



Ecological Phase 1 Survey Report

Bentley Street, Rochdale

June 2012

Control sheet

Project No & Title: BOW0017/409 Bentley Street, Rochdale – Extended Phase 1 Survey

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Contents

1. Introduction	2
2. Methodology	3
3. Results	4
4. Conclusions and Recommendations	8
References	10
Legal Information	11
Appendix A - Extended Phase 1 Target Notes	13
Appendix B - Extended Phase 1 Habitat Plan	18

1. Introduction

- 1.1 Bowland Ecology Ltd was commissioned by Manhattan Corporation Ltd to undertake an Extended Phase 1 Habitat Survey and desk study of a site on Bentley Street, Rochdale (NGR: SD 894 149). Planning permission is being sought for the development of the site.
- 1.2 The site currently comprises an undeveloped area of land which is used by local residents for access, recreation and some disposal of waste/tipping. The habitats present include broadleaved woodland, scrub and semi-improved grassland with large stands of Japanese knotweed throughout the site. This is bordered by hard standing (roads), residential properties, businesses including a Tesco Express, car wash and a car mechanics shop. It is linked to a dismantled railway line which passes to the north of the site and provides ecological connectivity to the woodland and grassland habitats present on site.
- 1.3 The purpose of the survey was to: 1) identify and map all habitats occurring within the survey area, 2) identify the presence of (or potential for) wildlife interests with particular reference to the need for further surveys and legal requirements, and 3) provide an ecological assessment and recommendations pertaining to the proposed development.
- 1.4 The ecological survey methodology followed that of an extended Phase 1 habitat survey. It also included a desk study to search for designated wildlife sites and protected species records. This report includes a description of survey methods and results; provides recommendations for further survey; and outlines recommendations to provide protection and enhancements for biodiversity and protected species. This report should be read in conjunction with the Phase 1 plan (Appendix B) and the target notes (1-7) as listed in Appendix A.

2. Methodology

Desk Study

- 2.1 A targeted desk study was undertaken of the site and a 1.5km buffer zone involving an online search of the Multi Agency Geographical Information Centre (www.magic.gov.uk), Natural England's Nature on the Map (www.natureonthemap.org.uk) and other online resources. The local biological records centre for the area was also consulted, in this case the Greater Manchester Ecology Unit. The UK and Local (Greater Manchester) Biodiversity Action Plans were also consulted.
- 2.2 The aim of the desk study was to identify the presence of statutory wildlife sites, non-statutory sites and any legally protected and notable species records for the area.

Extended Phase 1 Survey

- 2.3 The survey followed the Phase 1 habitat survey methodology (JNCC, 1993) and assessed all features of ecological significance within the survey area: All features of ecological significance were target noted and the location of target notes are shown in Appendix B.
- 2.4 The survey was extended such that evidence of fauna and faunal habitat was also recorded. The extended Phase 1 survey is a modified version of the Phase 1 survey and follows the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995). This involves walking the whole site, mapping and describing the habitats present (e.g. woodland, grassland, scrub) and recording evidence of fauna and faunal habitat (e.g. droppings, tracks or specialist habitat such as ditches for water voles or ponds for breeding amphibians). A colour coded map of the habitats on site is produced, with corresponding target notes of ecologically interesting features (Appendix A).
- 2.5 The ecological survey was carried out on 22nd May 2012 by Alice Helyar BSc (Hons), MSc, PhD, MIEEM. The weather was warm and dry, with 0% cloud cover and a light breeze. The timing of the survey was within the optimum period for completing such a survey, the conditions were suitable and the whole of the site was accessible. As a result, a comprehensive and valid assessment of the habitats present and their potential to support legally protected species was undertaken.

