BIODIVERSITY AUDIT CHELTENHAM BOROUGH COUNCIL

A Report to Cheltenham Borough Council

Middlemarch Environmental Ltd.
Triumph House
Birmingham Road
Allesley
Coventry
CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400

E-Mail: admin@middlemarch-environmental.com Web Site: www.middlemarch-environmental.com

Report Number: RT-MME-3879-rev01

June 2008

This document has been compressed for distribution and viewing online

BIODIVERSITY AUDIT CHELTENHAM BOROUGH COUNCIL

CONTROLLED COPY

01 OF 02

01 CHELTENHAM BOROUGH COUNCIL 02 MIDDLEMARCH ENVIRONMENTAL

This report was compiled by Helen Miller MIEEM CEnv and Heather Ball

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted, that whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment

Contract Number C3879 & C102866

June 2008

CONTENTS

EXI	ECUTIVE SUMMARY	5
1.	INTRODUCTION	7
1.1	1 Background	7
1.2	2 SITE DESCRIPTION	8
2.	METHODOLOGY	9
2.	1 Desk Study	9
2.2		
2.3		
2.4		
3.	DESK STUDY RESULTS	12
3.		
3.2		
3.3		
4.	EXTENDED PHASE 1 HABITAT SURVEY	31
4.		
4.2		
4.3		
4.4 4.5		
4.6		
4.7		
4.8		
4.9		
4.		
5.	BIODIVERSITY QUALITY OF SITES ASSESSED	36
5.		
5.3	BIODIVERSITY VALUE	
	5.3.1 Allotments	
	5.3.2 Cemetery or Churchyard	
	5.3.4 Green open space	
	5.3.5 Local nature reserve	
	5.3.6 Natural green space	
	5.3.7 Parks & gardens	
	5.3.8 Playing fields	
	5.3.9 Potential development sites	44
6.	IMPLICATIONS OF APPROPRIATE ASSESSMENTS IN RELATION TO	
EUI	ROPEAN LEGISLATION	46
7.	MANAGEMENT	48
7.		
7.2		
7.2	7.2.1 Habitats	
	7.2.2 Species	
7.3	1	
8.	CONCLUSIONS AND RECOMMENDATIONS	61
8.	1 Conclusions	61
8.2		
REF	FERENCES	62

APPENDICES	63
APPENDIX 1: SITES ASSESSED DURING THIS PROJECT	64
APPENDIX 2: DESK STUDY DATA	68
APPENDIX 3: EXTENDED PHASE 1 HABITAT DRAWINGS	
APPENDIX 4: SITE DESCRIPTIONS	72
A4.1 Allotments	73
A4.2 Cemetery or Churchyard	74
A4.3 Green corridor	76
A4.4 Green open space	79
A4.5 Local nature reserve	91
A4.6 Natural green space	92
A4.7 Parks & gardens	95
A4.8 Playing fields	101
A4.9 Potential development sites	107
APPENDIX 5: WILDLIFE CORRIDOR VALUE	117
APPENDIX 6: BIODIVERSITY QUALITY	119

EXECUTIVE SUMMARY

In March 2006 Cheltenham Borough Council commissioned Middlemarch Environmental Ltd to under take a biodiversity audit of Cheltenham Borough. This was completed between March and October 2006.

Purpose

The purpose of the project was to:

- Undertake a biodiversity audit of the Borough
- Provide a consistent biodiversity baseline resource
- Provide management prescriptions
- Identify the potential for wildlife corridors
- Inform the Local Development Framework (LDF)
- Inform the council's Green Space Strategy.

Approach

The study collated known biodiversity data for the Borough from a variety of sources:

- *MAGIC* website
- Local Biodiversity Record Centre/Wildlife Trust
- Cheltenham Borough Council website
- UK and Local BAP websites.

Extended Phase 1 Habitat Surveys were completed of the key open space areas (c. 130 sites) including samples from nature conservation sites, public open space e.g. playing fields and parks, green corridors and potential development sites.

Following the data collation of known records and the field surveys, the following assessments were completed:

- Review of National and Local BAP in relation to Cheltenham Borough
- Assessment of implications of appropriate assessments in relation to European Legislation
- Existing and potential value of each site assessed in terms of protected species, UK and Local BAPs (species and habitats) and probable function as wildlife corridors.
- Determination of biodiversity value of each site surveyed
- Determination of potential for wildlife corridors across the Borough.

A GIS data resource was developed to store and allow easy interrogation of the data collected during the project, including suggested management prescriptions for each site.

Summary of results

Nature conservation sites

- 2 European Protected sites within 10 km of the Borough (outside Borough)
- 2 SSSI within the Borough
- 2 Ancient woodlands within the Borough
- 1 ANOB (in part) within the Borough
- 9 non-statutory nature conservation sites within the Borough.

Species within the Borough

- 20 European protected species
- 28 Nationally protected species
- 7 UK BAP priority species
- 8 Gloucestershire BAP priority species
- 23 Other notable species (includes RSPB Red/Amber listed birds and Nationally scarce, notable and local species).

Habitats within the Borough

- 52 different habitats recorded, 19 of which were mosaics of at least two habitats
- Habitats occur which have the potential to support protected, BAP and notable species
- 10 UK Priority HAPs represented
- 12 UK Broad HAPs represented
- 12 Gloucestershire HAPs represented
- Biodiversity Value range from low to high at habitat, local and national levels.

Wildlife corridors

Existing corridors occur at scales ranging from habitat to across the Borough including

- Hedgerows
- Watercourses
- Infra-structure routes such as rail and road.

Management

There are a variety of opportunities for enhancement through the Borough e.g.

- Large areas potential for buffer zones; wildlife planting
- Watercourses open up
- Young plantations encourage structural diversity
- Hedgerows plant; increase diversity
- Trees encourage species and age diversity
- Non-native woody species gradual replacement with native cultivars
- Scrub reduce encroachment/encourage
- Mosaic habitats encourage
- Water bodies encourage natural vegetation
- Bird and bat boxes etc. erect.

Conclusions

The Audit has identified:

- Areas of high biodiversity value across the Borough
- Biodiversity 'hot spots'
- Wildlife corridors
- Scope for biodiversity enhancement

The GIS resource provides:

- Accessible interrogation of data
- A baseline biodiversity data set

The baseline data can be used for a number of projects e.g.:

- Identification of areas where detailed surveys would be beneficial
- Specific management plans
- Assessment of planning applications
- Assessment of implications of climate change

Cautionary Note: it is snap-shot in time and will need to be updated as habitats mature, management is implemented, development takes place and changes of legislation affecting species and habitats.

1. INTRODUCTION

1.1 BACKGROUND

On 21st March 2006, Cheltenham Borough Council commissioned Middlemarch Environmental Ltd to undertake a biodiversity audit of Cheltenham. It is understood that the existing biodiversity records for Cheltenham are not comprehensive and that the creation of an up-to-date survey and audit is necessary to inform the Local Development Framework (LDF) and the council's Green Space strategy for the Borough. The requirement for biodiversity considerations within LDFs and Green Space strategies are driven by European legislation and implemented through the Application of Appropriate Assessments under Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

To fulfil the above brief to assess the existing ecological interest of the site, a desk study, an Extended Phase 1 Habitat Survey and a review of the desk study and field surveys in relation to the UK and Gloucestershire BAPs were undertaken.

This report details and provides the following information:

- Desk study
- Extended Phase 1 Habitat Survey
- UK BAP Review
- Gloucestershire BAP
- Management recommendations.

Middlemarch Environmental report RT-MME-3879-GIS provides a summary of the GIS data resource created during this project.

1.2 SITE DESCRIPTION

Approximately 132 sites within Cheltenham County Borough, Gloucestershire were assessed. These sites were classified into the following categories by Cheltenham County Borough Council:

- o Allotments
- o Cemetery or Churchyard
- o Green corridor
- o Green open space
- o Local nature reserve
- o Natural green space
- o Parks & gardens
- o Playing fields
- o Potential development sites.

A list of the sites assessed is provided in Appendix 1.

2. METHODOLOGY

2.1 DESK STUDY

A desk study was undertaken to determine the nature conservation designations and protected species that have been recorded within the Borough boundary. This involved contacting statutory and non-statutory organisations. Middlemarch Environmental Ltd assimilated and reviewed the desk study data provided by the organisations.

The consultees for the Desk Study were:

- English Nature (Multi-Agency Geographical Information System)
- Local Biological Record Centre/Wildlife Trust.

The data collected from these consultees is discussed in Section 3.

2.2 EXTENDED PHASE 1 HABITAT SURVEY

To fulfil the brief of undertaking an ecological assessment of the site, an Extended Phase 1 Habitat Survey was conducted (JNCC, 1993 as amended by IEA, 1995). This is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are likely to be ecologically important. During the Extended Phase 1 Habitat Survey, the presence, or potential presence, of protected species, UK Priority BAP species and Gloucestershire Priority BAP was also recorded.

The ecological significance of the sites was evaluated at a national and local perspective and the significance as wildlife corridors assessed. The criteria used to assess the sites value as a wildlife corridor is detailed in Table 2.1. These criteria are relative for this project and Cheltenham Borough.

Wildlife Corridor Value	Description/Rationale
High	Good connectivity to other areas of open space OR high overall ecological value
	in terms of habitats occurring on site
Moderate	Near to sites of high Wildlife Corridor Value or other areas of open space but
	comprising of habitats of overall low ecological value. Such sites provide
	'stepping stone' corridors.
Low	Isolated sites in relation to other areas of open space, of low overall ecological
	value in terms of habitats present and generally small in spatial extent.

Table 2.1 Wildlife Corridor Value for Open Space Sites within Cheltenham Borough

2.3 BIODIVERSITY QUALITY

The biodiversity quality of each site is related to those criteria outlined in Table 2.2. This grading system is qualitative and is not representative of any nationally accepted regime, however, it has proved useful within similar projects to inform the allocation of resources for biodiversity enhancement for each site.

Biodiversity Quality	Description/Rationale
A	Large site with moderate/high existing biodiversity value OR small
	site with high existing biodiversity value
B+	Large site with low/moderate existing biodiversity value and with moderate/high potential biodiversity OR small site with moderate existing biodiversity value
В	Moderate site with low/moderate existing biodiversity value
С	Small site with low biodiversity value and minimal potential biodiversity

Table 2.2 Biodiversity Gradings for Open Space Sites within Cheltenham Borough

The biodiversity value of a site has taken the following into consideration:

- Frequency of the habitat at Local and National level
- Spatial extent of the habitat at Local and National level
- Conservation designations of the habitats at Local and National level
- Species diversity within the site
- Presence of Local and National BAP species
- Presence of other notable species.

For example if a habitat is uncommon and/or small in spatial extent at a local level, it is likely to have a higher biodiversity value than a habitat that is common and covers a greater spatial area within the local landscape. The habitat biodiversity value also takes the range of species likely to be supported by the habitat and the ease at which it can be recreated into account. For example semi-improved fields generally support a lower range of species than, for example mosaic habitats, and are also more readily recreated so therefore have lower biodiversity value.

As part of the determination of the biodiversity value of each site the UK National BAP and the Gloucestershire BAP were reviewed in relation to the sites assessed during the Phase 1 Habitat Surveys. The UK and Local BAPs were reviewed for their relevance to Cheltenham Borough with the focus on Priority Habitats and Species. Table 2.3

summarises the criteria for determining the biodiversity value of each habitat at habitat, Local and National Level.

Value	Habitat	Local	National
High	Complex habitat likely	Listed as a Priority	Listed as a Priority
	to support a range of	habitat on the	habitat on the UK
	species and not readily	Gloucestershire BAP	National BAP
	re-created		
Moderate	Intermediate between	Not a Gloucestershire	Listed as a Broad
	'high' and 'low'	Priority BAP Habitat	Habitat Type on the
		but few examples occur	UK National BAP
		across the Borough	
Low	Easily re-created and	Not a Gloucestershire	Not listed on the UK
	unlikely to support a	Priority BAP Habitat	National BAP
	high diversity of	and numerous	
	associated fauna	examples exist within	
		the Borough	

Table 2.3 Summary of criteria for determining the biodiversity value at habitat, Local and National Level

2.4 IMPLICATIONS OF APPROPRIATE ASSESSMENTS IN RELATION TO EUROPEAN LEGISLATION

The implications of appropriate assessments in relation to European legislation were assessed in relation to the biodiversity and nature conservation sites occurring within Cheltenham Borough.

3. DESK STUDY RESULTS

3.1 Introduction

From the details provided by the consultees, relevant ecological data have been reviewed. The results from these investigations for the site are summarised below in Sections 3.2 and 3.3. All data are provided in Appendix 2. The level of protection and conservation status given to species and habitats is correct as of time of undertaking this project (2006).

3.2 NATURE CONSERVATION SITES

There two statutory protected nature conservation sites within Cheltenham Borough:

- 1. Leckhampton Hill and Charlton Kings Common (SSSI)
- 2. Griffiths Aveneue (LNR) located within St Marks, West of City Centre

There are two Ancient Woodlands within the Borough (Magic 2008):

- 1. Unnamed Ancient and Semi-Natural Woodland (ASNW) in the Charlton Kings area of the Borough.
- 2. Timbercombe Woods comprising two areas of Ancient Replanted Woodland and one area of ASNW in the south-east of the Borough.

In addition there are a number of Ancient Woodlands bordering the Borough in the east.

The east and south-east of the Borough falls within the Cotswold Area of Outstanding Natural Beauty (AONB), part of which, the Cotswold Hills, is an Environmentally Sensitive Area.

There are nine non-statutory conservation sites within the Borough for which information has been obtained. Table 3.1 summarises these sites. Details of some of these sites are provided in Appendix 2.

