

Harrow Avenue, Rochdale, Preliminary Ecological Report

Revisions

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Summary

Ecological Constraints	Reason	Potential Impact	Recommendations
Invasive plant species	Confirmed presence of Japanese knotweed and Himalayan balsam encroaching onto site.	Schedule 9 invasive plant species.	Follow recommendations in section 5.
Bats	Potential of bats using on site for foraging and commuting.	Direct adverse impact on species.	Follow recommendations in section 5.

1. Introduction

EPS Ltd has been commissioned by Cube Architecture and Design to undertake an ecological assessment of the land adjacent to the rear of Harrow Avenue, Rochdale, OL11 4DS.

The report details the findings of an ecological assessment undertaken to determine as far as reasonably possible the potential impacts of the proposed works upon the environment, any ecological features, protected species and, or habitats of conservation importance in or close to the site.

Scope of Works

To construct three new dwellings on the land adjacent to Harrow Avenue in Rochdale.

Site Location

The area of works is located on the land adjacent to the rear of Harrow Avenue, Rochdale, OL11 4DS. The site is situated to the north of Eton Close and south of the B6222 Bury Road. The site is bounded by residential properties. The central grid reference for the site is; **SD 87531 12865** and is shown in Figure 1.

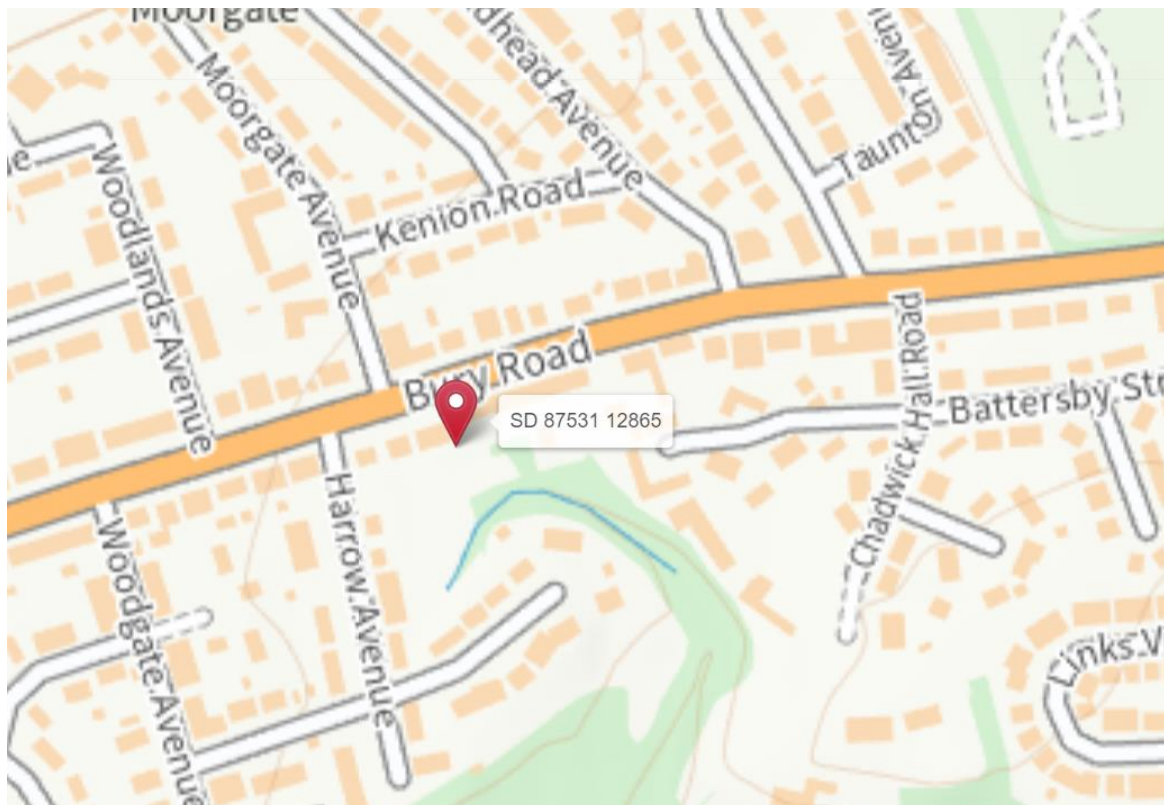


Figure 1: Site Location

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Study Area

The ecological 'study area' includes the site location and up to a 5km radius from the site (various search distances apply in relation to protected habitats and species data).