3. Results

Statutory and Non-Statutory Wildlife Sites

- 3.1 There is one Local Nature Reserve (Healey Dell) within 1.5km of the proposed area. It forms part of Spodden Valley and is also designated as a Site of Biological Importance (SBI). It is located approximately 1.2km to the north west of the site. Healey Dell is 40 hectares in size and is situated along the steep-sided valley of the River Spodden. It is part of one of the most important clough woodlands in the area, supporting semi-natural broadleaved woodland as well as areas of young broadleaved plantation. Other habitats present include heathland and grassland, scrub woodland, former mill lodges and watercourses.
- 3.2 The data search with GEMU indicated that there are no Sites of Biological Interest (SBI) on site but the following SBIs are present within 1.5km of the site boundary:
- Healey Dell SBI (as indicated above)
 - Brownhouse Wham and Hamer Pasture Reservoir
 - Buckley Wood Reservoir
- 3.3 No other statutory or non-statutory wildlife sites are present on or within 1.5km of the site.

Protected Species and Habitats Records

- 3.4 Searches with the GMEU found that the following species have been recorded within 1.5km of the site and therefore may be present if suitable habitats are found on site;
- Mammals; Daubentons's bat, soprano pipistrelle, pipistrelle sp., common pipistrelle and badger.
 - Birds; Lapwing, reed bunting and skylark.
 - Invertebrates; Small heath.
- 3.5 Online resources found a number of BAP species records for the grid square SD81 and therefore these species could potentially be present if suitable habitats are found on site;
- Amphibian; great crested newt and common toad.
 - Birds; common cuckoo, Eurasian tree sparrow, grey partridge, house sparrow, lesser redpoll, spotted flycatcher, hawfinch, tree pipit and wood warbler.
 - Flowering plants; field gentian.
 - Invertebrates; wall, small heath and white letter hairstreak.
 - Terrestrial mammals; brown hare, brown long eared bat, soprano pipistrelle bat and European hedgehog.
- 3.6 Natural England's 'Nature on the Map' found three areas of deciduous woodland and one area of lowland heath, both UKBAP habitats, within 1.5km of the proposed development area. In addition, two areas of ancient woodland are also present within 1.5km. All of these habitats were more than 1km from the site.

Extended Phase 1 Survey

- 3.7 Target notes summarising key interest features for wildlife recorded during the Extended Phase 1 survey are included as Appendix A. The Phase 1 habitat plan for the study site is presented as Appendix B which includes dominant species codes for the habitats present and the locations of the target notes.
- 3.8 The proposed site is situated to the north of Rochdale, Lancashire. The site itself comprises broadleaved woodland, scrub and semi-improved grassland with large stands of Japanese knotweed throughout the site. The surrounding landscape is generally one of urban development, with a network of connected semi-natural habitats. The site is immediately surrounded by hard standing (roads), residential properties, businesses including a Tesco Express, car wash and a car mechanics shop. It is also connected to a dismantled railway line which passes to the north of the site and provides ecological connectivity between the railway line and woodland (Foot Wood) and grassland habitats located to the south and south west of the site.

Habitat descriptions from field survey

Semi-improved species poor grassland

- 3.9 Semi-improved species poor grassland is present along the western edge of the site, at the base of the steep slope. It is represented by tussocky semi-improved grassland (Target Note (TN) 3). The habitat is not subject to management, producing a long rank sward, dominated by tussocks.
- 3.10 The grassland comprises of commonly occurring species including; ribwort plantain, Yorkshire fog, cock's foot, red fescue, common bent, annual meadow grass, meadow foxtail, perennial rye grass, common ragwort, dandelion sp., and the moss *Rhytidiadelphus squarrosus*. Occasional tall ruderal species such as greater willowherb with Japanese knotweed and sycamore saplings are scattered throughout.