Site	Summary of Site	Approximate Locality within Cheltenham Borough
Ashgrove Farm Meadows	Semi-natural Grassland	SO974199
Charlton Kings	Proposed Local Nature Reserve	SO966197
Fiddlers Green Lane Meadow	Semi-natural Grassland	SO913226
Glenfall Wood	Ancient Semi-natural Broadleaved Woodland	SO981219
Honeybourne Line	Proposed Local Nature Reserve	Prince of Wales Stadium to Queens Road Railway Station, Cheltenham
Leckhampton Hill &	Grassland Inventory/Proposed Local	South-east Cheltenham
Charlton Kings Common	Nature Reserve	
Pilley Bridge	Proposed Local Nature Reserve	Leckhampton, South Cheltenham
Ravensgate Hill	Grassland Inventory	SO977185
Timbercombe	Ancient Semi-natural Broadleaved Woodland	SO969193

Table 3.1 Summary of non-statutory conservation sites Within Cheltenham Borough

3.3 PROTECTED AND BIODIVERSITY ACTION PLAN SPECIES

The desk study identified a number of protected species within Cheltenham Borough. The species recorded within the last 10 years are summarised in Table 3.2 (listed in alphabetical order). The following sections outline their level of protection. Some of these species are also listed within the Local BAP and/or as priority species within the UK BAP. Table 3.3. details additional notable species that are not protected under any legislation. Table 3.4 lists plant species from the Cheltenham area that were published in the Atlas of the British Flora in 1982. These data were collected on a postcode basis (GL50-GL53) using the Postcode Plants Database and as such extends beyond the Borough boundary. Not all of these plant species will necessarily be present today. The absence of records should not be taken as confirmation that the species is absent from the search area.

Badgers

Badgers *Meles meles* are protected under Appendix 3 of the Bern Convention (1979), the Protection of Badgers Act (1992), and Schedule 6 of the Wildlife & Countryside Act (1981). Under this legislation it is an offence to:

- Destroy any part of a sett;
- Disturb any part of a sett;
- Obstruct access to or entrances of setts;
- Disturb badgers in occupation of a sett; and,
- Take, kill or injure a badger.

Bats

In England, Scotland and Wales all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties.

All bats are included in Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994, (or Northern Ireland, 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The following account represents a simplified summary of the legislation provided by Mitchell-Jones and Robertson (2004). *Taken together, the Act, Order and Regulations make it illegal to:*

intentionally or deliberately kill, injure or capture (or take) bats;
deliberately disturb bats (whether in a roost or not);
recklessly disturb roosting bats or obstruct access to their roosts (England & Wales only; proposed for Scotland in 2004);
damage or destroy bat roosts;
possess or transport a bat or any part of a bat, unless acquired legally;
sell (or offer for sale) or exchange bats, or parts of bats.

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording in the legislation is 'any structure or place which any wild animal...uses for shelter or protection' (WCA) or 'breeding site or resting place' (Habitats Regulations). Because bats tend to re-use the same roost after periods of vacancy, legal opinion is that the roost is protected whether or not the bats are present at the time.

Birds

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are protected by special penalties.

Birds such as the kingfisher *Alcedo atthis* and fieldfare *Turdus pilaris* are protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended);

"Wildlife and Countryside Act 1981 s. 1 (1)..if any person intentionally –

- (a) kills, injures or takes any wild bird;
- (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or, takes or destroys an egg of any wild bird, he shall be guilty of an offence." (Rees, 2002).

Some birds have further protection under the Bern Convention (Appendix II) and the Birds Directive Annex I, which stipulates that member states must take measures to conserve these species.

Butterflies

A number of butterflies and moths are protected under the Wildlife and Countryside Act (1981) Schedule 5 S9(5). The marsh fritillary *Euphydryas aurinia* is also listed under annex II of the Bern Convention, which lists strictly protected fauna.

Common Toad and Frog

The common toad *Bufo bufo* and frog *Rana temporaria* are protected under the Wildlife and Countryside Act (1981) Schedule 5 S9(5). This schedule prohibits the selling or offering for sale, possessing or transporting for the purpose of sale any live or dead animal or any part/derivative of the animal. Both species are also listed under annex III of the Bern Convention, which requires their populations to be protected from exploitation and managed to keep them of danger.

European Polecat

The European polecat *Mustela putorius* is partially protected under Schedule 6 of the Wildlife and Countryside Act, 1981. It is also listed under Schedule 3 of the Conservation (Natural Habitats etc) Regulations (1994), Annex Va of the EC Habitats Directive, and Appendix III of the Bern Convention. The UK Biodiversity Action Plan classifies the European polecat as a species of conservation concern, although not a priority species.

Hedgehogs

Hedgehogs *Erinaceus europaeus* are partially protected under the Wildlife & Countryside Act (Schedule 6) and may not be trapped without a licence from English Nature, the Countryside Council for Wales or Scottish Natural Heritage.

Newts

Great crested newts *Triturus cristatus* are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and Schedule 2 of the Conservation (Natural Habitats etc) Regulations 1994 (Regulation 38). Because of their rarity they are also protected under Annexes IIa and IVa of the Habitats and Species Directive and under the Bern Convention.

Langton et alia (2001) make the point that:

"The wording in the 1981 Act and 1994 Regulations is slightly different."

"Taken together, the Act and the Regulations (following the CROW Act 2000) make it illegal to:

- Intentionally or deliberately capture or kill, or intentionally injure great crested newts.
- Deliberately disturb great crested newts or intentionally or recklessly * disturb them in a place used for shelter or protection.
- Damage or destroy a breeding site or resting place.
- Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.
- Possess a great crested newt, or any part of it, unless acquired lawfully.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales".

Schedule 5 of the Wildlife and Countryside Act (1981) prohibits the sale and commercial exchange of palmate newts *Triturus helveticus* and smooth newts *Triturus vulgaris*. Smooth newts are also listed under annex III of the Berne Convention, which requires populations of the species to be protected from exploitation and managed to keep them out of danger.

Protected Plants

Bluebells *Endymion non-scriptus*, Meadow Clary *Salvia pratensis*, Adder's-tongue Spearwort *Ophioglossum vulgar* and Butcher's Broom *Ruscus aculeatus* are protected through provisions in the Wildlife and Countryside 1981 (Schedule 8), which makes it

illegal to intentionally uproot a wild plant and to sell or offer it for sale. Many of the plants listed in Table 3.4 are listed on appendix 2 of CITES because they are considered to be vulnerable to serious threat or extinction if trade is not controlled.

Reptiles

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* benefit from the greatest protection.

Common lizard *Lacerta vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix natrix* are protected under the Wildlife and Countryside Act 1981 as amended from intentional killing or injuring.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, & c.) Regulations 1994 which together make it illegal to kill, injure, capture, handle or disturb these animals. Places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed. It is also illegal to obstruct these animals from using such areas.

The reader is referred to the original legislation for definitive interpretation.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.

English Nature (2004) has stated that:

Reptiles are likely to be threatened, and the law potentially breached, by activities such as the following:

- *Archaeological and geotechnical investigations*
- Clearing land, installing site offices or digging foundations
- Cutting vegetation to a low height
- Laying pipelines or installing other services
- Driving machinery over sensitive areas
- Storing construction materials in sensitive areas
- Removing rubble, wood piles and other debris.

The law recognises that it is sometimes necessary to carry out work that may affect reptiles or their habitats.

In general English Nature would expect reasonable avoidance to include measures such as altering development layouts to avoid key areas, as well as capture and exclusion of reptiles.

For sand lizards and smooth snakes, licences may be issued for some activities (such as disturbance and capture) that would otherwise be prohibited.

Roman Snail

The roman snail *Helix pomatia* is listed under Annex III of the Bern Convention and Annex V of the EU Habitats Directive. The roman snail population is required to be protected from exploitation and managed to keep it out of danger. This species may be given protection through inclusion on Schedule 5 Section 9 (1) and Section 9 (5) of the Wildlife and Countryside Act during the quinquennial review of the Act. This would protect the species against killing, injuring and taking and sale.

White-clawed Crayfish

White-clawed crayfish *Austropotamobius pallipes* are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), making it an offence to take them from the wild or sell them. They are also protected internationally under Annexes II and V of the European Habitats Directive, are listed in Appendix III of the Bern Convention, and are classified as vulnerable (VU B2bce + 3bcd) on the IUCN Red Data List. In the UK the white-clawed crayfish is a Biodiversity Action Plan (BAP) priority species, both nationally and locally.

Notes for Table 3.2:

•	BAP	Biodiversity Action Plan
•	Bern (II & III)	Bern Convention Annex I & II
•	Bonn (II)	Bonn Convention Annex II
•	CITES(2)	Convention on International Trade in Endangered Species of
		Wild Flora and Fauna Appendix 2
•	RDB	Red Data Book Species
•	RSPB	Royal Society for the Protection of Birds
•	WCA (1.5.6 & 8)	Wildlife and Countryside Act (1981). Schedules 1, 5, 6 & 8.

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Alcedo atthis	Kingfisher	1	SO9419: The Burrows Playing Field (54), Tramway (91).			WCA(1), BAP (not priority), RSPB Amber Listed
Anguis fragilis	Slow Worm	11	SO9223: Hesters Way Infant/Junior Schools (4116), George Readings Open Spaces (19) and Stream Bank (80), Edward Wilson House (79/1075), Warfedale Square (89). SO9422: Honeybourne Way/Chelt Walk (27), Winston Churchill Memorial Gardens (60), Great Western Road (4704), Jessops Avenue/Chelt Walk (30), Jenner Gardens (29), Hanna Court (29), The Promenade Gardens (55), Promenade (150), St Mary's Parish Churchyard (76), Imperial Gardens (28). SO9421: Montpellier Gardens (37), Gloucester Road Open Space (90). SO9221: Benhall Open Space (2), Hatherly (3003), Alma Road (3001), Gloucester Road Open Space (90), Windermere Estate Green Spaces (74). SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9520: Naunton Park (38), Asquith (3002), King William Drive Open Space (32), Charlton Park Open Space (10), Pilley Bridge Nature Reserve. SO9620: Cirencester Road Open Space (12), Grange Tip Open Space (21), Charlton Kings Cemetery (96), The Beeches Playing Field (1), Glenfall Way Highway Verge (68), Lawrence Close Nature Reserve (98). SO9819: Proposed Gateway Park (72). SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34).			WCA(5), Bern(III)
Austropotamobius pallipes	Fresh-water Crayfish	1	SO9820: proposed Gateway Park (72).	Y	Y	WCA(5), Bern(III), EC(IIa)
Boloria euphrosyne	Pearl Bordered Fritillary	2	SO9518, SO9618: Leckhampton Hill (34).		Y	WCA(5)

Table 3.2 Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Bufo bufo	Common Toad	11	SO9523: Pitville Park (42), Pitville Crescent (41), Wellington Square (58), Clarence Square (13), Whaddon Recreation Ground (59). SO9622: Whaddon Recreation Ground (59), Clyde Crescent (14), Land at Oakley Farm (5009), Bouncer's Lane Cemetery (3). SO9721. SO9621: Queen Elizabeth II Playing Field (44), Churchill Drive Play Area (11). SO9321: Hatherly Court Gardens (22), Lansdown Crescent Open Space (33), Hatherly Park (23). SO9121: Golden Valley Open Space (20), Benhall Open Space (2), Grace Gardens Open Space (66), Reddings Road Open Space (45), Reddings Road Allotments (3006). SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9420: The Burrows Playing Field (54). SO9520: Naunton Park (38), Asquith (3002), King William Drive Open Space (32), Charlton Park Open Space (10), Pilley Bridge Nature Reserve. SO9620: Cirencester Road Open Space (12), Grange Tip Open Space (21), Charlton Kings Cemetery (96), The Beeches Playing Field (1), Glenfall Way Highway Verge (68), Lawrence Close Nature Reserve (98). SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34).			WCA(5), Bern(III)
Carduelis cannabina	Linnet	1	SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).	Y		WCA, Bern(II), EC Birds Directive(1), RSPB Red Listed
Cupido minimus	Small Blue	3	SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34). SO9518, SO9618: Leckhampton Hill (34).			WCA(5)
Euphydryas aurinia	Marsh Fritillary	1	SO9518: Leckhampton Hill (34).	Y	Y	Bern(II), WCA(5)

Table 3.2 cont. Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Erinaceus europaeus	Hedgehog	3	SO9121: Golden Valley Open Space (20), Benhall Open Space (2), Grace Gardens Open Space (66), Reddings Road Open Space (45), Reddings Road Allotments (3006). SO9221: Benhall Open Space (2), Hatherly (3003), Alma Road (3001), Gloucester Road Open Space (90), Windermere Estate Green Spaces (74). SO9419: The Burrows Playing Field (54), Tramway (91).			WCA(6), Bern(III)
Falco tinnunculus	Kestrel	3	SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9419: The Burrows Playing Field (54), Tramway (91). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).			Bern(II), Bonn(II), CITES(2), RSPB Amber Listed
Hamearis lucina	Duke of Burgundy Fritillary	3	SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9518, SO9618: Leckhampton Hill (34).			WCA(5)
Helix pomatia	Roman Snail	1	SO9618: Leckhampton Hill (34).			RDB Europe, Bern(III), BAP (not priority)
Hyacinthoides non-scripta	Bluebell	7	SO9222: Monkscroft Estate (84/1148), Pitman Road, 63-89 (1176), Benhall Gardens, 1-29 & Waslet Road, 19-29 (1029), Griffiths Avenue Local Nature Reserve (73), James Court (1108), King George V Playing Field (31), Norfolk Avenue (83), Goucester Road Open Space (90). SO9722: Farmland at Priors (70), Priors Farm Playing Field (43), Bouncer's Lane Cemetery (3). SO9721. SO9120: Maor Farm Open Space (35), Hatherly Green (63), Chargrove Lane Open Space (9). SO9420: The Burrows Playing Field (54). SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9618: Leckhampton Hill (34).			WCA(8), BAP (not priority)