For protected species, the ecological study area is defined as the extent of the works (Figure 1) plus a 2km buffer, herein referred to as the '2km study area'. The 2km study area has been used for the desk-based assessment to gather existing ecological records for the species with the area. For nationally designated sites, the study area is also defined as the site plus 2km buffer. However, this buffer has been extended to 5km to capture any European designated sites.

Survey Objectives

The objective of this report is to identify and present potential ecological constraints, mitigation, licensing and enhancement requirements relating to the works by undertaking the following tasks:

- Identification of any known records of protected, notable or scarce species on site or in the surrounding habitats up to 2km radius;
- Identification of any designated nature conservation sites within a 2km radius that could be affected by the works;
- Recording Phase 1 habitat types present on and immediately surrounding the site, using the methodology defined in 'Handbook for Phase 1 Habitat Survey' Joint Nature Conservation Committee (JNCC, 2010);
- Carry out an appraisal of the potential of the habitats at the site to support protected or notable species of fauna and flora;
- Suggesting mitigation measures to prevent or reduce any negative impacts to the ecological receptors identified (if necessary); and
- Advise on compliance with relevant UK and EU wildlife legislation.

2. Wildlife Legislation

Legislation

Relevant wildlife legislation is summarised in Appendix A. The legislation relevant to the protected and notable species present, or potentially present on the site is listed below:

- The Conservation of Habitats and Species Regulations 2019 (as amended) (EU Exit) which transposed the Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive);
- The Birds Directive 2009;
- Natural Environment and Rural Communities Act (NERC) 2006;
- The Countryside and Rights of Way (CRoW) Act 2000;
- Protection of Badgers Act 1992, and
- The Wildlife and Countryside Act (WCA) 1981 (as amended).

The above legislation has been considered when planning and undertaking this ecological assessment using the methods described in Section 3.

3. Methodology

Desk Study

A desk study was carried out to identify nature conservation designations, and records of protected and/or notable habitats and species potentially relevant to the site.

The desk study was carried out using the data sources detailed in Table 1.

Table 1 Desk Study Data Sources	
Data Source	Data Obtained
Multi-Agency Geographic Information for the Countryside (MAGIC) website	Statutory designations within 2 km Ponds and watercourses.
National Biodiversity Network (NBN) Atlas	Protected/notable species within 2 km of the site.
Online aerial photography	Information on habitats and habitat connections (based on aerial photography) relevant to interpretation of planning policy and assessment of potential protected and notable species constraints.
Ordnance Survey (OS) Mapping	Ponds and watercourses

Phase 1 Habitat Survey

Habitats on site were recorded in accordance with standard survey methodology (JNCC, 2010). The standard Phase 1 habitat survey method was extended to record information on protected, notable and invasive species. The information gained from the extended Phase 1 survey has been used to determine the likely ecological importance of the site (in terms of habitats present and the potential of these habitats to support protected and/or notable species).

The survey was undertaken on 3rd July 2023 by Nick Carter MCIEEM who recorded all habitat types present within the vicinity of the works, along with any important ecological features observed.

Typical and notable plant species were recorded for different habitat types and reflect the conditions at the time of survey. The presence on any invasive non-native plant species was also recorded during the survey.

Limitations

Good survey coverage was achieved during the survey and there were no significant limitations to the preliminary ecological assessment.

4. Results

Desk Study

This section provides the results of the desk study relevant to the works.

Statutory Sites Designated for Nature Conservation

There are no statutory sites within 2km of site.

