
EXTENDED PHASE 1 HABITAT SURVEY

Littleworth Lane, Lundwood, Barnsley

Harron Homes Ltd



**Applied Ecological Services Ltd
Ramshaw House, Ramshaw
County Durham
DL14 0NG**

**info@aes-ltd.com
01388 835084**

Field Investigations and Data

Where field investigations have been carried out these have been restricted to a level of detail required to achieving the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by AES - Ltd for inaccuracies in the data supplied by any other party.

Copyright

© *Applied Ecological Services Ltd* (AES-LTD 2014). *All rights reserved.*

This document has been provided for your reference by Applied Ecological Services Ltd . No material from this document may be otherwise copied, altered, republished, transmitted or distributed in any way without permission.

Third Party Disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by AES – Ltd at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. No other warranty, expressed or implied is made as to the professional advice included in this report

Report Reference & History: Document 1, Version 1

	Name	Signature	Date
Originators	C.Mercer		June 2014
Authors	C.Mercer		July 2014
Approved By	AES-LTD		July 2014

CONTENTS

1.0	INTRODUCTION	4
2.0	METHODOLOGY	5
3.0	RELEVANT LEGISLATION & POLICY	6
4.0	RESULTS AND DISCUSSION.....	11
5.0	SUMMARY & RECCOMENDATIONS	14
	Appendix 1: Target Notes.....	15
	Appendix 2: Phase 1 habitat plan	18

1.0 INTRODUCTION

- 1.1 Applied Ecological Services Ltd. was commissioned to undertake an Extended Phase 1 Habitat Survey at a Site at Lundwood situated adjacent to Littleworth Lane, Barnsley. The purpose of the survey was to map and identify habitats and species that are present within the site boundary (see Phase 1 Habitat Plan). The aim of the survey was to provide baseline data of the site and highlight areas for further investigation that may provide a constraint to development. This report presents an assessment of these potential ecological constraints to redevelopment based on the results of the survey, along with recommendations for further, more detailed surveys to be undertaken, as appropriate.
- 1.2 The land at Lundwood is the location for a proposed building development, occupying an area of approximately 8 Hectares. The site is located approximately 1.2km to the north east of Barnsley and is located within an urban setting at grid reference SE 370 069 (approximate central point).
- 1.3 The site is a former school / Sports College that has been demolished and stands as cleared land. A primary school (in use) and Littleworth Lane (which runs in a north north west to south east direction) are situated directly to the north of the site, to the east is Littleworth Lane, agricultural land and residential properties whilst to the south lies an area of broadleaved plantation and to the west residential properties.



2.0 METHODOLOGY

DESK STUDY

- 2.1 A preliminary desk study was undertaken to establish the presence of any designated statutory or non-statutory sites of conservation value within a 2km radius of the site. The Multi Agency Geographic Information for the Countryside (Magic) website was consulted for this purpose.

HABITATS / FLORA

- 2.2 The site was surveyed on the 26th June 2014 by Charlotte Mercer using the standard Extended Phase 1 Habitat Survey methodology (JNCC, 2010)¹ as recommended by Natural England to identify specific habitats of ecological interest. Whilst the species list should not be regarded as exhaustive, sufficient information was gained during the survey to enable classification and assessment of major habitat types.

FAUNA

- 2.3 During the survey, observations were made for characteristic signs and / or suitable habitat that would indicate / support protected / notable species.

SURVEY LIMITATIONS

- 2.4 The survey reported here was undertaken at an optimal time of year (June), for undertaking Phase 1 Habitat Surveys, therefore, there were no limitations to the survey.

¹ JNCC, (2010), Handbook for Phase 1 habitat survey - a technique for environmental audit

3.0 RELEVANT LEGISLATION & POLICY²

LEGISLATION

HABITAT REGULATIONS

- 3.1 The Conservation of Habitats and Species Regulations 2010 transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English law, making it an offence to deliberately capture, kill or disturb³ wild animals listed under Schedule 2) of the Regulations (such as all bat species and great crested newts). It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

WILDLIFE & COUNTRYSIDE ACT

- 3.2 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CROW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention, making it an offence to:

- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection; and
- Pick or uproot any wild plant listed under Schedule 8 of the Act. Sites of Special Scientific Interest (SSSI) are designated under this Act.