Table 3.2 cont. Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Lacerta vivipara	Viviparous Lizard	4	SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9819: Proposed Gateway Park (72). SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34).			WCA(5), Bern(III)
Limenitis camilla	White Admiral	1	SO9618: Leckhampton Hill (34)			WCA(5)
Mustela putorius	European Polecat	1	SO9524.			WCA(6), Conservation (Natural Habitats etc) Regulations (1994) (3), EC Habitats Directive (Va), and Bern (III).
Myotis sp.	Bats	1	SO9224: River Leys Estate open Spaces (), Land to NW Cheltenham (5004), George Readings Open Spaces (80).	Y	Y	WCA(5&6), Bern(II), Bonn(II), EC Habitats Directive(IV), Conservation Regulations 1994(2) (variable)
Meles meles	Badger	5	Within 1 km of Naunton Park, Cheltenham. SO9021: Chalford Avenue Open Space (8). SO9520: Naunton Park (38), Asquith (3002), King William Drive Open Space (32), Charlton Park Open Space (10), Pilley Bridge Nature Reserve. SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34).			Protection of Badgers Act 1992

Table 3.2 cont. Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Natrix natrix	Grass Snake	7	SO9622: Whaddon Recreation Ground (59), Clyde Crescent (14), Land at Oakley Farm (5009), Bouncer's Lane Cemetery (3). SO9721. SO9621: Queen Elizabeth II Playing Field (44), Churchill Drive Play Area (11). SO9121: Golden Valley Open Space (20), Benhall Open Space (2), Grace Gardens Open Space (66), Reddings Road Open Space (45), Reddings Road Allotments (3006). SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9620: Cirencester Road Open Space (12), Grange Tip Open Space (21), Charlton Kings Cemetery (96), The Beeches Playing Field (1), Glenfall Way Highway Verge (68), Lawrence Close Nature Reserve (98). SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34).			WCA(5), Bern(III)
Pipistrellus pipistrellus	Pipistrelle Bat	2	SO9224: River Leys Estate open Spaces (), Land to NW Cheltenham (5004), George Readings Open Spaces (80). SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34).	Y	Y	WCA(5&6), Bern(III), Bonn(II), EC Habitats Directive(IV), Conservation Regulations 1994(2)
Polyommatus coridon	Chalk Hill Blue	3	SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34). SO9518, SO9618: Leckhampton Hill (34).			WCA(5)
Pyrrhula pyrrhula	Bullfinch	2	SO9423: Honeybourne Line Open Space (26), University of Gloucestershire (4132), Aldridge Close (1002), Midwinter (5001), Elmfield Playing Field (17), Pitville Park (42). SO9420: The Burrows Playing Field (54).	Y		RSPB Red Listed, Birds Directive, Bern(III), WCA.

Table 3.2 cont. Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Rana temporaria	Common Frog	26	SO9221: Benhall Open Space (2), Hatherly (3003), Alma Road (3001), Gloucester Road Open Space (90), Windermere Estate Green Spaces (74). SO9120: Maor Farm Open Space (35), Hatherly Green (63), Chargrove Lane Open Space (9). SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9420: The Burrows Playing Field (54). SO9520: Naunton Park (38), Asquith (3002), King William Drive Open Space (32), Charlton Park Open Space (10), Pilley Bridge Nature Reserve. SO9620: Cirencester Road Open Space (12), Grange Tip Open Space (21), Charlton Kings Cemetery (96), The Beeches Playing Field (1), Glenfall Way Highway Verge (68), Lawrence Close Nature Reserve (98). SO9719: Balcarras Field (75). SO9519: Sandy Lane (50), Daisy Bank Field (95), Leckhampton Hill (34). SO9419: The Burrows Playing Field (54), Tramway (91). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7). SO9325: Home Farm (5006), Land to NW Cheltenham (5004), Zurich Sports Ground (2300), Land at Quat Goose Lane (5005).			WCA (5), Bern (III)
Ranunculus ophioglossifolius	Adder's- tongue Spearwort	1	SO911206 - Badgeworth			WCA(8), Endangered in Great Britain
Ruscus aculeatus	Butcher's Broom	1	SO9121: Golden Valley Open Space (20), Benhall Open Space (2), Grace Gardens Open Space (66), Reddings Road Open Space (45), Reddings Road Allotments (3006).			EC Habitats Directive(V b)
Salvia pratensis	Meadow Clary	2	SO9518, SO9618: Leckhampton Hill (34).			RDB(2), WCA(8), (Vulnerable)

Table 3.2 cont. Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Triturus cristatus	Great Crested Newt	11	SO9325: Home Farm (5006), Land to NW Cheltenham (5004), Zurich Sports Ground (2300), Land at Quat Goose Lane (5005). SO9524. SO9624: Apple Orchard Open Space. SO9723: Bouncer's Lane Cemetery (3). SO9323: St Peter's Playing Field (52), Cheltenham Walk Open Space (52), George Readings Open Space (19) and Stream Bank (80), St Peters Close Open Space (224), St Peters Square (51), Moors Avenue (1150), George Readings Estate/Mary Godwin Court (1097). SO9425: Hyde Lane Open Space. SO9621: Queen Elizabeth II Playing Field (44), Churchill Drive Play Area (11). SO9321: Hatherly Court Gardens (22), Lansdown Crescent Open Space (33), Hatherly Park (23). SO9120: Maor Farm Open Space (35), Hatherly Green (63), Chargrove Lane Open Space (9). SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way	Y	Y	IUCN Red List, Bern (II), EC Habitats Directive (II&IV), WCA, Conservation Regulations 1994 (2).
			Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9719: Balcarras Field (75).			
Turdus philomelos	Song Thrush	1	SO9419: The Burrows Playing Field (54), Tramway (91).	Y	Y	RSPB Red Listed, EC Birds Directive
Turdus pilaris	Fieldfare	1	SO9419: The Burrows Playing Field (54), Tramway (91).			WCA(1)

Table 3.2 cont. Protected Species within Cheltenham Borough (Table continues)

Scientific name	English name	Number of records	Approximate locations	Local BAP	UK BAP	Protection
Triturus helveticus	Palmate Newt	7	SO9524, SO9624: Apple Orchard Open Space. SO9223: Hesters Way Infant/Junior Schools (4116), George Readings Open Spaces (19) and Stream Bank (80), Edward Wilson House (79/1075), Warfedale Square (89). SO9722: Farmland at Priors (70), Priors Farm Playing Field (43), Bouncer's Lane Cemetery (3). SO9621: Queen Elizabeth II Playing Field (44), Churchill Drive Play Area (11). SO9620: Cirencester Road Open Space (12), Grange Tip Open Space (21), Charlton Kings Cemetery (96), The Beeches Playing Field (1), Glenfall Way Highway Verge (68), Lawrence Close Nature Reserve (98). SO9719: Balcarras Field (75).			WCA(5)
Triturus vulgaris	Smooth Newt	19	SO9325: Home Farm (5006), Land to NW Cheltenham (5004), Zurich Sports Ground (2300), Land at Quat Goose Lane (5005). SO9524. SO9624: Apple Orchard Open Space. SO9523: Pitville Park (42), Pitville Crescent (41), Wellington Square (58), Clarence Square (13), Whaddon Recreation Ground (59). SO9323: St Peter's Playing Field (52), Cheltenham Walk Open Space (52), George Readings Open Space (19) and Stream Bank (80), St Peters Close Open Space (224), St Peters Square (51), Moors Avenue (1150), George Readings Estate/Mary Godwin Court (1097).			WCA(5), Bern(III)
Vipera berus	Adder	4	SO9720: Glenfall Way Highway Verge (68), The Beeches Playing Field (1), Balcarras Field (75), Proposed Gateway Park (72). SO9719: Balcarras Field (75). SO9518, SO9618: Leckhampton Hill (34).			WCA(5), Bern(III)

Table 3.2 cont. Protected Species within Cheltenham Borough

Scientific Name	Common Name	Number of records	Approximate Locality	Notable status
Anthus pratensis	Meadow Pipit	1	SO9518: Leckhampton Hill (34).	RSPB Amber Listed
Argynnis paphia	Silver Washed Fritillary	3	SO9520: Naunton Park (38), Asquith (3002), King William Drive Open Space (32), Charlton Park Open Space (10), Pilley Bridge Nature Reserve. SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9618: Leckhampton Hill (34). SO9422: Honeybourne Way/Chelt Walk (27), Winston Churchill Memorial Gardens (60), Great Western Road (4704), Jessops Avenue/Chelt Walk (30), Jenner Gardens (29), Hanna Court (29), The Promenade Gardens (55), Promenade (150), St Mary's Parish Churchyard (76), Imperial Gardens (28)	BAP (not priority), Local
Bembecia ichneumoniformis	Six Belted Clearwing	1	SO9518: Leckhampton Hill (34).	Notable
Carduelis carduelis	Goldfinch	3	SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space (93), Jasmine Way/Justica Way Open Space (7). SO9419: The Burrows Playing Field (54), Tramway (91). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).	RSPB Amber Listed
Carduelis chloris	Greenfinch	3	SO9420: The Burrows Playing Field (54). SO9419: The Burrows Playing Field (54), Tramway (91). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).	RSPB Amber Listed
Cheilosia soror	Hoverfly	1	SO9721.	Notable
Delichon urbica	House Martin	2	Park Open Space (7).	RSPB Amber Listed
Dendrocopos major	Greater Spotted Woodpecker	3	SO9420: The Burrows Playing Field (54). SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).	Notable
Epistrophe diaphana	Hoverfly	1	SO9721.	Notable

Table 3.3 Notable Species within Cheltenham Borough

Scientific Name Common Name		Number of records	Approximate Locality	Notable status
Herminium monorchis	Musk Orchid	2	SO9518, SO9618: Leckhampton Hill (34).	Nationally Scarce
Larus argentatus	Herring Gull	1	SO9419: The Burrows Playing Field (54), Tramway (91).	RSPB Amber Listed
Locustella naevia	Grasshopper Warbler	1	SO9518: Leckhampton Hill (34).	RSPB Red Listed
Phylloscopus trochilus	Willow Warbler	1	SO9419: The Burrows Playing Field (54), Tramway (91).	RSPB Amber Listed
Picus viridis	Green Woodpecker	4	SO9420: The Burrows Playing Field (54). SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9419: The Burrows Playing Field (54), Tramway (91). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).	RSPB Amber Listed
Populus nigra ssp. betulifolia	Black Poplar	3	SO9124: Land at Old Gloucester Road (5007). SO9322: clevedon square (1052/78), Honeybourne Line Open Space (26). SO9021: Chalford Avenue Open Space (8).	BAP (not priority)
Prunella modularis	Dunnock SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Can Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Sp (93), Jasmine Way/Justica Way Open Space (7).		SO9320: Salisbury Avenue Recreation Ground (48), Kingham Line (97), Campion Park Open Space (7), Rowena Cade Open Space (47), Billings Way Open Space	RSPB Amber Listed
Strix aluco	Tawny Owl	2	SO9619: Little Herbets Nature Reserve (92), The Beeches Playing Field (1). SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion Park Open Space (7).	BAP (not priority)
Synanthedon andrenaeformis Synanthedon tipuliformis	Orange Tailed Clearwing Currant Clearwing	1 1	SO9518: Leckhampton Hill (34). SO9520: Naunton Park (38), Asquith (3002), King William Drive Open Space (32), Charlton Park Open Space (10), Pilley Bridge Nature Reserve.	Notable Notable

Table 3.3 cont. Notable Species within Cheltenham Borough

Scientific Name	Common Name	Number of records	Approximate Locality	Notable status
Turdus iliacus	Redwing	4	SO9423: Honeybourne Line Open Space (26), university of Gloucestershire (4132), Aldridge Close (1002), Midwinter (5001), Elmfield Playing Field (17),	RSPB Amber Listed
			Pitville Park (42).	Eisted
			SO9521: Sandford Park (49), Oxford & Priory Street Gardens (62), Cox's Meadow	7
			Open Space (15), Murvagh Open Space (64), Charlton Park Open Space (10).	
			SO9419: The Burrows Playing Field (54), Tramway (91).	
			SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion	
			Park Open Space (7).	
Turdus pilaris	Fieldfare	1	SO9319: Brizen Lane Open Space (77), Brizen Farm Playing Field (4), Campion	RSPB Amber
			Park Open Space (7).	Listed
Volucella inflata	Hoverfly	1	SO9721.	Notable
Xylota xanthocnema	Hoverfly	1	SO9721.	Notable

Table 3.3 cont. Notable Species within Cheltenham Borough

Scientific Name	Common Name	Notable status
Anacamptis pyramidalis	Pyramidal Orchid	CITES2
Carex vulpina	True Fox Sedge	UK & LBAP
Centaurea cyanus	Cornflower	L BAP, UK BAP
Cephalanthera damasonium	White Helleborine	CITES2
Cephalanthera rubra	Red Helleborine	WCA(8), CITES2
Coeloglossum viride	Frog Orchid	CITES2
Cynoglossum germanicum	Green Hounds-tongue	WCA(8)
Dactylorhiza maculata	Heath Spotted-orchid	CITES2
Dactyloriza fuchsii	Common Spotted Orchid	CITES2
Dactyloriza incarnata	Early March-orchid	CITES2
Dianthus armeria	Deptford pink	WCA(8),UK BAP
Epipactis helleborine	Broad-leaved Helleborine	CITES2
Epipactis leptochila	Narrow-lipped Helleborine	CITES2
Epipactis phyllanthes	Green-flowered Helleborine	CITES2
Galeopsis angustifolia	Red Hemp-nettle	L BAP, UK BAP
Gymnadenia conopsea	Fragrant Orchid	CITES2
Herminium monorchis	Musk Orchid	CITES2
Himantoglossum hircinum	Lizard Orchid	WCA(8), CITES2
Huperzia selago	Fir Clubmoss	ECH(5)
Hyacinthoides non-scripta	Bluebell	WCA(8)
Juniperus communis	Common Juniper	L BAP, UK BAP
Mentha pulegium	Pennyroyal	WCA(8), UK BAP
Neottia nidus-avis	Bird's-nest Orchid	CITES2
Ophrys insectifera	Fly Orchid	CITES2
Ophyrus apifera	Bee Orchid	CITES2
Orchis mascula	Early-purple Orchid	CITES2
Orchis morio	Green-winged Orchid	CITES2
Orchis ustulata	Burnt Orchid	CITES2
Ranunculus ophioglossifolius	Adder's-tongue Spearwort	WCA(8)
Ranunculus triparitus		UK BAP
Rhinanthus angustifolius	Greater Yellow-rattle	WCA(8)
Salvia pratensis	Meadow Clary	WCA(8)
Scandix pecten-veneris	Shepherd's-needle	L BAP, UK BAP
Sium latifolium	Greater Water-parsnip	UK BAP
Spiranthes spiralis	Autumn Lady's-tresses	CITES2
Thlaspi perfoliatum	Perfoliate Penny-cress	WCA(8), L BAP, UK BAP
Valerianella rimosa	Broad-fruited Corn Salad	L BAP, UK BAP

Table 3.4 Historically Recorded Protected Plant Species Within Postal Districts $\operatorname{GL}50\text{-}53$

4. EXTENDED PHASE 1 HABITAT SURVEY

4.1 Introduction

The results of the Extended Phase 1 Habitat Survey are presented in Sections 4.2 to 4.10. An overview of the habitats of the entire Borough is provided on Extended Phase 1 Habitat Survey Drawings (Middlemarch Environmental Ltd Drawing Number RTMME-3879-01 to C3879-11 in Appendix 3. These drawings illustrate the location of all the habitat types recorded at the site assessed as part of the biodiversity audit. Detailed spatial habitat data for each site assessed is provided in digital format (ArcView files). Brief description of each of these sites is provided in Appendix 4 with the main species noted provide din Appendix 5.