Semi-natural broadleaved woodland

- 3.11 The semi-natural broadleaved woodland located at TN2, is semi-mature with tree species dominated by willow species (goat willow). Other trees present include hornbeam, sycamore and hawthorn; however, these are less frequent than the willow trees. Due to their age, the trees have negligible features for roosting bats. Within the understorey are abundant bramble and common nettle with sycamore and willow saplings, hawthorn, hazel, rowan and dog rose. The ground flora comprises greater willowherb, rosebay willowherb, common nettle, dandelion sp., wood avens, broadleaved dock, horse tail, smooth meadow grass, broad buckler fern, cock's foot, ivy, bittercress sp. and Yorkshire fog. Japanese knotweed is rapidly spreading throughout the woodland and *Cotoneaster* is also abundant along the north eastern site boundary within the woodland.
- 3.12 The ground within and around the woodland is strewn with litter and debris, with particular concentrations along the north eastern boundary and along the slope edge.
- #### Scattered trees
- 3.13 A small number of semi-mature and immature trees are scattered around the northern end of the site and along the eastern site boundary (TN6). The trees are primarily silver birch trees with occasional sycamore and hawthorn trees

also present. Due to their age, the trees have negligible features for roosting bats.

Introduced shrubs

- 3.14 Introduced shrubs including Japanese knotweed and *Cotoneaster* are present across the site in large stands. It is likely that both species were accidentally introduced with the waste deposited on to the site from the adjacent premises. The Japanese knotweed has spread extensively and is now the dominant species across the site (TN1 and TN4).

Tall ruderals

- 3.15 Tall ruderals, dominated by greater willowherb and rosebay willowherb are present at the northern end of the site, predominantly along the steep slope adjacent to Whitworth Road (TN5).

Scrub

- 3.16 Areas of scattered scrub are present at the northern end of the site (TN6), as well as along the western boundary. The scrub is dominated by bramble, with some hawthorn shrubs.

Other habitats

- 3.17 Bare ground and brick walls are present along the steps and track at the northern end of the site and running through the site; whilst brick walls and bare ground have the potential to be colonised by pioneer plants, they are of little intrinsic ecological value. No buildings are present on the site.

Faunal description from field survey

- 3.18 A range of habitats are present within the site boundary including; grassland, semi-natural broadleaved woodland, scattered trees, scrub, tall ruderals and introduced shrubs, which can provide a number of opportunities for fauna to inhabit the site.

Small and medium mammals

- 3.19 The grassland, woodland, tall ruderals, scrub and introduced shrub habitats provides opportunities for small mammals such as mice, field voles and shrews. No badger setts were observed to be present at the time of survey. Anecdotal evidence from two local residents indicated that the site was well used by the local fox population, hedgehogs and rats. The site provides good opportunities for cover for fox and hedgehogs due to the dense tall ruderals, introduced shrubs and scrub, which make areas of the site inaccessible to humans.

Bats

- 3.20 A number of semi-mature and immature trees were present on site (TN2 and TN6), which had limited opportunities for roosting bats. The woodland, grassland and scrub habitats and the linear features, including the property boundaries around the site, are likely to provide foraging opportunities for a range of bats species. The connectivity the site provides with the disused railway line (TN7) and nearby woodlands increases the likelihood that the site is used by foraging bats.

Birds

- 3.21 Birds (chaffinch, robin and blue tit) were observed to be nesting within a number of trees and shrubs at the time of the survey. Additional species observed during the survey included house sparrow, bullfinch, song thrush, blackbird and great tit; breeding status of these birds was not confirmed

during the survey. Anecdotal evidence from local residents indicated the presence of jay and greater spotted woodpecker on the site.

- 3.22 There is potential for breeding birds to be present throughout the site, particularly within the woodland habitat and introduced shrubs on site (TN2 and TN4). It is also likely to provide foraging habitat and connectivity for birds within the disused railway line and nearby woodland habitats.

Amphibians

- 3.23 The site does provide good terrestrial habitat for amphibians such as great crested newts; however, there are no ponds within 250m of the proposed development site. There is only a negligible risk of amphibians being present on site and are thus not considered further within this report.

4. Impact Assessment and Recommendations

- 4.1 This section is a summary of ecological interest within the survey area and the recommendations and mitigation measures that should be considered should the development affect them.