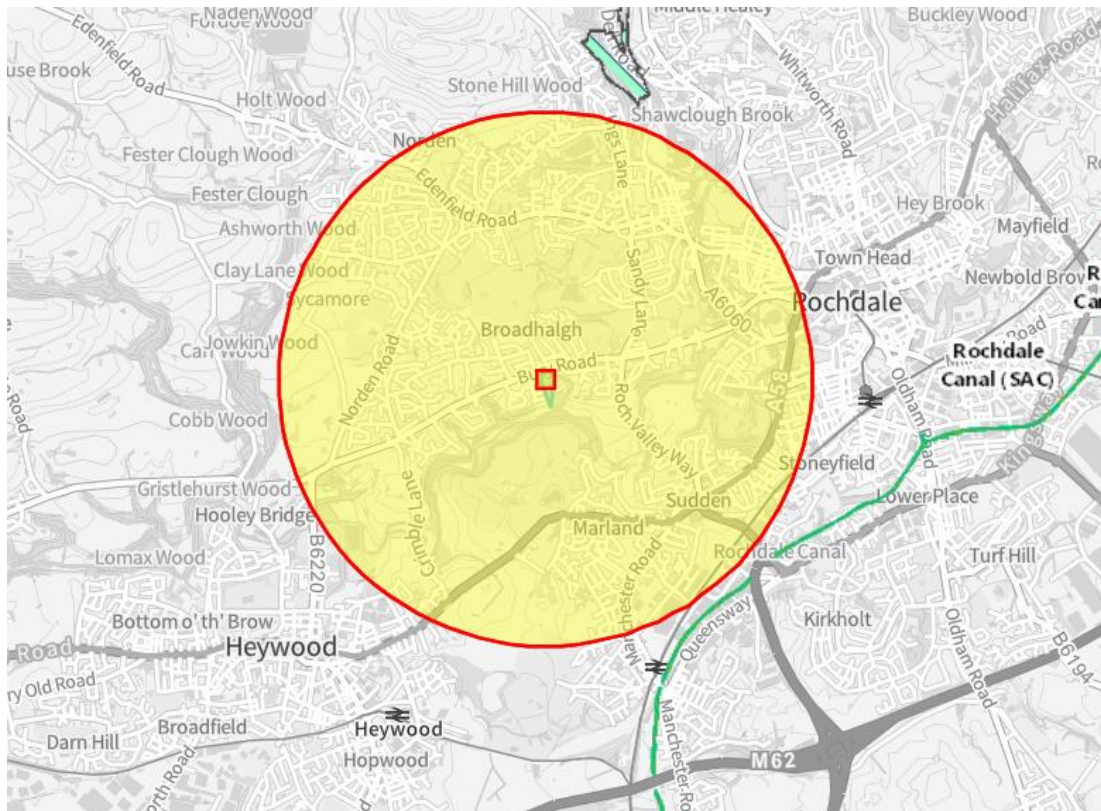


Figure 2: Designated sites within 2 km

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The nearest statutory designated site is the Rochdale Canal Site of Specific Scientific Interest (SSSI).

Site Name/ Designation	Description from Citation	Approx. Distance and Direction from Site
Rochdale Canal SSSI	The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species floating waterplantain <i>Luronium natans</i> .	2.1.km south-east

The proposed development will not have an impact upon the listed statutory designated site.

Non-Statutory Designated Sites

There are no non-statutory sites within 2km of site

Habitats

The individual habitat types recorded within and immediately adjacent to the site is discussed in further detail below and a selection of site photographs can be found in Appendix B.

Site Assessment

Hardstanding/Bare ground

The interior of the site consists of levelled hardstanding composed of hardcore. The south of the site is bare earth with invasive plant species encroaching onto the site from the dry ditch to the boundary. The Schedule 9 invasive plant species present include; Japanese knotweed *Reynoutria japonica* and himalayan balsam *Impatiens glandulifer*. There is also Rhododendron *Rhododendron* and laurel *Laurus nobilis* to the southern boundary.

Protected Species

Breeding Birds

Desk Study

The NBN Atlas database returned records for range of passerines within 2km that are considered relevant to this site.

Site Assessment

The unvegetated nature of the site offers no opportunities for nesting birds. It is understood that the boundary trees will be retained.

Further mitigation in relation to nesting birds and is detailed in section 5.