Amenity grassland with scattered trees is the dominant habitat across the Borough, particularly within the urban areas. Agricultural habitats, notably improved grassland and species-poor hedgerows dominate the periphery of the Borough. Habitats of high ecological value, such as semi-natural woodland and running water, occur sporadically throughout the Borough.

Table 4.1 presents the habitat types recorded during the biodiversity audit field surveys; overall 52 different habitat types were recorded, 19 of which were mosaic habitats of at least two other habitats. Sections 4.2 to 4.10 provide details of each open space category of the sites surveyed. Table 4.1 summarises the habitats found in each open space category.

Phase 1 Habitat	Code	ode CBC Open Space Category								
		Allotments	Cemetery/ Churchyard	Green corridor		Local nature		Parks & gardens	Playing fields	Potential development sites
Woodland & Scrub										
Woodland Broadleaved Semi-natural	A111			✓	✓	✓	✓	✓	✓	✓
Woodland Broadleaved Plantation	A112						✓		✓	
Woodland Coniferous Plantation	A122					✓				
Scrub Dense/continuous	A21			✓	✓	✓	✓	✓	✓	✓
Scrub Scattered	A22				✓	✓			✓	✓
Parkland/scattered trees Broadleaved	A31	✓	✓		✓	✓	✓	✓	✓	✓
Parkland/scattered trees Coniferous	A32		✓							
Parkland/scattered trees Mixed	A33			✓						
Grassland & Marsh										
Neutral grassland Semi-improved	B22		✓	✓	✓					
Calcareous grassland Unimproved	B31					✓				
Improved grassland	B4						✓			✓
Poor semi-improved grassland	В6		✓	✓	✓		✓		✓	✓
Tall herb & Fern										
Tall ruderal	C31			✓	✓	✓	✓		✓	✓
Swamp, Marginal & Inundation										
Swamp	F1				✓				✓	
Marginal/inundation Marginal	F21							✓		
Open Water										
Standing water	G1				✓			✓		
Running water	G2		✓	✓	✓		✓			✓

Table 4.1 Habitats Recorded in Each Open Space Category (Table continues)

Phase 1 Habitat	Code	e CBC Open Space Category								
		Allotments	Cemetery/ Churchyard	Green corridor		Local nature		Parks & gardens	Playing fields	Potential development sites
Rock Exposures & Waste										
Natural inland cliff Basic	I112					✓				
Other exposure Basic	I142					✓				
Miscellaneous										
Cultivated/disturbed land Arable	J11									✓
Cultivated/disturbed land Amenity grassland	J12		✓	✓	√		√	✓	✓	√
Cultivated/disturbed land Introduced shrub	J14		✓		√			✓	✓	✓
Hedges Intact Species-rich	J211						✓			
Hedges Intact Species-poor	J212		✓		✓			✓		✓
Hedges Defunct Species-poor	J222	✓				✓	✓			✓
Hedges with trees Species-poor	J232						✓			✓
Fence	J24	✓					✓			✓
Wall	J25									✓
Dry ditch	J26									✓
Built-up Buildings	J36	✓						✓	✓	✓
Bare ground	J4	✓	✓	✓		✓		✓	✓	✓
Other habitat	J5	✓		✓				✓	✓	✓
TOTAL NUMBER OF HABITATS		6	9	10	13	11	13	11	13	20

Table 4.1 cont. Habitats Recorded in Each Open Space Category

4.2 ALLOTMENTS

The allotment sites are dominated by cultivated and fallow plots with the occasional shed and mature tree. Tree-lined watercourses bordered some sites.

The majority of the sites are located in the south and west of the Borough.

4.3 CEMETERY OR CHURCHYARD

The cemetery and churchyard sites are dominated by amenity grassland and scattered trees.

The cemeteries and churchyards are located in the west and central regions of the Borough.

4.4 GREEN CORRIDOR

The Green Corridor sites are linear features dominated by scrub, woodland and grassland habitats. Some of the sites are also associated with running water.

The sites are generally located within the centre of the Borough with the main site following a railway line.

4.5 GREEN OPEN SPACE

The Green Open Space sites are dominated by Amenity grass with other habitats generally being scattered and small in spatial extent.

The sites occur throughout the Borough, although there is a concentration in the west.

4.6 LOCAL NATURE RESERVE (INCLUDING PROPOSED)

The Local Nature Reserves have a range of habitats and species. The key habitats are unimproved calcareous grassland and semi-natural broadleaved woodland. Several of the sites connect to other areas of open space providing valuable wildlife links across the Borough. Other Local Nature Reserve Sites are isolated areas of semi-natural

habitat within a dense urban area. Such sites are equally valuable to wildlife in providing a refuge in a built-up urban environment.

The sites are generally located in the south of the Borough.

4.7 NATURAL GREEN SPACE

The Natural Green Space sites are dominated by grassland habitats with pockets of scrub and woodland.

The sites are located at the east and west periphery of the Borough.

4.8 PARKS & GARDENS

Amenity grassland, introduced shrub, scattered trees and amenity planting such as annual flowerbeds dominate the Parks and Gardens.

The sites are generally located in the centre of the Borough and the southwest.

4.9 PLAYING FIELDS

The Playing Field sites are dominated amenity grassland. Other habitats include hedgerows, scattered tees and scrub. The hedgerows are of particular value as wildlife corridors. The scrub and scattered trees provide valuable nesting sites for birds.

The sites occur throughout the Borough.

4.10 POTENTIAL DEVELOPMENT SITES

The potential development sites are dominated by agricultural land. The key habitats are improved grassland and species-poor hedgerows. There are scattered pockets of more diverse habitats, such as semi-natural woodland and tree lined watercourses, which could be considered as ecological 'hot-spots' within a species poor landscape.

The sites are generally located at the periphery of the Borough, particularly in the north and west.

5. BIODIVERSITY QUALITY OF SITES ASSESSED

This section provides a summary of the biodiversity quality of each of the open space sites assessed as part of this biodiversity audit. The values are relative for this project and Cheltenham Borough and are not necessarily comparable to other ecological values given to other sites in other parts of the country or for other ecological projects.

5.1 SPECIES

The desk study identified 31 protected species within the Borough. These species are summarised in Tables 5.1 and 5.2. The field survey identified potential presence and/or suitable habitat of several protected species. Table 5.1 summarises the species that:

- Have historic records of occurring with Cheltenham Borough (desk study data)
- Were recorded during the field surveys (2006)
- Have the potential to occur within sites assessed as part of the biodiversity audit.

Table 5.2 summarises plants that have historically been recorded in the region, and that may occur on habitats identified during the surveys.

Scientific Name	English Name	Identified via Desk/Field	Local	National	Key Associated Habitats			
		Study	BAP	BAP	Occurring on site ⁺			
Alcedo atthis	Kingfisher	Desk			G2			
Anguis fragilis	Slow Worm	Desk			B31, B6			
Austropotamobius	Fresh-water	Desk	Y	Y	G1, G2			
pallipes	Crayfish							
Boloria	Pearl Bordered	Desk		Y	A111, J5			
euphrosyne	Fritillary							
Bufo bufo	Common Toad	Desk			G1, G2 (BREEDING)			
Carduelis	Linnet	Desk	Y		A21, J11, J211, J212, J232,			
cannabina					J5			
Cupido minimus	Small Blue	Desk			B31			
Euphydryas	Marsh Fritillary	Desk	Y	Y	F1, B31			
aurinia								
Notes * indicates that there is potential for the species to occur.								
*Habitat cod	es are defined in Table :	5.3.						

Table 5.1 Protected and BAP Species Identified by the Desk Study and/or Field Survey Likely to Occur within Sites in Cheltenham Borough (Table continues)