Scheme Proposal

- 4.2 The scheme involves the development of the site for residential accommodation. The development may impact upon semi-improved species poor grassland, semi-natural broadleaved woodland, scrub, tall ruderals, scattered trees and introduced shrubs.

Habitats

- 4.3 The proposed development may have the greatest impact on semi-natural broadleaved woodland, as well as species poor semi-improved grassland; both of these habitats were found to be species poor and of low ecological value. It also may impact upon introduced shrubs, scattered scrub and tall ruderals, all of which are commonly occurring habitats and also of limited ecological value. Due to the low value of these habitats, it is considered that the development is not likely to have any significant impacts in respect of habitat types. In addition, due to the presence of Japanese knotweed, the value of any existing natural habitats will be declining in value as Japanese knotweed spreads across the site.

- 4.4 The greatest impact the development is likely to incur is in terms of disrupting the ecological connectivity between the network of green spaces running adjacent to and close to the site.

- 4.5 It is therefore recommended that a row of trees is retained along the north eastern and western boundaries of the site, which would retain an element of habitat connectivity between the disused railway line and the woodlands to the south of the site. Protection should be provided to the trees (fencing) that are to be retained on the site during development, in order to prevent damage to their roots and branches as a result of construction activities.

Invasive plant species

- 4.6 The extensive stands of the invasive species Japanese knotweed on site will require treatment and removal prior to construction. It is an offence to cause Japanese knotweed to spread in the wild under the Wildlife and Countryside Act 1981 (as amended). Therefore to prevent potential spread of the Japanese knotweed, it will require treatment and removal by specialist contractors according to best practice.

Bats

- 4.7 None of the trees situated on the site are considered to provide features suitable for roosting bats. Further survey of these trees is not considered necessary.
- 4.8 Retaining rows of trees along the north eastern and western boundaries of the site should retain the connectivity for commuting bats that are likely to use the site to access the disused railway line and the woodlands to the south of the site. This would also retain some bat foraging habitat within the site itself.

Birds

- 4.9 When the trees, scrub and introduced shrubs and therefore potential bird nesting habitat, are removed as a result of the proposed works, it is recommended that the works should take place outside the breeding bird season which runs from late February until September, in order to prevent any impacts upon breeding birds.
- 4.10 Any vegetation clearance work that have not have been carried out outside the bird breeding season will be subject to a pre-clearance bird survey carried out by a suitably experienced ecologist. No vegetation clearance will be carried out within 5m of an identified nest until the young have fledged and are no longer returning to the nest site. Vegetation will only be cleared once a scheme ecologist has declared the nest to be no longer in use. Mitigation for the loss of breeding bird habitat should include the planting of native species of trees and shrubs and the provision of alternative nesting opportunities in the form of nest boxes within the new development, particularly on the gable end walls and beneath the roof line of the western elevation of the properties adjacent to the disused railway line.

Enhancement

- 4.11 A key element of the National Planning Policy Framework is to minimise impacts to biodiversity and provide enhancements. Paragraph 109 states that 'The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible'. It also states in Paragraph 118 that 'when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by encouraging opportunities to incorporate biodiversity in and around developments'.
- 4.12 Measures to enhance the biodiversity of the site include:
- a) Seeking the advice of a professionally/suitably qualified ecologist throughout the progress of the development in order to maximise ecological and biodiversity gains at each stage.
 - b) Planting of scattered trees around the proposed new buildings. Species that should be used should include hawthorn, ash, oak and rowan. Specimens should be sourced locally, they should be planted at an appropriate time of year (Oct – Feb, when there is no ground frost) and protected from grazing by rabbits and deer.
 - c) Installation of bird nesting boxes on the properties adjacent to the disused railway line.
 - d) Opportunities for roosting bats should be provided within the proposed residential buildings. Incorporation of roosting opportunities within the proposed development should be achievable, and can be designed to meet with planning requirements and building regulations. It is recommended that one of the following is incorporated into each building with south or west aspects, with particular emphasis on those adjacent to the disused railway line;
 - o Access gaps between soffits and walls (15-20mm);
 - o Access points to the roof void via bat tiles incorporated into the roof structure or bat tubes built into gaps in the masonry or into wall surfaces (Tubes such as the Schwegler 2FR Bat Tube would be suitable).
 - o Access points over top of cavity walls by specifically constructed gaps;

