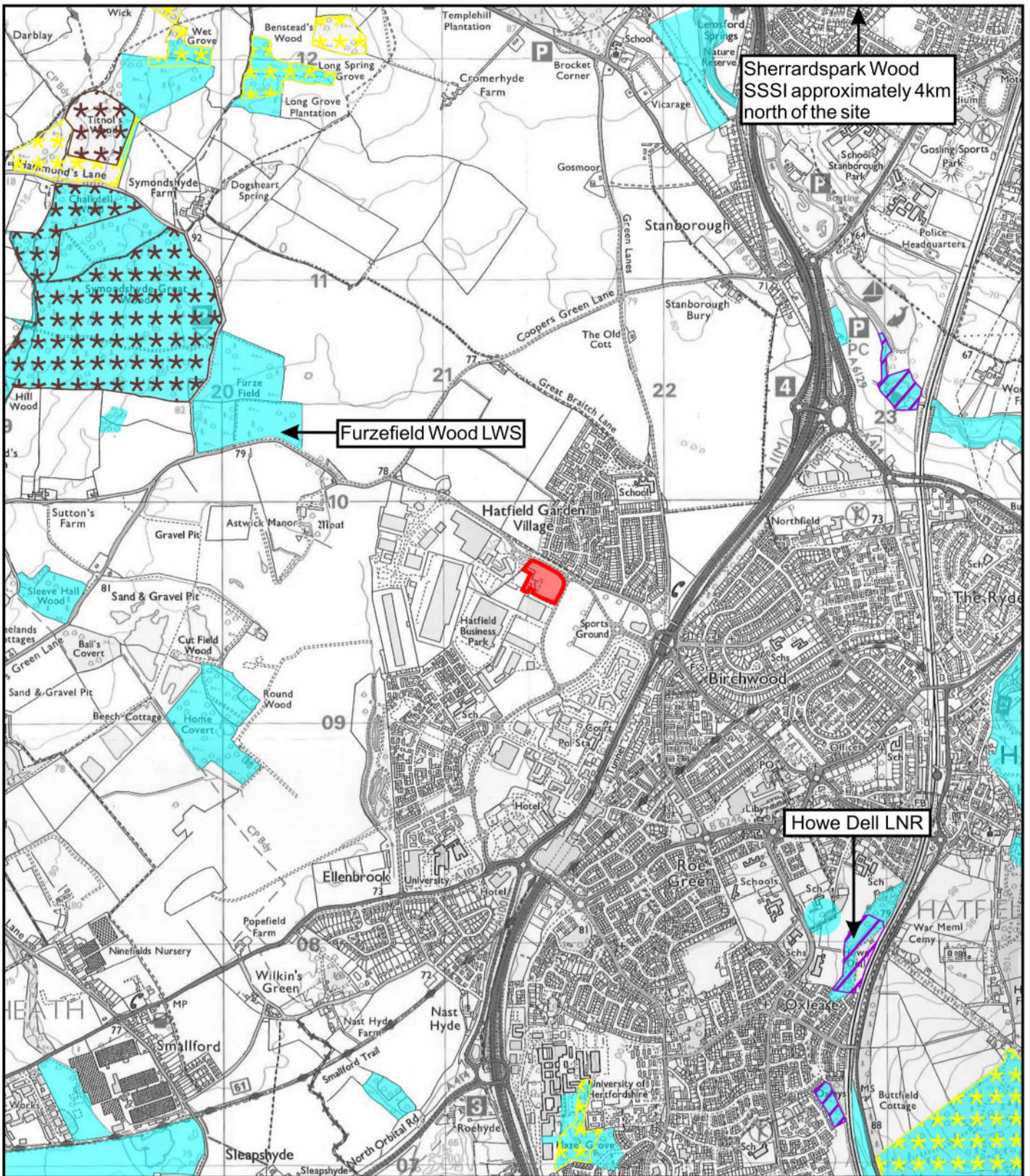
range of native species which will continue to offer foraging and dispersal opportunities for this species. Furthermore, it is recommended the boundaries of the site remain permeable for Hedgehogs to allow for continued access and dispersal.

- 6.10. **Birds.** There is no evidence to suggest that any more notable species would be present. Where it is necessary to remove vegetation, it is recommended that this be undertaken outside of the breeding season (March to July inclusive) or checked for nesting birds by an ecologist immediately prior to removal. New planting undertaken as part of the proposed development should include native species and fruit bearing specimens. This would offer new foraging and nesting habitats for a variety of species. As an enhancement bird boxes could be installed on new buildings within the site to offer new nesting opportunities.
- 6.11. **Reptiles.** No reptiles were observed during the survey work undertaken. The grassland present on site lacks the tussocky nature favoured by common reptile species. The site is also very isolated from further suitable habitat, therefore the presence of common reptiles on site is considered unlikely. It should be noted no reptiles were recorded on a neighbouring plot (Plot 5000) by Ecology Solutions during a reptile survey undertaken in 2017.
- 6.12. **Amphibians.** There are no waterbodies present on site. An ornamental pond is present to the north west of the site. The ornamental nature of the pond, having vertical sides and being within an area of hardstanding isolated from the site it is not considered to offer opportunities for breeding amphibians, particularly Great Crested Newt.
- 6.13. **Invertebrates.** Given the habitats present it is likely that the site supports a range of common and widespread invertebrates, but there is no evidence to suggest that any more notable or scarce species would be present.
- 6.14. Overall, on the basis of the current evidence there are not considered to be any overriding ecological reasons why the site could not be developed. The proposals accord with planning policy with regard to nature conservation at all administrative levels.