Erinaceus europaeus	Scientific Name	English Name	Identified via Desk/Field Study*	Local BAP	National BAP	Key Associated Habitats Occurring on site ⁺
Falco timunculus Falco timunculus Falco timunculus Duke of Burgundy Fritillary Helix pomatia Roman Snail Hyacinthoides non-scripta Lacerta vivipara Lizard Limenitis camilla Mustela putorius Polecat Myotis sp. Bats Desk Pipistrellus Pipistrellus Pipistrellus Polyommatus Coridon Pyrrhula Roman Snail Desk Desk Desk Desk Desk Desk Desk Desk	Erinaceus	Hedgehog				A111, A112, A21, J11,
Falco timunculus Hamearis lucina Duke of Duke of Burgundy Fritillary Helix pomatia Roman Snail Desk De						J211, J212, J222, J232, J5
Burgundy Fritillary Roman Snail Desk. Field	Falco tinnunculus	Kestrel	Desk			J11
Fritillary Roman Snail Desk Field Roman Snail Desk Roman Snail Roman Snail Desk Roman Snail Ro	Hamearis lucina	Duke of	Desk			A111, B31
Fritillary Roman Snail Desk Field Roman Snail Desk Roman Snail Roman Snail Desk Roman Snail Ro		Burgundy				
Hyacinthoides non-scripta Desk						
non-scripta Lacerta vivipara Viviparous Lizard Limenitis camilla White Admiral Desk Mustela putorius European Polecat Desk Meles meles Badger Desk. Field Myotis sp. Bats Desk Y Natrix natrix Grass Snake Desk Y Y Pipistrellus pipistrellus Pipistrelle Bat pipistrellus Desk Y Y Y Polyommatus coridon Chalk Hill Blue Desk Desk Y Y Y Y Pyrrhula pyrrhula pyrrhula Bullfinch Desk Y Y Y Y Y Y Y Y P <	Helix pomatia	Roman Snail	Desk. Field			B31
Lacerta vivipara Viviparous Lizard Desk Limenitis camilla White Admiral Desk Mustela putorius European Polecat Desk Meles meles Badger Desk. Field Myotis sp. Bats Desk Y Natrix natrix Grass Snake Desk Y Pipistrellus Pipistrelle Bat Desk Y Polyommatus Chalk Hill Blue Desk Y coridon Chalk Hill Blue Desk Y Pyrrhula pyrrhula Bullfinch Desk Y Pyrrhula pyrrhula Common Frog Desk F Ranunculus ophioglossifolius Adder's-tongue Spearwort Desk F Ruscus aculeatus Butcher's Broom Broom Broom Salvia pratensis Meadow Clary Desk Y Y Triturus cristatus Great Crested Newt Desk Y Y Turdus pilaris Fieldfare Desk Y Y Triturus vulgaris Smooth Newt Desk Desk	Hyacinthoides	Bluebell	Desk			A111
Lizard Limenitis camilla White Admiral Desk Mustela putorius Polecat Badger Desk. Field Myotis sp. Bats Desk Pipistrellus Pipistrellus Polyommatus coridon Pyrrhula Rana temporaria Ranuculus Ophioglossifolius Spearwort Butcher's Broom Salvia pratensis Triturus cristatus Fieldfare Desk Lizard White Admiral Desk Desk Polsk	non-scripta					
Limenitis camilla White Admiral Desk Mustela putorius European Polecat Desk Meles meles Badger Desk. Field Myotis sp. Bats Desk Y Y Natrix natrix Grass Snake Desk Y Y Y Pipistrellus Pipistrelle Bat Desk Y Y Y Polyommatus coridon Chalk Hill Blue Desk Y Y Pyrrhula pyrrhula Bullfinch Desk Y P Ranunculus ophioglossifolius ophioglossifolius Spearwort Desk Desk B Ruscus aculeatus ophioglossifolius	Lacerta vivipara	*	Desk			A111, F1, J5
Mustela putorius European Polecat Desk Meles meles Badger Desk. Field Myotis sp. Bats Desk Y Y Natrix natrix Grass Snake Desk Y Y A Pipistrellus pipistrellus Pipistrelle Bat pipistrellus Desk Y Y A Polyommatus coridon Chalk Hill Blue coridon Desk Y Y A A Pyrrhula pyrrhula Bullfinch Desk Y Y A A A A A A A A A A A A A A A A						
Polecat Badger Desk. Field			Desk			A111, A112
Myotis sp. Bats Desk Y Y Pipistrellus Pipistrellus Polyommatus coridon Pyrrhula Pyrrhula Rana temporaria Common Frog Spearwort Ruscus aculeatus Broom Salvia pratensis Meadow Clary Triturus cristatus Fieldfare Desk Y Y Y Y Y Y Y Y Y Y Y Y Y	Mustela putorius		Desk			A111, A112, A122
Natrix natrix Grass Snake Desk Pipistrellus Polyommatus coridon Pyrrhula pyrrhula Rana temporaria Common Frog Desk Ranunculus ophioglossifolius Spearwort Butcher's Broom Salvia pratensis Meadow Clary Triturus cristatus Fieldfare Desk Triturus Polyommatus Chalk Hill Blue Desk Y Y Y Adder's-tongue Spearwort Desk Broom Salvia pratensis Meadow Clary Desk Triturus cristatus Fieldfare Desk Triturus Palmate Newt Desk Triturus vulgaris Smooth Newt Desk Triturus vulgaris Smooth Newt Desk	Meles meles	Badger	Desk. Field			A111, A112, A21, J211, J212, J222, J232
Natrix natrix Grass Snake Desk F Pipistrellus Pipistrelle Bat pipistrelle Bat pipistrellus Desk Y	Myotis sp.	Bats	Desk	Y	Y	A111, A112, A122, A31,
Pipistrellus Pipistrellus Polyommatus coridon Pyrrhula Polyrrhula Rana temporaria Common Frog Desk Ranunculus ophioglossifolius Butcher's Broom Salvia pratensis Meadow Clary Triturus cristatus Fieldfare Desk Pyrhush Posk Posk Posk Posk Posk Posk Pripistrellus Posk Posk Posk Posk Posk Posk Posk Pos						A33, G1, G2, J211, J212, J232
Polyommatus coridon Pyrrhula Bullfinch Desk Y Pyrrhula Rana temporaria Common Frog Desk Field Y Ranunculus ophioglossifolius Spearwort Ruscus aculeatus Butcher's Desk Broom Salvia pratensis Meadow Clary Desk Y Triturus cristatus Great Crested Newt Philomelos Turdus pilaris Fieldfare Desk Palmate Newt Pelmate Ne	Natrix natrix	Grass Snake	Desk			F1, G1, G2, A111, A112, B31, B6, J5
Polyommatus coridon Pyrrhula Pyrrhula Rana temporaria Common Frog Desk Ranunculus ophioglossifolius Spearwort Ruscus aculeatus Butcher's Broom Salvia pratensis Meadow Clary Triturus cristatus Turdus philomelos Triturus Palmate Newt helveticus Triturus vulgaris Chalk Hill Blue Desk Y Y Y Phyrrhula Desk Y Y Y Y Y Y Y Turdus Palmate Newt Desk Triturus vulgaris Smooth Newt Desk A Y Y Phyrrhula Pusk Y Y Y Y Phyrrhula Pusk Pusk Pusk Pusk Pusk Pusk Pusk	*	Pipistrelle Bat	Desk	Y	Y	A111, A112, A122, A31, A33, G1, G2, J211, J212,
coridon Pyrrhula Bullfinch Desk Y Pyrrhula Bullfinch Desk Y Rana temporaria Common Frog Desk F Ranunculus ophioglossifolius Adder's-tongue Spearwort Desk Spearwort Ruscus aculeatus Butcher's Broom Desk Y Y Salvia pratensis Meadow Clary Desk Y Y Triturus cristatus Great Crested Newt Desk Y Y Turdus philomelos Fieldfare Desk F Triturus pilaris Fieldfare Desk F Triturus vulgaris Smooth Newt Desk F	pipisii ciius					J232, J36
Rana temporaria Common Frog Desk Ranunculus Adder's-tongue Ophioglossifolius Spearwort Ruscus aculeatus Butcher's Broom Salvia pratensis Meadow Clary Desk Triturus cristatus Great Crested Newt Turdus Philomelos Turdus pilaris Fieldfare Desk Triturus vulgaris Smooth Newt Desk Triturus vulgaris Smooth Newt Desk Fieldfare Desk Fieldfare Desk Fieldfare Desk		Chalk Hill Blue	Desk			B31
Rana temporaria Common Frog Desk Ranunculus ophioglossifolius Adder's-tongue Spearwort Desk Ruscus aculeatus Butcher's Broom Desk Salvia pratensis Meadow Clary Desk Triturus cristatus Great Crested Desk Y Newt Y Y Turdus philomelos Fieldfare Desk Triturus pilaris Fieldfare Desk Triturus vulgaris Smooth Newt Desk		Bullfinch	Desk	Y		A111, J211, J222, J5
ophioglossifolius Spearwort Ruscus aculeatus Butcher's Broom Salvia pratensis Meadow Clary Triturus cristatus Great Crested Newt Newt Desk Turdus philomelos Song Thrush Desk. Field Turdus pilaris Fieldfare Desk A Triturus Palmate Newt Desk Triturus vulgaris Smooth Newt Desk		Common Frog	Desk			F1, G1, G2, B6, B4, B22, B31, J12, A111, A112
Ruscus aculeatus Butcher's Broom Desk Salvia pratensis Meadow Clary Desk Triturus cristatus Great Crested Newt Desk Y Y Turdus philomelos Song Thrush Desk. Field Y Y Turdus pilaris Fieldfare Desk A Triturus Palmate Newt Desk A Triturus vulgaris Smooth Newt Desk A			Desk			F1, G1
Triturus cristatus Great Crested Newt Newt Song Thrush Desk. Field Y Y Y Turdus pilaris Fieldfare Desk Triturus Palmate Newt Desk Triturus vulgaris Smooth Newt Desk			Desk			J14
Newt Turdus Philomelos Turdus pilaris Fieldfare Desk Desk Fieldfare Desk Triturus Palmate Newt Desk Triturus vulgaris Smooth Newt Desk	Salvia pratensis	Meadow Clary	Desk			B31
philomelos Turdus pilaris Fieldfare Desk Triturus Palmate Newt helveticus Desk Triturus vulgaris Smooth Newt Desk	Triturus cristatus		Desk	Y	Y	G1 (BREEDING)
Turdus pilaris Fieldfare Desk Triturus Palmate Newt Desk helveticus Intriturus vulgaris Smooth Newt Desk Intriturus vulgaris		Song Thrush	Desk. Field	Y	Y	A111, A31, A33,J211, J212,J232
helveticus Lead of the control of the con		Fieldfare	Desk			A111, A112, A122, J211, J212, J222, J232, J5
Triturus vulgaris Smooth Newt Desk		Palmate Newt	Desk			G1 (BREEDING)
· · ·		Smooth Newt	Desk			G1 (BREEDING)
Vipera berus Adder Desk			Desk			A111
Notes * indicates that there is potential for the species to occur.					1	

Table 5.1 cont. Protected and BAP Species Identified by the Desk Study and/or Field Survey Likely to Occur within Sites in Cheltenham Borough (Table continues)

Scientific Name	English Name	Identified via Desk/Field	Local	National	Key Associated Habitats
	8	Study*	BAP	BAP	Occurring on site ⁺
Anacamptis	Pyramidal	Desk. Field			B31
pyramidalis	Orchid				
Cephalanthera	White	Desk. Field			A111
damasonium	Helleborine				
Carex vulpina	True Fox Sedge	Desk	Y	Y	B22, B6 (Damp)
Cephalanthera	Red	Desk.		-	A111 (Beech only)
rubra	Helleborine	Besk.			Titti (Beech only)
Coeloglossum	Frog Orchid	Desk			B31
viride	110g Orema	Besk			B 31
Cynoglossum	Green Hounds-	Desk			A111, J211
germanicum	tongue	Desk			A111, J211
Dactyloriza	Early Marsh-	Desk			F1
incarnata	orchid	Desk			1.1
	Common	Desk. Field			B31
Dactyloriza	Spotted Orchid	Desk. Fleid			D31
fuchsii		D. J.		Y	D.C
Dianthus armeria	Deptford pink	Desk		Y	B6
Epipactis	Broad-leaved	Desk. Field			A111, A112
helleborine	Helleborine	-			
Epipactis	Narrow-lipped	Desk			A111, B22
leptochila	Helleborine				
Epipactis	Green-flowered	Desk			A111, B22
phyllanthes	Helleborine				
Gymnadenia	Fragrant Orchid	Desk			B22
conopsea					
Herminium	Musk Orchid	Desk			B22
monorchis					
Himantoglossum	Lizard Orchid	Desk			B22
hircinum					
Neottia nidus-avis	Bird's-nest	Desk. Field			A111 (Beech)
	Orchid				
Ophrys	Fly Orchid	Desk			B22
insectifera					
Ophyrus apifera	Bee Orchid	Desk			B22
Orchis mascula	Early-purple	Desk. Field			A111, J211, B22, B6
	Orchid				, , ,
Orchis morio	Green-winged	Desk			B22, B6
	Orchid				7 *
Orchis ustulata	Burnt Orchid	Desk			B22
Ranunculus	Three-lobed	Desk		Y	G1
triparitus	water-crowfoot				
Salvia pratensis	Meadow Clary	Desk			B22
Spiranthes	Autumn	Desk			B6, B22
spiralis	Lady's-tresses	DOM			D 0, D 22
Vaterianella	Broad-fruited	Desk	Y		B31/J11
rimosa	Corn Salad	DOSK	1		D31/J11
	nat there is potential for	the species to occur		1	
	les are defined in Table				

Table 5.2 Historically Recorded Protected and BAP Plant Species Likely to Occur within Sites in Cheltenham Borough

5.2 Habitats

Middlemarch Environmental Drawing Number C3879-12 (Appendix 5) illustrates the sites in relation to their value to act as an existing or potential wildlife corridor. In summary all watercourses have the potential to act as a corridor for a variety for species including otter and kingfisher. However their value is greatly reduced where the watercourse is culverted over extensive sections or passes through densely urbanised areas with minimal buffer zones of natural habitat. Many of the watercourses assessed during this biodiversity audit were tree lined, increasing their value as a wildlife corridor for many species. However, as a result of the trees the watercourses were also often heavily shaded which reduces their value as water vole habitat.

Hedgerows are also of high value as wildlife corridors, connecting a range of other habitats. These generally occur at the periphery of the sites, with high concentrations within the agricultural land at the periphery of the Borough.

Some of the sites are linear in nature, following roads or railways and as such also act as valuable wildlife corridors connecting other areas of semi-natural open space.

Table 5.3 summarises the habitats recorded across the Borough in relation to Local (Gloucestershire) and National BAPs.

Phase 1 habitat	Code	Local BAP	National BAP							
Woodland Broadleaved Semi-	A111	Woodlands	Lowland beech and yew woodland;							
natural			Broadleaved, mixed and yew							
			woodland; wet woodland							
Woodland Broadleaved	A112	Woodlands	Broadleaved, mixed and yew woodland							
Plantation										
Woodland Coniferous	A122	Woodlands	Coniferous woodland							
Plantation										
Scrub Dense/continuous	A21									
Scrub Scattered	A22									
Parkland/scattered trees	A31	Woodpasture, parkland and	Lowland wood-pasture and parkland							
Broadleaved		veteran trees								
Parkland/scattered trees Conifer	A32	Woodpasture, parkland and								
		veteran trees								
Notes. Bold indicates a priority habita	t, underli	otes. Bold indicates a priority habitat, <u>underlined indicates Broad Habitat</u>								

Table 5.3 Habitats recorded within the site in relation to Local & National BAP (Table continues)

Phase 1 habitat	Code	Local BAP	National BAP
Parkland/scattered trees Mixed	A33	Woodpasture, parkland and veteran trees	Lowland wood-pasture and parkland
Neutral grassland Semi- improved	B22	Unimproved neutral grassland	Lowland meadows; <u>improved</u> grassland; neutral grassland
Calcareous grassland	B31	Unimproved limestone	Lowland calcareous grassland;
Unimproved		grassland	<u>calcareous grassland</u>
Improved grassland	B4		Improved grassland
Poor semi-improved grassland	В6	Unimproved neutral grassland	Improved grassland; lowland meadows
Tall ruderal	C31		
Swamp	F1	Reedbeds; lowland wet grassland	Reedbeds; fen, marsh and swamp
Standing water	G1	Standing open waters; canals	Aquifer fed naturally fluctuating water bodies; eutrophic standing waters; mesotrophic lakes; standing open water and canals
Running water	G2	Rivers and streams	Chalk river; Rivers and streams
Other exposure Basic	I142		
Cultivated/disturbed land Arable	J11	Cereal field margins	Cereal field margins; arable and horticulture
Amenity grassland	J12	Urban habitats	Built up areas and gardens
Introduced shrub	J14	Urban habitats	Built up areas and gardens
Hedges Intact Species-rich	J211	Species rich and/or ancient hedgerows	Species rich and/or ancient hedgerows;
Hedges Intact Species-poor	J212	-	
Hedges Defunct Species-poor	J222		
Hedges with trees Species-poor	J232		
Fence	J24		
Dry ditch	J26		Boundary and linear features
Built-up/buildings	J36	Urban habitats	Built up areas and gardens; urban
Bare ground	J4		
Other – allotments	J5		Arable and horticulture; built up areas and gardens
Other – Orchard	J5	Old orchards	Arable and horticulture
Other – mosaic habitats	J5		
Notes. Bold indicates a priority habita	, <u>underl</u>	I ined indicates Broad Habitat	1

Table 5.3 cont. Habitats recorded within the site in relation to Local & National BAP

5.3 BIODIVERSITY VALUE

Table 5.4 summarises the overall biodiversity values of the individual habitats recorded across the Borough at habitat, local and national scales. Overall the habitats range from low to high biodiversity value.