Reptiles

Desk Study

The NBN Atlas database contains no records for reptiles within 2km of the site.

Site Assessment

The habitat in the immediate vicinity of the works is considered suboptimal for reptiles and as such reptile will not be considered further within the report.

Bats

Desk Study

There are 47 records for bats within 2km of the site. These include common pipistrelle *Pipistrellus pipistrellus*, pipistrelle *Pipistrellus pipistrellus*, daubenton's bat *Myotis daubentonni* and whiskered/brant's bat *Myotis mystacinus/ brandtii*.

Site Assessment

There are a few trees on site may have low potential for bats and contain roosting features such as knot holes and large cracks.

The ditch to the southern boundary provides a linear habitat which is likely to be used for commuting and foraging bats.

Further mitigation in relation to bats is detailed in section 5.

Badgers

Desk Study

There are 34 records for eurasian badger *Meles Meles* within 2km of the site.

Site Assessment

There were no signs of badger within the proposed works area.

Further mitigation in relation to badger is detailed in section 5.

Invasive species

Site assessment

Japanese knotweed *Reynoutria japonica* and Himalayan balsam *Impatiens glandulifera* are present on site.

Further mitigation in Schedule 9 invasive plant species is detailed in section 5.

5. Conclusion/Recommendations

Summary

Japanese knotweed and Himalayan balsam are listed under Schedule 9 of the Wildlife and Countryside Act 1981. As such, it is an offence to plant or otherwise cause this species to grow in the wild. Without mitigation, site works could result in the disturbance and dispersal of these species on and off site. This could result in a breach of legislation. The recognition and early (appropriate) management of invasive species will reduce the risk of excessive cost, potential prosecution and prevent physical damage to buildings and hard surfaces.

Designated Sites

There are no non-statutory sites within 2km of site.

Habitats

The habitat on site is common and of value to nature at a local level only.

Birds

Any vegetation removal should be undertaken outside of the typical breeding bird season (March-August inclusive) to avoid disturbance to or direct harm to breeding birds. If any vegetation clearance is necessary during this season, the area will need to be inspected immediately prior to works by the ECoW to check for nesting birds. If an active nest is found, an appropriate cordon and period of monitoring will be adopted by the ECoW to ensure that the nest is not damaged (or disturbed if a Schedule 1 species) by the works. The cordon will be in place until the ECoW deems the nest to be no longer active.

Although not directly impacted by the proposed works, there is potential for cetti's warbler to be using the reed bed upstream of the works, a thorough check of the reed bed should be undertaken prior to the works starting and if lighting is required beyond the stated work times, the lighting should be cowed and directed away from scrub and the reed beds.

Bats

If night work is required, then task-specific lighting should be used on the working area only to minimise light spillage on surrounding habitats.

Invasive Species

Japanese knotweed

Japanese knotweed, a rhizomatous perennial was introduced from Asia to Europe in the mid-nineteenth century as an ornamental and fodder plant. It is an impressive species which grows to a height of 2-3 metres, with bamboo like stems, arching branches and clusters of creamy white flowers appearing late in the season. The orange to brown coloured, woody, dead stems persist erect throughout the winter and new shoots, produced from the extensive rhizome system, grow up amongst these the following spring to form dense thickets. The dead stems and leaf litter decompose very slowly and form a deep organic layer, which prevents native seeds from germinating. Once present at a site, Japanese knotweed increases in area very rapidly and soon forms monoculture stands.

Reproduction is primarily by vegetative regeneration of rhizomes and fresh stems. The rhizome system may extend from a parent plant up to 7 m laterally and to a depth of 4 m. Very small fragments of rhizome (as little as 0.7 g) give rise to new plants. Fresh stems produce shoots and roots when buried in a soil medium or floated in water. Stems in water may produce viable plants within 6 days.

Japanese knotweed thrives on disturbance and has been spread by both natural means and by human activity. In riparian areas, high water flows disperse fragments of the plant downstream where new colonies form. In the

past, fly tipping and transportation of soil containing rhizome fragments have been a major cause of spread, particularly in the urban environment.