PLANS

PLAN ECO1

Site Location and Ecological Designations



Sherrardspark Wood
SSSI approximately 4km
north of the site

Furzefield Wood LWS

Howe Dell LNR

KEY:

-  SITE LOCATION
-  LOCAL NATURE RESERVE (LNR)
-  LOCAL WILDLIFE SITE (LWS)
-  ANCIENT AND SEMI-NATURAL WOODLAND
-  ANCIENT REPLANTED WOODLAND



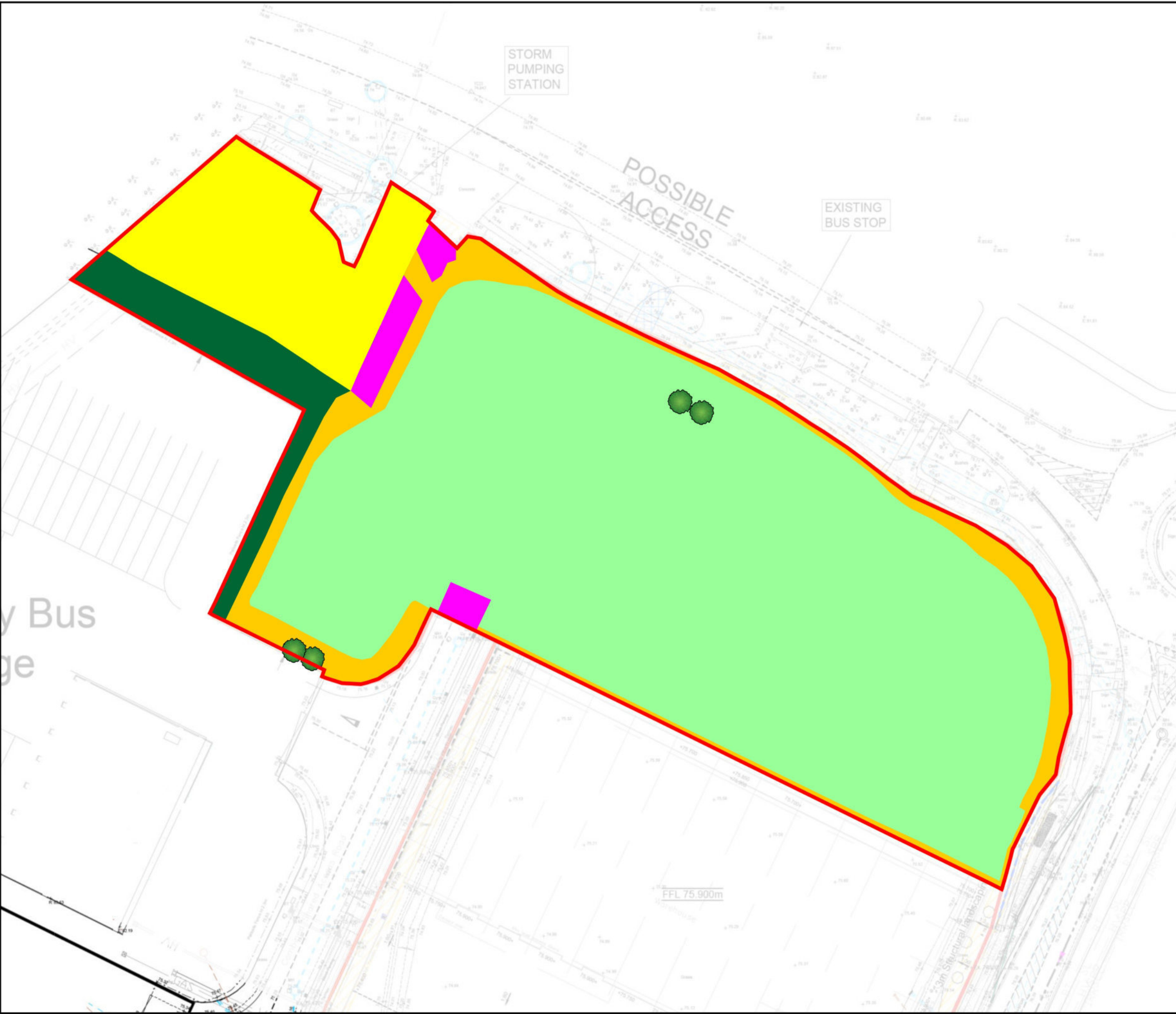
7954: PLOT 5610,
HATFIELD BUSINESS PARK,
HERTFORDSHIRE








PLAN ECO1: SITE LOCATION AND
ECOLOGICAL DESIGNATIONS

PLAN ECO2

Ecological Features

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- KEY:**
-  SITE BOUNDARY
 -  SEMI-IMPROVED GRASSLAND
 -  ROUGH GRASSLAND
 -  TALL RUDERAL VEGETATION
 -  BARE GROUND
 -  TREELINE / WOODED BELT
 -  TREE