Phase 1 Habitat	Code	Habitat value	Local value	National value
Woodland Broadleaved Semi- natural	A111	High	High	High
Woodland Broadleaved Plantation	A112	Moderate - high	High	High
Woodland Coniferous Plantation	A122	Moderate	Low	High
Scrub Dense/continuous	A21	Moderate	Low	High if with broadleaf woodland, otherwise Low
Scrub Scattered	A22	Moderate	Low	High if with purple moor grass rush pasture otherwise low
Parkland/scattered trees Broadleaved	A31	Moderate - high	High	High
Parkland/scattered trees Conifer	A32	Low-Moderate	Moderate	Moderate
Parkland/scattered trees Mixed	A33	Moderate - high	High	High
Neutral grassland Semi- improved	B22	Moderate - high	High	High
Calcareous grassland Unimproved	B31	High	Moderate	High
Improved grassland	B4	Low	High	Moderate
Poor semi-improved grassland	В6	Low - moderate	High	Moderate
Tall ruderal	C31	Low	Low	Low
Swamp	F1	High	High	High
Standing water	G1	High - Moderate	High	High if aquifer fed naturally fluctuating water body, otherwise Moderate
Running water	G2	High - Moderate	Moderate	High if a chalk river, otherwise Moderate
Other exposure Basic	I142	High	Moderate	Low
Cultivated/disturbed land Arable	J11	Low - moderate	High	High if has good field margins, Otherwise Moderate
Amenity grassland	J12	Low	Low	Moderate
Introduced shrub	J14	Moderate	Low	Low
Hedges Intact Species-rich	J211	High	High	High

Table 5.4 Biodiversity Value of Habitats Identified Within Cheltenham Borough (Table continues)

Phase 1 Habitat	Code	Habitat value	Local value	National value
Hedges Intact Species-poor	J212	Moderate	High	High if ancient, otherwise Moderate
Hedges Defunct Species-poor	J222	Moderate	High	High if ancient, otherwise Moderate
Hedges with trees Species-poor	J232	Moderate - high	High	High if ancient, otherwise Moderate
Fence	J24	Low	Low	Low
Dry ditch	J26	Moderate	Low	Low
Built-up/buildings	J36	Low - high	Low	Moderate
Bare ground	J4	Low	Low	Low
Other – allotments	J5	Moderate	Low	Moderate
Other – Orchard	J5	High	Moderate	Moderate
Other – mosaic habitats	J5	High	Low	Moderate

Table 5.4 cont. Biodiversity Value of Habitats Identified Within Cheltenham Borough

Table 5.5 groups each site surveyed within each open space category according to biodiversity quality. Middlemarch Drawing number C3879-13 (Appendix 6) illustrates the distribution of each Biodiversity quality category across the Borough. Generally sites with a greater range of habitats and more notable species and habitats, such as National and Local Biodiversity Action Plan Priority species/habitat and habitats with a greater biodiversity value, have been given a higher biodiversity quality rating. The presence of any water bodies at a site (e.g. rivers, ponds, wet ditches etc.) also contributed to a relatively higher biodiversity as a result of the aquatic and marginal plants within and around the water and the faunal species often associated with these habitats. Sections 5.3.1 to 5.3.9 summarise the biodiversity values for each open space category.

5.3.1 Allotments

The overall biodiversity quality of these sites has been categorised as 'B' on account of their generally small size and low diversity in terms of native species. However, allotments often provide suitable habitat for species such as slow-worm.

5.3.2 Cemetery or Churchyard

The overall biodiversity quality of these sites has been categorised as 'C' on account of their generally small size and low diversity of habitats. However, as a result of the generally low intensity use by man, such sites often provide valuable wildlife refuges. Such sites are likely to be of particular value to a variety of nesting birds.

5.3.3 Green corridor

The overall biodiversity quality of these sites has been categorised as 'B/B+' on account of their value as dispersing routes for a variety of species and the range of habitats occurring across the sites. They also provide linkages to other areas of seminatural open space across the Borough. The sites with running water are of particular value to species such as otter and water vole. However, discontinuities in such habitats such as culverts and canalised sections may deter such species and reduce the value of the site.

5.3.4 Green open space

The overall biodiversity quality of these sites has been categorised as 'C' on account of the dominance of low habitat diversity dominating the sites. Although a relatively high range of habitats were recorded across these sites, the majority of the habitats of higher ecological value were only small isolated pockets within habitats of lower ecological value. The high usage by the public is also likely to deter some species. However, such sites are likely to be of particular value to a variety of nesting birds.

5.3.5 Local nature reserve

The overall biodiversity quality of these sites has been categorised as 'A' on account of their generally high diversity of habitats and flora. Although the range of habitats occurring in these sites is lower than some of the other open space categories, the species diversity was much greater.

5.3.6 Natural green space

The overall biodiversity quality of these sites has been categorised as 'B' on account of the generally low existing biodiversity value. However, the sites do include features of high ecological value such as old oaks which have the potential to be

become future veteran trees. The grassland and woodland habitats are of particular value to nesting birds, including ground-nesting birds if use by the public is low.

5.3.7 Parks & gardens

The overall biodiversity quality of these sites has been categorised as 'C' on account of the high dominance of amenity grassland and generally small spatial extent. However, the introduced shrub and scattered trees are of particular value to nesting birds.

5.3.8 Playing fields

The overall biodiversity quality of these sites has been categorised as 'C/B' on account of the low habitat diversity and dominance of amenity grassland. However, the sites are generally of moderate size with at least some potential for enhancement at the periphery away from the main amenity use of the site.

5.3.9 Potential development sites

The overall biodiversity quality of these sites has been categorised as 'B'. Although these sites are large in spatial extent and have the greatest number of habitats recorded compared to the other open space categories they generally comprise of just a few habitats, notably improved grassland. The majority of habitats are just small, scattered examples. However the hedgerows across these sites provide valuable connecting wildlife corridors. Improved grassland and arable fields are also important sites for ground nesting birds such as lapwing and skylark.

Biodiversity				СВ	C Open Space C	ategory			
Quality	Allotments	Cemetery/ Churchyard	Green corridor	Green	Local nature	Natural groop groop	Parks & gardens	Playing fields	Potential development sites
A (2224)		Churchyaru	corridor	open space 27	reserve	green space 91	gardens	Helus	development sites
A (good)				21	34, 40, 73	91			
B+			61, 97	47, 93	92, 98	70, 72	42, 49		5004, 5008, 5011, 5013, 5014, 5015, 5016
В	3001, 3002 3003, 3004 3005, 3006 3007, 3008 4705, 3009	3	10, 26	2, 15, 36 46, 52, 67 68, 94, 95		56, 75, 80	60, 23, 25 37, 38	1, 31, 38 44, 50, 54, 57	5001, 5002, 5003, 5005, 5006, 5007 5009, 5010, 5012 5018
C (poor)		29, 76, 96		5, 7, 8 9, 11, 12 14, 16, 19 20, 21, 24 30, 32, 33 35, 39, 45 48, 51, 64 65, 66, 71 74, 77, 78 79, 81, 82 83, 84, 85 86, 87, 88 89, 90, 69			6, 13, 18 22, 28, 41 55, 58,62 63	4, 17 43, 52 53, 59 69	
Overall	В	C	B/B+	C	A	В	С	C/B	В
category value									

Table 5.5 Sites Grouped According to Biodiversity Quality

6. IMPLICATIONS OF APPROPRIATE ASSESSMENTS IN RELATION TO EUROPEAN LEGISLATION

Appropriate Assessment is needed for certain scheme proposals under the Article 6 of European Council Directive 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of natural habitats and of wild fauna and flora for European Protected Sites.

A European Site is any classified Special Protection Area (SPA) and any Special Area of Conservation (SAC) from the point where the European Commission and the UK Government agree the site as a Site of Community Importance (English Nature 1997). Appropriate Assessment is required by law for projects and plans which might significantly affect European Sites. As a matter of Government policy, it is also required for potential SPAs, possible SACs (pSACs), candidate SACs (cSACs) and listed RAMSAR Sites for the purpose of considering development proposals affecting them

A plan or project does not have to be located within the designated area and the effects may be direct or indirect, temporary or permanent, beneficial or harmful to the site, or a combination of these. English Nature (now Natural England) will advise, on request, as to whether any particular plan or project may be likely to have a significant effect on any of these sites (English Nature 1997).

A search of the MAGIC website indicates that there are no European Protected Sites within the borough of Cheltenham. Two European Protected Sites have however been recorded within 10 km of the centre of Cheltenham: Dixton Wood and Cotswold Beechwoods. The two sites, together with other European Protected sites outside of a 10 km radius are indicated on Figure 6.1. Impacts relating to these two sites may be considered by Gloucestershire County Council.

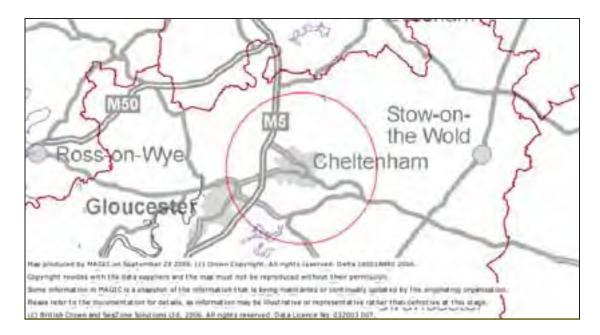


Figure 6.1: European Protected Sites Within 10 km of Central Cheltenham

As no European Protected Sites are present within the Cheltenham Borough Council boundary the principal concern will be to ensure that Natural England is consulted with regard to development projects which may have indirect or 'in combination' effects on European Protected Sites beyond CBCs boundary (e.g. emissions to air, discharges to water or projects with heavy transport demands). Natural England should always be consulted with regard to potential impacts on naturally important nature conservation sites such as SSSIs within CBCs boundary. Gloucestershire County Council should also be notified of any such development.

7. MANAGEMENT

7.1 Introduction

This section provides habitat management prescriptions for the habitats recorded across the sites assessed as part of the biodiversity audit. It focuses on the management for biodiversity and nature conservation. In some areas it may not be feasible to implement the recommended management as a result of other local issues such as antisocial behaviour. Such situations have not been taken into account, as it would require specific local knowledge outside the ecological field.

Section 7.2 provides generic habitat management prescriptions for each of the habitats recorded during the Phase 1 Habitat Survey undertaken as part of the biodiversity audit. Section 7.3. provides more specific management prescriptions where there are sensitive issues or high potential for biodiversity enhancement within a particular site.

In general there is limited opportunity for biodiversity enhancement in areas classified as playing fields as a result of their prime use as a playing field.

7.2 GENERIC MANAGEMENT PRESCRIPTIONS FOR BIODIVERSITY

It is possible to develop generic management prescriptions for each of the identified semi-natural habitats that are based on established conservation science. Generic management practices for species on CBC land can also be developed. The generic management prescriptions for both habitats and particular species will be transferable across many CBC sites. Species management has concentrated on protected, BAP and invasive species.

Each management prescription will be prioritised from highest level of priority (3) to lowest (1). In addition, the potential for community involvement with each management prescription has been evaluated and rated from high to low.

The specifications for habitat management for the different habitat groupings and species that have been developed by Middlemarch Environmental Ltd are detailed in Sections 7.2.1 and 7.2.2.

The following habitats/groups have been considered:

- Grasslands
- Woodlands
- Scrub and scattered trees
- Ditches
- Bare ground
- Aquatic habitats
- Hedgerows
- Tall ruderal vegetation.

The following species/groups have been considered:

- Locally distinctive plant species
- Noxious weeds
- Invertebrates
- Reptiles and amphibians
- Birds & bats
- Badgers
- Brown hare
- Invasive exotic plant species
- Floristic enhancement.

7.2.1 Habitats

Grasslands

Habitat(s)	Objective	Prescription	Priority	Potential for Community Involvement	Code
Amenity Grassland	Enhance the biodiversity of the amenity grassland	 Cut the grassland once every two weeks to 50 mm in April to May and September to October. Remove grass arisings from the site or stack them in discrete grass heaps (GH). 	2	Low	G1
Semi-Improved & Improved Grasslands	Enhance the biodiversity of the grassland	Manage grassland areas by grazing at a low stocking density between 250 and 350 Livestock Unit Days / Hectare/ Annum OR	3	Low	G2
		 Grassland to be cut once between mid August to late September to approximately 50 mm. Second cut to take place in October where necessary. Remove grass arisings from the site or stack them in discrete grass heaps (GH). Monitor sensitive species/communities and feed results back into the mowing regime to ensure that no adverse ecological effects arise. 			G3

Woodlands

Habitat(s)	Objective	Prescription	Priority	Potential for Community	Code
Woodlands	Non-intervention	• N/A	1	Involvement Low	W0
Broadleaf Woodland	Enhance the biodiversity of the woodland	Coppice on a 20-year rotation, with compartments coppiced annually removing 90% of the stems in each compartment -	3	Moderate - high	W1
Coniferous and Mixed Plantation Woodland	Maintain coniferous and/or mixed woodland areas.	 Gradual restoration to broadleaf woodland where appropriate. Maintain specimen non-native/conifer species if non-invasive and provide historic/cultural value. Retain any fallen dead wood for invertebrates 	2	Moderate - high	W2
Broadleaved plantation	Encourage varied structure and enhance biodiversity	Gradually thin/coppice	2	Moderate - high	W3

Aquatic

Habitat(s)	Objective	Prescription	Priority	Potential for Community Involvement	Code
Open Water	Manage the standing water habitat	 Remove emergent vegetation on a ten-year basis, ensuring at least 5% remains in each cleared area. Remove one-tenth of the vegetation each year. Leave cuttings on the bank side overnight, following cutting 	3	Low	A1
Running Water	Management of running water habitat	 Clear the vegetation from the channel on a five-year rotation. Clear 20% of the channel every year. Leave cuttings on the bank side overnight, following cutting Monitor sensitive species/communities and feed results back into the management regime to ensure that no adverse ecological effects arise. 	3	Low	A2
Marginal Vegetation	Enhance the biodiversity of the marginal vegetation	 Cut vegetation on a four-year basis to 50 mm in late August or Early September. Cut one quarter of the habitat each year. Fence to prevent grazing where necessary. Remove arisings or stack them in discrete grass heaps (GH). Leave cuttings on the bank side overnight, following cutting Monitor sensitive species/communities and feed results back into the management regime to ensure that no adverse ecological effects arise. 	3	Low	A3
Swamp & Inundation Vegetation	Enhance the biodiversity of the swamp and inundation vegetation	 Clear small blocks of vegetation up to 25% of the total area of the habitat per year in rotation. Leave cuttings on the bank side overnight, following cutting Monitor sensitive species/communities and feed results back into the management regime to ensure that no adverse ecological effects arise. 	3	Low	A4

Hedgerows

Habitat(s)	Objective	Prescription	Priority	Potential for Community Involvement	Code
Hedgerows	Enhance the biodiversity of the hedgerows	 Hedgerows to be cut January to February. Half of each side cut each year to 2 metres high. If appropriate introduce laying management. If young and maturing, introduce laying management. If hedgerow is composed entirely of Cypress then replace with native species is deemed appropriate. If hedgerow contains trees these should be retained and only managed for health and safety issues. 	3	Moderate - high	H1 H2 H2 H3 H4

Scrub and scattered trees

Habitat(s)	Objective	Prescription	Priority	Potential for Community Involvement	Code
Scattered Scrub	Maintenance of current habitats	Manage scattered scrub by periodic clearance.	3	Medium	S1
Continuous / Dense Scrub	Enhance the biodiversity of the scrub habitat	 Cut 25% of scrub area every 7 years. Cut on a 25 year rotation. Cut ¼ of the area: Every 5 years if less than 5 ha Every 10 years if less than 2.3 ha Every 20 years if less than 5 ha. 	3	Medium	S2
Scattered trees	Retain scattered trees	Adopt a non-intervention strategy and manage for health and safety issues.	1	Low	S3

Ditches

Habitat(s)	Objective	Prescription	Priority	Potential for Community	Code
				Involvement	
Ditches	To maintain the	Non intervention strategy for dry ditches	1	Low	D1
	occurrence of both	• Cut back wet ditch vegetation every 3 to 4 years in			D2
	wet and dry ditches.	small areas of around 50 m.			