POLICY

NATIONAL PLANNING POLICY FRAMEWORK

- 3.3 The Government published the National Planning Policy Framework (NPPF) on 27th March 2012. This sets out new guidance for local authorities, focusing on helping to produce planning policies that are clear and easier to understand. The NPPF is effective immediately; however the local plans are still valid, for the time being, even if they have been produced prior to the NPPF. There is emphasis on the need for economic growth

² Please note that this legal information is a summary and intended for general guidance only. The original legal documents should be consulted for definitive information.

³ Disturbance, as defined by the Conservation of Habitats and Species Regulations 2010, includes in particular any action which impairs the ability of animals to survive, breed, rear their young, hibernate or migrate (where relevant); or which affects significantly the local distribution or abundance of the species.

through designing planning policies which are in favour of development but this will not be achieved in isolation from social and environmental development. Section 11 sets out the requirements for conserving and enhancing the natural environment. Land previously used for development (brownfield sites) should be favoured as long as they are not considered to be of high environmental value. Of particular note is paragraph 152 of the Plan-Making Section which states, “Local planning authorities should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gains across all three. Significant adverse impacts on any of these dimensions should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where adverse impacts are unavoidable, measures to mitigate the impact should be considered. Where adequate mitigation measures are not possible, compensatory measures may be appropriate”. The Framework is guidance for local planning authorities on the content of their Local Plans, but is also a material consideration in determining planning applications. The NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. However, the government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System, which accompanied PPS9 remains valid.

BIODIVERSITY ACTION PLANS

- 3.4 The UK Biodiversity Action Plan (UKBAP) (Anon, 1995) was organised to fulfill the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. A list of national priority species and habitats has been produced with all listed species/habitats having specific action plans defining the measures required to ensure their conservation. Regional and local BAPs have also been organised to develop plans for species/habitats of nature conservation importance at regional and local levels.

LOCAL STRUCTURE PLANS

- 3.5 County, District and Local Councils have Structure Plans and other policy documents that include targets and policies which aim to maintain and enhance biodiversity. These are used by Planning Authorities to inform planning decisions

NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT (2006)

- 3.6 Public authorities have a duty to conserve biodiversity under the Natural Environment and Rural Communities (NERC) Act, which came into force in 2006. This states that ‘any public body or statutory undertaker in England and Wales must have regard to the purpose of conservation of biological diversity in the exercise of their function and that decisions of public bodies work with the grain of nature and not against it’ (Part 3, Paragraph 60). The Act also includes a range of measures to strengthen the protection of wildlife and habitats.

WILDLIFE LEGISLATION

- 3.7 In addition to the above, a range of legislation is in place to ensure that habitats and species of conservation importance are protected from harm, either directly or indirectly. A summary of this legislation is given in Table 1.

Table 1: Overview of Key Legislation

Legislation	Relevance
The Conservation of Habitats and Species Regulations 2010	This transposes the EC Habitats Directive 1992 (<i>Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna</i>) and the EC Birds Directive 1979 (<i>Council Directive 79/409/EEC on the protection of wild birds</i>) into UK law. Annexes I and II of the Habitats Directive list (respectively) habitats and species for which member states are required to establish and monitor SACs. The EC Birds Directive provides a similar network of sites (SPAs) for all rare or vulnerable species listed in Annex I and all regularly occurring migratory species, with particular focus on wetlands of international importance. Together with SACs, SPAs form a network of pan-European protected areas known as 'Natura 2000' sites. The Habitats Regulations also make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4.
The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979)	The Bern Convention aims to ensure conservation and protection of all wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to afford special protection to the most vulnerable or threatened species (including migratory species).
The Wildlife and Countryside Act (WCA) 1981 (as amended)	The WCA is the primary UK mechanism for statutory site designation (Sites of Special Scientific Interest, SSSIs) and the protection of individual species listed under Schedules 1, 2, 5 and 8 of the Act, each subject to varying levels of protection
The Countryside and Rights of Way Act 2000	This legislation strengthens the provision of the 1981 WCA (as amended), both in respect of statutory sites such as SSSIs and protected species. It also places a statutory obligation on Local Authorities and other public bodies to further conservation of biodiversity in the exercise of their functions, thus providing a statutory basis to the Biodiversity Action Plan (BAP) process, which began in 1994. Section 74 of the Act lists the habitat types and species of principal importance in England.
Hedgerow Regulations 1997	The Hedgerow Regulations 1997 are intended to protect important countryside hedges from destruction or damage in England and Wales.
Natural Environment and Rural Communities Act 2006	The 'NERC' Act makes provision in respect of biodiversity, pesticides harmful to wildlife, protection of birds and invasive non-native species. Section 40 of the act also introduced a new duty on public bodies to have regard to the purpose of conserving biodiversity in the exercise of their functions.