- External bat bricks installed at a height of 3m (or close to the roof line), in the south or west facing elevation (Schwegler 1FR Bat Tube would be suitable).
- e) The integration of bat roosting habitat will not cause disturbance to users of the development, nor create aesthetic problems. Bats will not nibble or gnaw at wood, wires or insulation. Bat droppings do not smell strongly, there are no known health risks associated with them. The droppings are dry and do not putrify, but crumble away to dust, or are washed away by rain.
- f) Any plantings within the new development would provide foraging habitat for bats, and therefore have the potential to increase the value of the site. Nectar rich plants that attract insects would be recommended as they would enhance foraging opportunities for bats in the local area.

References

IEA. 1995. *Guidelines for Baseline Ecological Assessment*. Chapman and Hall.
Joint Nature Conservation Committee (1993). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit*. JNCC
www.ukbap.org.uk

Legal Information

This report provides guidance of potential offences as part of the impact assessment. This report does not provide detailed legal advice and for full details of potential offences against protected species the relevant acts should be consulted in their original forms i.e. The Wildlife and Countryside Act, 1981, as amended, The Countryside and Rights of Way Act 2000, The Natural Environment and Rural Communities Act, 2006 and The Conservation of Habitats and Species Regulations 2010.

Bats

All **bats** in the UK are listed on Schedule 5 of the Wildlife and Countryside Act (WCA) (1981, as amended), updated by the Countryside and Rights of Way Act (2000). It is therefore subject to provision 9 of the WCA which makes it an offence to;

- Intentionally kill, injure or take any wild bat,
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by any wild bat
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for that purpose.
- Possess or control any live or dead specimen or anything derived from a UK bat species.

The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. The term 'reckless' is defined by the case of Regina v Caldwell 1982. The prosecution has to show that a person either deliberately took an unacceptable risk, or failed to notice or consider an obvious risk.

The Conservation of Habitats and Species Regulations 2010 which make provision implementing Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna (the Habitats Directive). These give additional protection to bats, which are listed on Schedule 2 of the Regulations. Under Regulation 39 a person commits an offence if he;

- Deliberately captures, injures or kills any wild animal of a European protected species.
- Deliberately disturbs wild animals of any such species in such a way as to be likely significantly to affect the ability of any significant group of animals of that species to:
 - i) to survive, to breed or to reproduce or to rear or nurture their young or
 - ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate or the local distribution or abundance of that species

A bat roost has been interpreted by Natural England to mean any structure or place which is used for shelter or protection whether or not bats are present at the time.

Breeding Birds

Breeding birds are protected by Section 1 of the Wildlife and Countryside Act (1981, as amended). All birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions, to intentionally;

- Kill, injure or take any wild bird,
- Take, damage or destroy the nest of any wild bird while it is in use or being built,
- Take or destroy the egg of any wild bird.

Birds listed on Schedule 1 of the Wildlife and Countryside Act (1981, as amended) are subject to increased protection through a penalty system. For species listed on this Schedule it is also an offence to intentionally or recklessly;

- Disturb any Schedule 1 bird while it is building a nest or is in or near a nest containing eggs or young,
- Disturb dependent young of any Schedule 1 bird.

Invasive plants

It is an offence, under The Wildlife and Countryside Act 1981 (as amended) to actively plant or otherwise cause Japanese Knotweed to spread in the wild.

Under The Environmental Protection Act 1990 Japanese Knotweed is classed as 'controlled waste' and as such must be disposed of safely at a licensed landfill site according to the Environmental Protection Act (Duty of Care) Regulations 1991. Soil containing knotweed roots can be regarded as contaminated.