The Environment Agency has detailed the current guidelines developed by the Environment Agency for control of Japanese knotweed. The Environment Agency guidelines 'Managing Japanese Knotweed on Development Sites' (Environment Agency, 2013 as amended) detail several options for the control of Japanese knotweed.

The recognition and early (appropriate) management of Japanese knotweed will reduce the risk of excessive cost, potential prosecution and prevent physical damage to buildings and hard surfaces.

Himalayan balsam

Himalayan Balsam is an annual plant and therefore the key objective for control of Himalayan balsam is to exhaust the plant's seed bank. This is done by repeatedly removing adults before they set seed. Seeds can spread up to 7 m from the plant. Therefore a 7 m radius around Himalayan balsam plants should be marked out to indicate the area of contamination. Seed bank longevity is about two years and control programmes should be undertaken for the whole of this period followed by a 3-year monitoring programme.

Control of Himalayan balsam should ideally happen when the plants have grown to a good height but have not yet flowered. This is usually around June. However, it may be easier to leave them until the end of June, start of July, when the plants have flowered, as they will be easier to spot, but before they have formed seed pods. Flowering may vary from season to season, but seeds generally mature / are released in August/September. Some balsam plants have been seen flowering in October in cleared areas, although it is uncertain whether these went on to produce seeds.

If the balsam is cleared before June/July, it is likely new balsam plants will germinate in the cleared areas and can grow and flower rapidly in the warmer summer soil. It is likely to have to clear it a further two times or even three times before winter.

The Environment Agency has detailed the current guidelines developed for control of Himalayan balsam. The Environment Agency guidelines 'Guide for the control of invasive weeds in or near water' (Environment Agency, 2007) detail several options for the control of Himalayan balsam within a development site.

The recognition and early (appropriate) management of Himalayan balsam can reduce the risk of excessive cost.

Biosecurity Measures

General

When within invasive plant areas the following procedures should be adopted:

- Only essential vehicles and plant machinery should be present in areas polluted with invasive plants. Care should be taken to ensure that polluted material is not dropped or transferred to other areas of the site.
- On leaving areas of the site known to contain invasive plants, any vehicle or machinery that has been used should be thoroughly cleaned within a designated area. All hand tools and footwear should be cleaned off in a similar manner.
- Even with great care, a certain amount of regrowth in the spring would be expected and any should be treated with herbicide.

No contaminated materials are to be moved across site to receptor areas unless on designated haul routes which are to be made from hardcore / crush. The specific locations, proposed design detail and specifications can be determined by the on-site contractor.

References

Collins J. (2016) Bat Survey for Professional Ecologists: Good Practice Guidelines 3rd Edition. Bat Conservation Trust.

Environment Agency (2012) Freshwater macro-invertebrate sampling in rivers. Operational instructions 018_08 d (2 October 2012)

Joint Nature Conservation Committee (2010) Handbook for Phase 1 Habitat Survey: A technique for environmental audit. JNCC.

Multi-Agency Geographic Information for the Countryside (MAGIC) <https://magic.defra.gov.uk/>

National Biodiversity Network Gateway (2000) www.nbn.co.uk

Harris, S., Cresswell, P. and Jefferies, D. (1989) Surveying Badgers. The Mammal Society: London

Natural England (2011) Badgers and Development - A Guide to Best Practice and Licensing.

Appendix A Wildlife Legislation

Wildlife and Countryside Act (WCA) 1981 (as amended)

Part 1 of the WCA affords general protection to all species of wild bird and specific protection to flora and fauna listed in Schedules 1 (birds protected by special penalties), 5 (other animals), and 8 (flora, fungi and lichens). It is an offence (subject to exceptions) to:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built;
- take or destroy an egg of any wild bird;
- disturb any wild bird listed on Schedule 1 of the WCA while nesting, or disturb the dependent young of such a bird (e.g. quail);
- kill, injure or take any wild animal listed on Schedule 5 (e.g. bats, great crested newt, common lizard);
- damage, destroy or obstruct places used for shelter or protection by wild animals listed on Schedule 5 and covered by Part 4A of the WCA (e.g. bats and great crested newt);
- intentionally disturb wild animals listed in Schedule 5, and covered by Part 4A of the WCA, that are occupying places of shelter and protection (e.g. bats and great crested newt); and
- pick, uproot or destroy any plant, fungi or lichen listed in Schedule 8.