3.8 Due to its location the site may have the potential to support or provide habitat for a number of those species protected by the various pieces of legislation summarised in Table 1. A summary of the key legislation is given in Table 2.

Table 2: Key Legislation for protected species

Species	Key legal protection
Bats (all species)	All European species of bat are listed on Annex IV of the EC Habitats Directive as being in need of “strict protection”. This is implemented in Britain under The Conservation of Habitats and Species Regulations 2010. All British bats are included on Schedule 5 of the WCA (1981) and the whole of Section 9 of The Act applies to European bat species. In summary, the above legislation collectively prohibits the following: • Deliberately or recklessly capturing, injuring, taking or killing of a bat; • Deliberately or recklessly harassing a bat; • Intentionally or recklessly disturbing of a bat in its place of rest (roost), or which is used for protection or rearing young; • Deliberately or recklessly damaging, destroying or obstructing access to any resting place or breeding area used by bats; • Deliberately or recklessly disturbing a bat in any way which is likely to significantly affect the local populations of the species, either through affecting their distribution or abundance, or affect any individuals ability to survive, reproduce or rear young; • Possession or advertisement/sale/exchange of a bat (dead or alive) or any part of a bat. In England, licenses are issued by Natural England for any actions that may compromise the protection of a European protected species, including bats, under the Habitats Regulations 2010. This includes all developments, regardless of whether or not they require planning permission. Bats are also protected by the Wild Mammals (Protection) Act 1996 and selected species are listed on the UK Biodiversity Action Plan (BAP) and the Local Biodiversity Action Plan (LBAP)
Great crested newt	Great crested newts are protected under European and British law, having the same level of protection as bats (see above). Licenses are issued by Natural England for any actions that may compromise the protection of this species, under the Habitat Regulations 2010. This includes all developments, regardless of whether or not they require planning permission. The species is also listed on the UK and Local BAPs.
Otter	Otter are again protected under European and British law and receive the same level of protection as bats (see above.) The species is listed under Annex II and IV of the Habitats Directive, which is implemented in Britain under The Conservation of Habitats and Species Regulations 2010. Otter are also protected under Schedules 5 and 6 of the WCA 1981, The Wild Mammals (Protection) Act 1996 and are listed as a priority species in Appendix II of the Bern Convention. The species is also listed on the UK and Local BAPs.

Table 2: Continued

Species	Key legal protection
Red Squirrel	The red squirrel is listed on Appendix III of the Bern Convention and is both a UK and North East Biodiversity Action Plan Species. The red squirrel is protected by Schedules 5 and 6 of the Wildlife and Countryside Act. The red squirrel and its resting places are both fully protected in the UK. It is an offence to: • Deliberately, capture, injure, kill or damage a red squirrel • Destroy or obstruct a red squirrel breeding or resting place. • Disturb a red squirrel in their breeding or resting places.
Birds	The majority of bird species, with the exception of some species listed on Schedule 2, are protected under the WCA 1981 (as amended). This makes it an offence to intentionally or recklessly: • Kill, injure or take any wild bird; • Take, damage or destroy any nest which is in use or being built; and • Take, damage or destroy the eggs of any such bird. Additional protection against disturbance whilst at the nest is also afforded to any bird species, whether an adult bird or their dependent young, which is listed on Schedule 1 of the Act. Certain species are also listed as being of priority conservation importance on the UK and Local BAPs
Badger	Badger are protected under the Protection of Badgers Act 1992, which makes it an offence to: • Knowingly kill, capture, injure or disturb any individual; • Intentionally damage or destroy a badger sett, or any part thereof; • Obstruct access to an area which is used for breeding, resting or shelter; and • Disturb a badger while it is using any place used for breeding, resting or shelter. The species is also protected by the Wild Mammals (Protection) Act 1996.