Section 14(2) of the Wildlife and Countryside Act 1981 (WCA 1981) states that if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence.

Appendix A - Extended Phase 1 Target Notes

Target Note	Description	Photograph
1	Extensive stands of Japanese knotweed (<i>Fallopia japonica</i>) along the north eastern and southern boundaries of the site.	

2	The semi-natural broadleaved woodland is semi-mature with tree species dominated by willow species (goat willow (<i>Salix caprea</i>)). Other trees present include hornbeam (<i>Carpinus betulus</i>), sycamore (<i>Acer pseudoplatanus</i>) and hawthorn (<i>Crataegus monogyna</i>); however, these are less frequent than the willow trees. Due to their age, the trees have negligible features for roosting bats. Within the field layer are abundant bramble (<i>Rubus fruticosus</i>) and common nettle (<i>Urtica dioica</i>) with sycamore and willow saplings, hawthorn, hazel (<i>Corylus avellana</i>), rowan (<i>Sorbus aucuparia</i>) and dog rose (<i>Rosa canina</i>). The ground flora comprises greater willowherb (<i>Epilobium hirsutum</i>), rosebay willowherb (<i>E. angustifolium</i>), common nettle (<i>Urtica dioica</i>), dandelion sp. (<i>Taraxacum</i> agg.), wood avens (<i>Geum urbanum</i>), broadleaved dock (<i>Rumex obtusifolia</i>), horse tail (<i>Equisetum</i> sp.), smooth meadow grass (<i>Poa pratensis</i>), broad buckler fern (<i>Dryopteris dilatata</i>), cock's foot (<i>Dactylis glomerata</i>), ivy (<i>Hedera helix</i>), bittercress sp. (<i>Cardamine</i> sp.) and Yorkshire fog (<i>Holcus lanatus</i>). Japanese knotweed is rapidly spreading throughout the woodland and Cotoneaster (<i>Cotoneaster</i> sp.) is also abundant along the north eastern site boundary within the woodland.	
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3	Semi-improved species poor grassland is present along the western edge of the site, at the base of the steep slope. It is represented by tussocky semi-improved grassland (Target Note (TN) 3). The habitat is not subject to management, producing a long rank sward, dominated by tussocks. The grassland comprises of commonly occurring species including; ribwort plantain (<i>Plantago lanceolata</i>), Yorkshire fog, cock's foot, red fescue (<i>Festuca rubra</i>), common bent (<i>Agrostis capillaris</i>), annual meadow grass (<i>Poa annua</i>), meadow foxtail (<i>Alopecurus pratensis</i>), perennial rye grass (<i>Lolium perenne</i>), common ragwort (<i>Senecio jacobaea</i>), dandelion sp., and the moss <i>Rhytidiadelphus squarrosus</i>. Occasional tall ruderal species such as greater willowherb with Japanese knotweed and sycamore saplings are scattered throughout. This grassland provides potential habitat for foraging birds, small and medium sized mammals. No evidence of badger activity was found during the survey.	
4	An extensive stand of Japanese knotweed along the steep slope through the centre of the site.	

		
5	An area of tall ruderals. The tall ruderals are dominated by willowherb species with a number of ferns scattered throughout.	 
6	A small number of semi-mature and immature trees are scattered around the northern end of the site and along the eastern site boundary. The trees are primarily silver birch (<i>Betula pendula</i>) trees with occasional sycamore and hawthorn trees also present. Due to their age, the trees have negligible features for roosting bats. Tall ruderals, dominated by greater willowherb and rosebay willowherb and scattered scrub dominated by bramble are also present here. The trees, scrub and tall ruderals	

	provide potential bird nesting habitat. Nesting chaffinch was observed in this location.	
7	Disused railway line adjacent to the site. The site and adjacent habitats provide connectivity between the network of habitats around Rochdale.	No Photo

Appendix B - Extended Phase 1 Habitat Plan