In certain circumstances, licences can be granted to permit some actions prohibited under the WCA.

Schedule 9 provides lists of non-native flora and fauna that it is an offence to release or cause to spread in the wild.

Part 2 of the WCA details the law regarding SSSIs and other protected areas within Great Britain.

Countryside & Rights of Way Act 2000 (CRoW)

Schedule 9 of the CRoW amends SSSI provisions of the Wildlife and Countryside Act 1981, including increased powers for their protection and management of SSSIs. These strengthened provisions extend powers for entering into management agreements; place a duty on public bodies to further the conservation and enhancement of SSSIs; increase penalties on conviction where the provisions are breached; and introduce a new offence whereby third parties can be convicted for damaging SSSIs.

Schedule 12 of the CRoW amends the species provisions of the WCA, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable' and create a new offence of reckless disturbance.

Natural Environment and Rural Communities Act 2006 (NERC)

The NERC places a duty on Government Departments and public authorities to have regard for the conservation of biodiversity. Section 41 includes a list of habitats and species to be used by decision-makers, including local authorities, to guide the implementation of their duties under section 40 of the NERC to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

The Conservation of Habitats and Species Regulations 2019 (as amended) (EU Exit)

The Habitats Regulations require the compilation and maintenance of a register of European sites, to include Special Area Conservations (SACs) and Special Protection Areas (SPAs) classified under Directive 2009/147/EC on the conservation of wild birds (codified version). When considering potentially damaging operations, the precautionary principle applies i.e. consent for the operations cannot be given unless it is demonstrated that there would be no adverse effect on the integrity of the European site.

Affords protection to European Protected Species, e.g. bats and great crested newt, listed in Schedule 2. It is an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in listed animals. In certain circumstances, licences can be granted to permit some actions prohibited under the Habitats Regulations.

Regulation 9A requires that competent authorities must take such steps in the exercise of their functions as they consider appropriate to secure the preservation, maintenance and re-establishment of sufficient diversity and area of habitat for wild birds as appropriate, and having regard to the requirements of Article 2 of the Birds Directive.

Protection of Badgers Act 1992

The Act makes it an offence to kill or take a badger, to cruelly ill-treat a badger, or to interfere with a badger sett, including disturbing a badger while it is occupying a sett. In certain circumstances, licences can be granted to permit some actions prohibited under the Act.

Animal Welfare Act 2006

The Act contains the general laws relating to animal welfare. It is an offence to cause unnecessary suffering to any animal. The Act makes owners and keepers (including landowners) responsible for ensuring that the welfare of animals within their control is met.

National Planning Policy Framework (NPPF) 2018

The NPPF states the commitment of the UK Government to minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. It specifies the obligations that the Local Authorities and the UK Government have regarding statutory designated sites and protected species under UK and international legislation and how this is to be delivered in the planning system. Protected or notable habitats and species can be a material consideration in planning decisions and may therefore make some sites unsuitable for particular types of development, or if development is permitted, mitigation measures may be required to avoid or minimise impacts on certain habitats and species, or where impact is unavoidable, compensation may be required. A summary of the paragraphs of the NPPF relevant to ecology and nature conservation, and to the Proposed Development, is provided below.

Paragraph 170 states that *"Planning policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"*.

Paragraph 171 states that *"Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Paragraph 174 states that *"To protect and enhance biodiversity and geodiversity, plans should:*

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity".

Paragraph 175 states that *"When determining planning applications, local planning authorities should apply the following principles:*

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The

only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.”

Appendix B Site Photographs



Photograph 1: Site of the proposed residential development.



Photograph 2: Stand of Himalayan balsam along the southern boundary.



Photograph 3: Japanese knotweed encroaching onto site.



Photograph 4: Rhododendron stand to the south east boundary.



Appendix C Phase 1 Habitat Map