4.0 RESULTS AND DISCUSSION

DESK STUDY

DESIGNATED SITES

- 4.1 There is one designated site within a 2km radius of the site boundary, Dearne Valley Park is a Local Nature Reserve (LNR) designated for its acidic oak woodland and mosaic of wetland habitat. It is located approximately 225m from the site boundary (to its nearest boundary) but is separated from the site by the A633 Rotherham Road and housing. Development of the site would not impact upon the LNR.

FIELD RESULTS AND DISCUSSION - HABITATS/FLORA

GENERAL SITE DESCRIPTION

- 4.2 The site comprised of semi-improved neutral grassland, ephemeral/short perennial, tall ruderal vegetation, dense continuous scrub, introduced shrub, individual trees and bare ground. The site was completely enclosed with palisade fencing. Habitats of interest directly connected to the boundary included broadleaved plantation to the south. Travellers were occupying the site at the time of survey, their horses were roaming free and grazing the site.
- 4.3 The locations of the habitats described in the following sections can be found on the Phase I Habitat Plan. Target notes (TN) are provided in **Appendix 1**.

NEUTRAL SEMI-IMPROVED GRASSLAND

- 4.4 Located to the south and west of the site this area of land had been playing field in the past (evident from the aerial photograph) (TN 5). Where the land has been left unmanaged, grasses and herbs indicative of neutral grassland have colonised. Species recorded included perennial rye grass *Lolium perenne*, Cocksfoot *Dactylis glomerata* Yorkshire fog *Holcus lanatus* crested dogs tail *Cynosaurus cristatus*, common bent *Agrostis capillaris*, white clover *Trifolium repens*, ribwort plantain *Plantago lanceolata* daisy *Bellis perennis*, red fescue *Festuca rubra*, creeping buttercup *Ranunculus repens*, meadow buttercup *Ranunculus acris*, black knapweed *Centaurea nigra*, common mouse-ear *Cerastium fontanum*, and birds foot trefoil *Lotus corniculatus*,

EPHERMERAL / SHORT PERENNIAL

- 4.5 Located on ground from where the old college buildings had been demolished in the east of the site (TN 2), species recorded included perennial rye grass, white clover, common

black medic *Medicago lupulina*, dandelion *Taraxacum officinale*, ox-eye daisy, *Leucanthemum vulgare*, broad leaved dock, cocksfoot, spear thistle, *Cirsium vulgare*, Teasel *Dipsacus sylvestris*, and common melilot *Melilotus officinalis*.

TALL RUDERAL VEGETATION

- 4.6 Frequently observed large stands of broadleaved dock *Rumex obtusifolius*, nettle *Urtica dioica*, creeping thistle *Cirsium arvense*, rosebay willowherb *Chamerion angustifolium* and hogweed *Heracleum sphondylium* (TN 6).

DENSE CONTINUOUS SCRUB

- 4.7 Located along the east, south (TN 4) and west boundaries of the site, species recorded included hawthorn *Crateagus monogyna*, dog rose, *Rosa canina*, Guelder rose *Viburnum opulus*, alder *Alnus glutinosa*, Rowan *Sorbus aucuparia*, bird cherry *Prunus padus* and silver birch *Betula pendula*.

INTRODUCED SHRUB

- 4.8 Located around the former entrance to the school on the east boundary adjacent to Little worth Lane. Species recorded included cotoneaster *Cotoneaster spp*, rose of Sharon *Hypericum spp* and ivy *Hedera helix*

SCATTERED TREES

- 4.9 Several ornamental trees were recorded on site, remaining from the college site, mostly silver birch but rowan copper beech *Fagus sylvatica Purpurea* and whitebeam *Sorbus aria* were also recorded. The trees were relatively young.