Bare Ground

Habitat(s)	Objective	Prescription	Priority	Potential for Community	Code
				Involvement	
Bare Ground	Improve the	• Sow with a wildflower seed mix where appropriate.	1	Low	B1
(where earth	biodiversity of the				
not hard	bare ground area.				
standing etc)					

Tall Ruderal vegetation

Habitat(s)	Objective	Prescription	Priority	Potential for Community	Code
				Involvement	
Tall Ruderal	Enhance biodiversity of tall ruderal habitat	 Cut one-third of the habitat each year on October. Remove arisings from the site or stack them in discrete heaps (GH). If tall ruderal area is within or adjacent to a grassland area then manage according to grassland specifications. 	3	Low	T1

7.2.2 Species

Locally Distinctive Plant Species

Species	Objective	Prescription	Priority	Potential for Community Involvement
Locally Distinctive Plant Species	Enhancement of locally distinctive plant species.	 Ensure the optimum conditions for the survival / spread of selected species by following appropriate habitat management prescriptions. Localised, spot application use of herbicides to eradicate / reduce populations of noxious and undesirable competitive species. If near a watercourse Environment Agency must be consulted. Control existing scrub. 	3	Low

Invertebrates

Species	Objective	Prescription	Priority	Potential for Community Involvement
Invertebrates	Enhance the site for invertebrates	 Leave strips of vegetation around the perimeter of the site to be cut biennially on rotation. All standing and fallen dead wood on site to be retained unless health and safety is an issue. Ring bark selected living tree species especially undesirable species such as Sycamore. Implement appropriate pond management (see habitats; Aquatic) 	2	Low

Reptiles and Amphibians

Species	Objective	Prescription	Priority	Potential for Community Involvement
Reptiles and Amphibians	Enhance the site for amphibians and reptiles.	 Provide hibernacula and refuges for the species in the form of grass heaps (GH). Retain some areas of rank vegetation and maintain by periodic cutting. If ponds/pools occur on site partially remove any overshadowing scrub and trees. 	2	Low

Birds and Bats

Species	Objective	Prescription	Priority	Potential for Community Involvement
Birds and Bats	Enhance the site for birds and bats by providing food and nesting / roosting sites.	 Leave a strip around the boundary 1 m wide to by cut on a biennial or triennial basis to provide seed and attract invertebrates for feeding birds and bats. Manage suitable hedges on site to ensure winter berry supply. Thin and coppice woodland and scrub areas to ensure a mosaic of conditions to boost invertebrates berries and nuts. Retain dead wood where this does not conflict with health and safety issues. Place nest and bat boxes at suitable points around the site. Maintain open grassland areas, marginal and emergent areas using appropriate habitat management prescriptions. 	2	Medium to High

Badgers

Species	Objective	Prescription	Priority	Potential for Community Involvement
Badgers	Enhance the site for badgers	 Ensure that responsibilities for badgers on site are discharged under the Badgers Act 1992. Ensure that badger setts are not disturbed (particularly between December and June inclusive). Ensure that badger setts are not damaged and that entrances are not obstructed. 	3	Low

Brown Hare

Species	Objective	Prescription	Priority	Potential for Community Involvement
Brown Hare	Improve the site for brown hares	 Maintain areas of open grassland using appropriate habitat management prescriptions. Create a mosaic of tall and short grassland types using an appropriate grazing regime. 	3	Low

Invasive Exotic Plant Species

Species	Objective	Prescription	Priority	Potential for Community Involvement	Code
Invasive Exotic Plant Species	Control invasive exotic plant species at the site.	 Control Japanese knotweed using Environment Agency Methodology. Control Himalayan balsam by pulling and burning the maturing plants in late spring before the seeds set. Use 'spot' treatments to control the spread of undesirable and weed species listed in the Weeds Act, 1959. Treat species with an approved translocated herbicide and apply through a weed wiper or wand. This operation should be carried out in June and September. If near a watercourse Environment Agency must be consulted. 	3	Low	II

Floristic enhancement

Objective	Prescription	Priority	Potential for Community Involvement	Code
Enhance floristic value for wildlife	 Favour cultivars of native species and wildlife attracting species when areas come up for replanting Create flower beds using wildlife attracting shrubs and/or herbaceous species 	1	2	E1 E2

7.3 SPECIFIC MANAGEMENT PRESCRIPTIONS FOR BIODIVERSITY ENHANCEMENT

This section provides more specific recommendations in relation to the management of the sites for nature conservation and biodiversity. It should be noted that specific, detailed management plans for all the CBC owned sites have not been produced on account of such detail being beyond the scope of this project. In practice, each site should be treated according to its unique ecological priorities. Therefore this section identifies areas where biodiversity enhancement could be considered.

1. Large areas of amenity grassland:

- a. Create a buffer zone around the periphery of the site with less intense and frequent management. E.g. Sites 17, 21.
- b. Create wildlife beds of woody and/or herbaceous wildlife attracting species.
- c. Set-a-side an area to create a wildflower meadow.

2. Densely shaded watercourses:

 a. consider opening up some of the canopy along the watercourses to allow ground flora to establish. This would help increase the value of such habitats for water voles. E.g. sites 10

3. Young tree plantations:

a. Encourage a diverse structure through the identification of trees that will form the canopy once the trees reach maturity. Carry out gradual felling of the trees around the marked trees on a 5 year interval. If any of the marked trees fail, identify an alternative to take its place in the mature canopy. Coppice selected trees of suitable species to provide an understorey

4. Hedgerows:

- a. increase the diversity of gappy hedgerows through planting up the gaps with appropriate native species.
- b. plant hedgerows where possible e.g. along site boundaries.

5. Scattered trees:

 Maintain a diversity of species and age ranges where there are groups of trees.

- b. Where trees need removal for health & safety, consider replacing them with appropriate native trees.
- c. Retain and allow mature trees to develop into veteran trees where health & safety issues allow.
- d. Erect bat and birds boxes, particularly in hedgerow trees and along linear features such as streams.

6. Non-native woody species:

 a. consider gradual removal and replacement with native species or native cultivars/wildlife attracting species where adverse ecological effect would not occur.

7. Scrub:

- a. allow young scrub, such as that planted at Site 38, to establish before implementing management.
- b. Avoid scrub encroachment into grasslands.

8. Mosaic habitats:

- a. Maintain mosaics of habitats where these exist
- b. Encourage mosaics of habitats to develop.

9. Ponds:

- a. Encourage marginal vegetation to establish while not allowing it to dominate the pond. This would enhance the habitat for species such as great crested newts.
- b. Retain an area of low frequency cutting of grassland around the periphery of ponds.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 CONCLUSIONS

The biodiversity audit has enabled areas of high biodiversity value to be identified. This will enable further specific survey effort to be targeted, particularly in relation to future development. It will also provide a baseline dataset from which detailed specific management plans can be written for CBC owned sites.

This audit provides a baseline against which further assessments can be measured. However it should be noted that the current surveys provide a snap shot of the biodiversity within Cheltenham at the time of survey and as habitats mature or management is implemented/changed the relative biodiversity values will alter.

8.2 RECOMMENDATIONS

This study has identified the many benefits that an ecological assessment of Cheltenham Borough Open Space sites can yield.

Where areas have been indicated as having high biodiversity value or where a protected species has either been recorded or has the potential to occur it is recommended that specific surveys are undertaken, at the appropriate time of year, to determine the precise value of the site. Such surveys would be particularly important prior to such sites being developed or a change in management being implemented.

The management prescriptions are fairly generic as a result of the scale at which the sites were assessed. Therefore while the surveys and management prescriptions provide a good baseline it is recommended that detailed site specific management plans are developed, particularly for the larger sites that have greater potential for habitat enhancement.

REFERENCES

Botanical Society of the British Isles, (2002). *New Atlas of the British & Irish Flora* Oxford University Press .

English Nature (**1997**) Habitat Regulations Guidance Note 1: The Appropriate Assessment (Regulation 48) The Conservation (Natural Habitats &c.) Regulations, 1994.

IEA (1995) Guidelines for Baseline Ecological Assessment. Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall. London.

JNCC, (1993). Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint). Joint Nature Conservation Committee, Peterborough.

JNCC (**unpublished**) Working draft of Phase 1 Habitats in Relation to UK BAP Priority habitats.

Local BAP. Gloucestershire Biodiversity Action Plan www.ukbap.org.uk

Multi-Agency Geographic Information Website (2006). Site Check Report. www.magic.gov.uk

National Biodiversity Action Plan www.ukbap.org.uk

The Postcode Plants Database (2006). www.nhm.ac.uk

APPENDICES

APPENDIX 1: Sites Assessed during this Project

APPENDIX 2: Desk Study Data

APPENDIX 3: Extended Phase 1 Habitat Survey Drawing

Middlemarch Environmental Drawing No: C3879-01 to C3879-

11

APPENDIX 4: Site descriptions

APPENDIX 5 Wildlife Corridor Value of the sites assessed

Middlemarch Environmental Drawing No: C3879-12

APPENDIX 6 Biodioveristy Quality of the sites asssesed

Middlemarch Environmental Drawing No: C3879-13

Blodiversity Audit	Cheitennam Borough Cou	ncii	R1-MME-38/9-revul	
,	APPENDIX 1: SITES ASS	ECCED DUDING TH	IC DROIECT	
F	APPENDIX 1: SITES ASS	ESSED DUKING TH	18 F ROJECT	

Ref.	Site name	Biodiversity
5010	Biodiversity audit only	Potential development site
5011	Biodiversity audit only	Potential development site
5012	Biodiversity audit only	Potential development site
5013	Biodiversity audit only	Potential development site
5014	Biodiversity audit only	Potential development site
5015	Biodiversity audit only	Potential development site
5016	Biodiversity audit only	Potential development site
5018	Biodiversity audit only	Potential development site
1	The Beeches Playing Field	Playing Field
2	Benhall Open Space	Green open space
3	Bouncers Lane Cemetery	Cemetery or churchyard
4	Brizen Farm Playing Field	Playing Field
5	Broad Oak Way Open Space	Green open space
6	Caernaryon Park	Parks and garden
7	Campion Park Open Space	Green open space
7	Davillia Drive Open Space	Green open space
7	JasminWay/Justica Way Open Space	Green open space
8	Chalford Avenue Open Space	Green open space
9	Chargrove Lane Open Space	Green open space
10	Charlton Park Open Space	Green corridor
11	Churchill Drive Play Area	Green open space
12	Cirencester Road Open Space	Green open space
13	Clarence Square	Parks and garden
14	Clyde Crescent	Green open space
15	Cox's Meadow Open Space	Green open space
16	Elm Farm Open Space	Green open space
17	Elmfield Playing Field	Playing Field
18	Fairview Open Space	Parks and garden
19	George Reading's Open Spaces	Green open space
20	Golden Valley Open Space	Green open space
21	Grange Tip Open Space	Green open space
22	Hatherley Court Gardens	Parks and garden
23	Hatherley Park	Parks and garden
24	Henley Road Open Space	Green open space
25	Hester's Way Park	Parks and garden
26	Honeybourne Line Open Space	Green corridor
27	Honeybourne Way/Chelt Walk	Green open space
28	Imperial Gardens	Parks and garden
29	Jenner Gardens	Cemetery or churchyard
30	Jessops Avenue/Chelt Walk	Green open space
31	King George V Playing Field	Playing Field
32	King William Drive Open Space	Green open space
33	Lansdown Crescent Open Space	Green open space
34	Leckhampton Hill	Local nature reserve
35	Manor Farm Open Space	Green open space
36	Manor Road Open Space	Green open space
37	Montpellier Gardens	Parks and garden
38	Naunton Park	Parks and garden
38	Naunton Park	Playing Field
39	Pilgrove Way Open Space	Green open space
57	i ligitove way Open Space	Green open space
40	Pilley Bridge Nature Reserve	Local nature reserve

Table A1.1 Sites assessed during the 2006 Biodiversity Audit (Table continues)