7954: PLOT 5610,
HATFIELD BUSINESS PARK,
HERTFORDSHIRE

PLAN ECO2:
ECOLOGICAL FEATURES

PHOTOGRAPHS

PHOTOGRAPH 1: Semi-improved Grassland



PHOTOGRAPH 2: Rough Grassland



PHOTOGRAPH 3: Tall Ruderal Vegetation



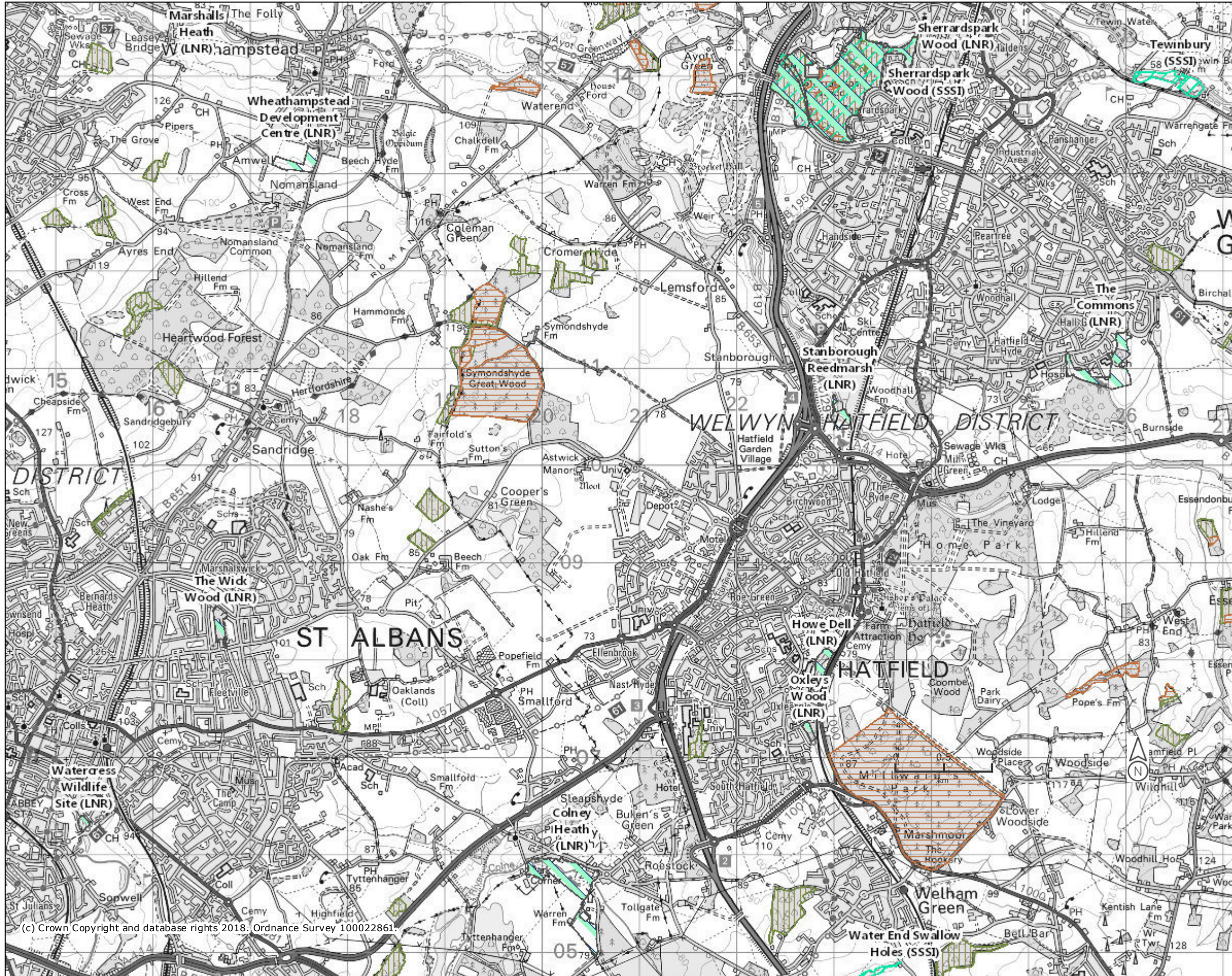
PHOTOGRAPH 4: Bare Ground











APPENDICES

APPENDIX 1

Information downloaded from Multi-Agency
Geographic Information for the Countryside (MAGIC)



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 = 510800
 ymin = 204800
 xmax = 530900
 ymax = 214700



Map produced by MAGIC on 13 November, 2018.
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e c o l o g y s o l u t i o n s f o r p l a n n e r s a n d d e v e l o p e r s