BARE GROUND

- 4.10 Existed where there were once access points into the school (TN 1).

BUILDING

- 4.11 A brick built building (engineering bricks) with felt roof – probably an old boiler store. Approximately 4 x 2.5m in good condition (TN 3).

FIELD RESULTS AND DISCUSSION – FAUNA

FIELD RESULTS – FAUNA

BATS

- 4.14 A brick built boiler house that was situated within the site was investigated for its potential use by bats (TN 3). The building was in good condition, it had a felt roof which looked to be good although a couple of sections had started to lift from the front and crack. There was no evidence that bats were using this building to roost – there were no droppings, urine stains etc. It is unlikely that bats would use this building as there were no linear features leading towards the building – it was located in the open. Individual trees located within the site were checked for signs of bats and results were negative. There were no cracks, rot holes, hollows or cavities etc. or staining / scratch marks observed. The site has good potential to provide foraging habitat for bats around the periphery of the site, however the site itself was unsuitable for bats to forage across as it lacked any boundary features across the site for bats to follow.

BADGER

- 4.15 No badger setts or other field signs characteristic of badger were recorded on the site during the time of survey.

NESTING BIRDS

- 4.17 The site offers a suitable nesting habitat to arboreal nesting bird species on its peripheral habitat. However, No birds' nests were recorded on site. Numerous species of birds were seen at the time of survey within the site boundary, including: magpie *Pica pica*, wood pigeon *Columba palumbus*, blackbird *Turdus merula* and a Kestrel *Falco tinnunculus*. No ground nesting birds were observed.

5.0 SUMMARY & RECCOMENDATIONS

- 5.1 The Littleworth lane, Lundwood site supports a range of habitat types and low potential for protected species to be present.
- 5.2 The brick built building should be dismantled with care during the summer months (May – October). The risk of bats being present is very low, however the felt on the flat roof should be removed carefully by hand. If bat(s) are observed the felt should be laid back in place and AES-LTD contacted immediately (Charlotte Mercer 01388 835084 / 07778840565).
- 5.2 Bats may forage along the peripheral edges bordering the site but foraging within the site would be extremely limited due to the lack of features within the site boundary. Consideration will be given to low level lighting of the development as well as consideration to minimise light pollution to reduce impact on retained habitat.
- Use low pressure sodium lamps or high pressure sodium instead of mercury or metal halide where glass glazing is preferred due to its UV filtration properties;
 - Lighting should be directed to where it is needed and light spillage avoided. This may be achieved through design and using accessories such as hoods, cowls, louvres and shields;
 - The lighting should be as low as guidelines permit, if lighting is not needed don't light;
 - Many security lights may be fitted with movement sensors which if well installed and aimed will reduce the amount of time a light is on each night; and
 - The light should be aimed to light only the immediate area required by using as sharp a downward angle as possible.
- 5.3 Bat bricks should be considered for the build.
- 5.6 It is recommended that any vegetation clearance be undertaken outside of the bird breeding season. This includes all ground level vegetation as well as woodland, scrub, hedgerows and standard trees. The bird breeding season can extend from March until August (inclusive), weather and species depending, but generally birds have completed breeding by the end of July. Where vegetation clearance cannot be undertaken outside the bird breeding season, all such areas would be subject to a thorough walkover survey by a suitably qualified ecologist prior to any clearance or disturbance work being undertaken.

APPENDIX 1: TARGET NOTES

TN No.	Note	Photo
1.	Old access into school / college	
2.	Ephemeral / short perennial species colonised on site of demolished buildings	

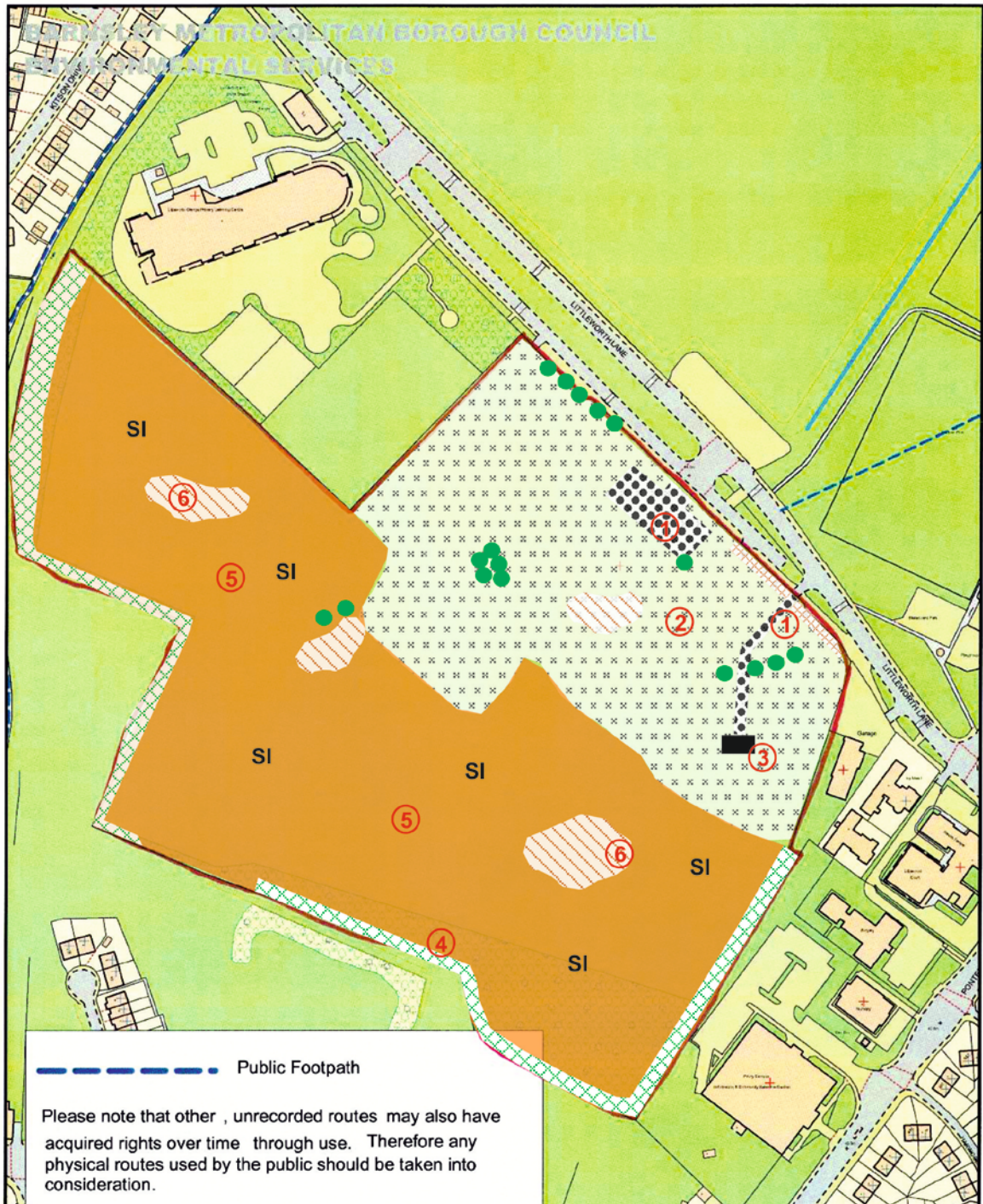
3.	Brick built boiler house			
4.	Dense continuous scrub at southern boundary of Site			

5.	Former playing fields, which through lack of management have been colonised by species indicative of semi-improved neutral grassland			
6.	Large stands of tall ruderal vegetation			

Layout width 175mm

Barnsley MBC Licence Number 100022264

Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationary Office © Crown copyright.
Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.



KEY

- | | | | |
|---|---------------------------------|---|------------------|
|  | Semi-improved neutral grassland |  | Individual trees |
|  | Ephemeral / short perennial |  | Introduced shrub |
|  | Bare ground |  | Target note |
|  | Tall ruderal | | |
|  | Dense continuous scrub | | |

Littleworth Lane, Lundwood Phase 1 Habitat Plan



Applied Ecological Services Ltd
Ramshaw House, Ramshaw
County Durham, DL14 0NG
Tel: 01388 835084
email: info@aes-ltd.com