Ref.	Site name	Biodiversity
43	Priors Farm Playing Field	Playing Field
44	Queen Elizabeth II Playing Field	Playing Field
45	Reddings Road Open Space (humpty dumps)	Green open space
46	Redthorne Way Open Space	Green open space
47	Rowena Cade Open Space	Green open space
48	Salisbury Avenue Recreation Ground	Green open space
49	Sandford Park	Parks and garden
50	Sandy Lane	Playing Field Open Space
51	St Peters Square	Green open space
52	St Peters Playing Field/Chelt Walk	Green open space
52	St. Peters Playing Field Football Pitch	Playing Field
53	Swindon Village Playing Field	Playing Field
54	The Burrows Playing Field	Playing Field
55	The Promenade Gardens	Parks and garden
56	Weaver's Field Open Space	Natural green space
57	Welch Road Playing Field	Playing Field
58	Wellington Square	Parks and garden
59	Whaddon Recreation Ground	Playing Field
60	Winston Churchill Memorial	Gardens Parks and garden
61	Wymans Brook Open Space	Green corridor
62	Oxford and Priory Street Gardens	Parks and garden
63	Hatherley Green	Parks and garden
64	Murvagh Close Open Space	Green open space
65	Pittville Circus Roundabout Open Space	Green open space
66	Grace Gardens Open Space	Green open space
67	Apple Orchard Open space	Green open space
68	Glenfall Way Highway Verge	Green open space
69	Prestbury Playing Field	Playing Field
69	Prestbury Road Playing Field	Green open space P
70	Farmland at Priors	Natural green space
71	Alan Robson Memorial Field	Green open space
72	Noverton Proposed Gateway Park	Natural green space
73	Griffiths Avenue Local Nature	Reserve Local nature reserve
74	Windermere Estate Green Spaces	Green open space
75	Balcarras Field	Natural green space
76	St Marys Parish Churchyard	Cemetery or churchyard
77	Brizen Lane Open Space	Green open space
78	Clevedon Square	Green open space
79	Edward Wilson House	Green open space
79	Scott House	Green open space
80	George Reading's stream bank	Natural green space
81	Lynworth Place	Green open space
82	Bush Court	Green open space Green open space
82	Bush Court	Green open space Green open space
83	Norfolk Avenue	Green open space Green open space
84	Monkscroft Estate	
85	Niven Courtyard	Green open space
	·	Green open space
86	Cabura Cordons	Green open space
87	Coburn Gardens Kinga Oals (Triggorpha Way)	Green open space
88	Kings Oak (Triscombe Way)	Green open space
89	Wharfedale Square	Green open space

Table A1.1 (cont) Sites assessed during the 2006 Biodiversity Audit (Table continues)

Ref.	Site name	Biodiversity
90	Gloucester Road Open Space	Green open space
91	Tramway	Natural green space
92	Little Herberts Nature Reserve	Local nature reserve
93	Billings Way Open Space	Green open space
94	Farmfield Road/Squires Meadow Open Space	Green open space
95	Daisy Bank Field	Green open space
96	Charlton Kings Cemetery	Cemetery or churchyard
97	Kingham Line	Green corridor
98	Lawrence Close Nature Reserve	Local nature reserve
3001	Alma Road	Allotments
3002	Asquith	Allotments
3003	Hatherley	Allotments
3004	Hayden I	Allotments
3005	Hayden II	Allotments
3006	Reddings Road	Allotments
3007	Severn Road	Allotments
3008	Terry Ashdown Henley Way	Allotments
4705	Warden Hill	Allotments
5001	Midwinter	Potential development site
5002	Starvehall Farm	Potential development site
5003	Midwinter ex Allotment Site	Potential development site
5004	Land to NW Cheltenham	Potential development site
5005	Land at Quat Goose Lane	Potential development site
5006	Land at Home Farm	Potential development site
5007	Land at Old Gloucester Road	Potential development site
5008	Land at Bamfurlong Lane	Potential development site
5009	Land at Oakley Farm	Potential development site

 $Table\ A1.1\ (cont)\ Sites\ assessed\ during\ the\ 2006\ Biodiversity\ Audit$

APPENDIX 2: DESK STUDY DATA

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
Erinaceus europaeus	Hedgehog	SO9121	1999		Bern App III		Common		,
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9122	1986			only)	Notable/Nb		GM Butterfly Survey
					EC Annex Va;	E (Solo			Colin Twissell's
Rana temporaria	Common Frog	SO9123	1989		Bern App III	only)		BAP3	Records
Populus nigra ssp.	Comment reg	000120	1000		Вент пр н	Offiy)		D/ 11 O	records
betulifolia	Black Poplar	SO9124	-1992				Vulnerable		
	·								Roger Gaunts Moths
Earias clorana	Cream-bordered Green Pea	SO9221	1999				Notable/Nb		1ar
					FO A	5 (O-l-			Colin Twissell's
Dana tamananania	Common From	000004	1004		EC Annex Va;	`		BAP3	
Rana temporaria	Common Frog	SO9221	1984		Bern App III	only)		BAP3	Records
						5 (Killing,			Oalia Turia a allia
Anguis fragilis	Slow-worm	SO9221	1999		Bern App III	injuring, sale only)		BAP3	Colin Twissell's Records
Erinaceus europaeus	Hedgehog	SO9221	1999		Bern App III	sale of lig)	Common	DAF3	Necolus
Limaceus caropacus	rieagenog	003221	1000		Вентиррні		Common		
Hyacinthoides non-scripta	Bluebell	SO9222	1999			8		BAP3	
·						5 (Sale			
Triturus vulgaris	Smooth Newt	SO9222	1999		Bern App III	only)		BAP3	
					EC Annex Va;	E (Colo			
Rana temporaria	Common Frog	SO9222	1999		Bern App III	only)		BAP3	
Parus major	Great Tit	SO9222	1999		Бепт Арр пі	Offig)		BAP3	
T aras major	Great Tit	003222	1000			5 (Sale		DAI 3	
Satyrium w-album	White Letter Hairstreak	SO9223	1992			only)	Notable/Nb		GM Butterfly Survey
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9223	2004		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Triturus helveticus	Palmate Newt	SO9223	2004		Bern App III	only)		BAP3	Records

Full Name	Common Name	GRID SQ	Year	RDB	International Status	WCA Schedules	GB Status	BAP	Survey name
Populus nigra ssp.									,
betulifolia	Black Poplar	SO9021	-1992				Vulnerable		
_					EC Annex Va;	`			Colin Twissell's
Rana temporaria	Common Frog	SO9021	1989		Bern App III	only)		BAP3	Records
Meles meles	Badger	SO9021	2005		Bern App III		Common		
Aricia agestis	Brown Argus	SO9022	1997				Local		GM Butterfly Survey
I									Mark and Clare
Populus nigra ssp.									Kitchen General
betulifolia	Black Poplar	SO9120	2004				Vulnerable		Records
					EC Annex IIa,				
					IVa; Bern App				Colin Twissell's
Triturus cristatus	Warty Newt	SO9120	1999		II	5		BAP1ý	Records
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9120	1999		Bern App III	only)		BAP3	Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9120	1999		Bern App III	only)		BAP3	Records
Hyacinthoides non-scripta	Bluebell	SO9121	1987			8		ВДРЗ	BSBI Local Change
Narcissus	Didebell	003121	1307				<u>'</u>	DAI 3	BOBI Local Onlange
pseudonarcissus ssp.									
pseudonarcissus	Daffodil	SO9121	1987						BSBI Local Change
Ruscus aculeatus	Butcher's-broom	SO9121	1987		EC Annex Vb				BSBI Local Change
Aricia agestis	Brown Argus	SO9121	1997		20 / 111110/1 12		Local		GM Butterfly Survey
490000	2.5111711900	555121	1.557			5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9121	1985		Bern App III	only)		ВАР3	Records
-		333.2.	1.550		111	,,		1	
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9121	1979		Bern App III	only)		ВАР3	Records
						5 (Killing,		20	
						injuring,			Colin Twissell's
Natrix natrix	Grass Snake	SO9121	1985		Bern App III	sale only)		BAP3	Records

Status and BAP information - Recorder 3.3

The above list uses the information held on our database and does not represent a comprehensive list of rare or protected species for your search area Presence on this list does not indicate breeding status

						WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
					EC Annex Va;	E (Solo			Colin Twissell's
Dana tampararia	Common From	00000	2002		· ·	`		DADO	
Rana temporaria	Common Frog	SO9223	2002		Bern App III	only)		BAP3	Records
						5 (Killing,			Colin Turio collin
A service for willing	01	00000	0004		D A III	injuring,		D 4 D0	Colin Twissell's
Anguis fragilis	Slow-worm	SO9223	2001		Bern App III	sale only)		BAP3	Records
Cate wireman albuma	White Letter Heirstreel	000004	1001			5 (Sale	Natable /Nb		CM Dustantly Company
Satyrium w-album	White Letter Hairstreak	SO9224	1991			only)	Notable/Nb		GM Butterfly Survey
Myotis sp.	Unidentified bat	SO9224	2003			5			
Pipistrellus pipistrellus									
45kHz	45 kHz Pipistrelle	SO9224	2003					BAPL	
Pipistrellus pipistrellus									
55kHz	55 kHz Pipistrelle	SO9224	2003					BAPL	
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9319	1995			only)	Notable/Nb		GM Butterfly Survey
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9319	1964		Bern App III	only)		BAP3	Records
					EC Annex Va;	`			Colin Twissell's
Rana temporaria	Common Frog	SO9319	1967		Bern App III	only)		BAP3	Records
Anas platyrhynchos	Mallard	SO9319	1995					BAP3	
Accipiter nisus	Sparrowhawk	SO9319	1995					BAP3	
Falco tinnunculus	Kestrel	SO9319	1995					BAP3	
Strix aluco	Tawny Owl	SO9319	1995					BAP3	
Picus viridis	Green Woodpecker	SO9319	1995					BAP3	
Dendrocopos major	Great Spotted Woodpecker	SO9319	1995					BAP3	
Hirundo rustica	Swallow	SO9319	1995					BAP3	
Delichon urbica	House Martin	SO9319	1995					BAP3	
Turdus pilaris	Fieldfare	SO9319	1995			1		BAP3	
Turdus philomelos	Song Thrush	SO9319	1995					BAP1	BAPL
Turdus iliacus	Redwing	SO9319	1995			1		BAP3	
Sylvia atricapilla	Blackcap	SO9319	1995					BAP3	
Phylloscopus collybita	Chiffchaff	SO9319	1995					BAP3	

Status and BAP information - Recorder 3.3

The above list uses the information held on our database and does not represent a comprehensive list of rare or protected species for your search area Presence on this list does not indicate breeding status

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
Parus ater	Coal Tit	SO9319	1995					BAP3	
Parus caeruleus	Blue Tit	SO9319	1995					BAP3	
Parus major	Great Tit	SO9319	1995					BAP3	
Fringilla montifringilla	Brambling	SO9319	1995			1		BAP3	
Carduelis chloris	Greenfinch	SO9319	1995					BAP3	
Carduelis carduelis	Goldfinch	SO9319	1995					BAP3	
Carduelis spinus	Siskin	SO9319	1995					BAP3	
Carduelis cannabina	Linnet	SO9319	1995					BAP2ý	BAP2+ýBAPL
Carduelis flammea	Redpoll	SO9319	1995					BAP3	
Pyrrhula pyrrhula	Bullfinch	SO9319	1995					BAP2+	-ýBAP2ýBAPL
Emberiza citrinella	Yellowhammer	SO9319	1995					BAP3	
					EC Annex IIa,				
					IVa; Bern App				Colin Twissell's
Triturus cristatus	Warty Newt	SO9320	1998		II	5		BAP1ý	Records
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9320	1969		Bern App III	only)		BAP3	Records
-						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9320	1969		Bern App III	only)		BAP3	Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9320	1969		Bern App III	only)		ВАРЗ	Records
tana tomporana	Common Frog	000020	1000		20, (pp	5 (Killing,		D/ (1 O	11000100
						injuring,			Colin Twissell's
Lacerta vivipara	Viviparous Lizard	SO9320	1965		Bern App III	sale only)			Records
	,	000020	1000			5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9320	1992		Bern App III	sale only)		BAP3	Records
J.:	212.11.21.11	2 2 2 2 2 2			- FF	5 (Killing,			
						injuring,			Colin Twissell's
Natrix natrix	Grass Snake	SO9320	1976		Bern App III	sale only)		BAP3	Records
Falco tinnunculus	Kestrel	SO9320	1995					BAP3	
Prunella modularis	Dunnock	SO9320	1995					BAP3	
Parus major	Great Tit	SO9320	1995					BAP3	

Status and BAP information - Recorder 3.3

The above list uses the information held on our database and does not represent a comprehensive list of rare or protected species for your search area Presence on this list does not indicate breeding status

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
Carduelis carduelis	Goldfinch	SO9320	1995					BAP3	,
					EC Annex IIa,				
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9321	1969		II	5	5	BAP1ý	BAPL
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9321	1985		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9321	1978		Bern App III	only)		BAP3	Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9322	1977		Bern App III	only)		BAP3	Records
Populus nigra ssp.					' '	, ,			
betulifolia .	Black Poplar	SO9323	-1992				Vulnerable		
	·				EC Annex IIa,				•
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9323	1987		II	5	5	BAP1ý	BAPL
						5 (Sale			
Triturus vulgaris	Smooth Newt	SO9323	1987		Bern App III	only)		BAP3	
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9323	1992		Bern App III	only)		BAP3	Records
Anas platyrhynchos	Mallard	SO9323	1999					BAP3	
Hirundo rustica	Swallow	SO9323	1999					BAP3	
Sylvia atricapilla	Blackcap	SO9323	1999					BAP3	
Parus caeruleus	Blue Tit	SO9323	1999					BAP3	
Parus major	Great Tit	SO9323	1999					BAP3	
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9324	1995			only)	Notable/Nb		GM Butterfly Survey
					EC Annex IIa,				
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9324	1975		II	5	5	BAP1ý	BAPL

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
						5 (Killing,			
						injuring,			Colin Twissell's
Lacerta vivipara	Viviparous Lizard	SO9324	1976		Bern App III	sale only)			Records
						5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9324	1998		Bern App III	sale only)		BAP3	Records
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9325	1996			only)	Notable/Nb		GM Butterfly Survey
Aricia agestis	Brown Argus	SO9325	1989				Local		GM Butterfly Survey
					EC Annex IIa,				-
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9325	2004		II	5		BAP1ý	BAPL
						5 (Sale			
Triturus vulgaris	Smooth Newt	SO9325	2004		Bern App III	only)		BAP3	
					EC Annex Va;	5 (Sala			Colin Twissell's
Pana tampararia	Common Frog	SO9325	1992		Bern App III	only)		DADS	Records
Rana temporaria	Common Flog	309325	1992		Бепт Арр пі	5 (Sale		DAPS	Colin Twissell's
Triturus vulgaria	Smooth Newt	SO9419	2000		Porn Ann III	only)		BAP3	Records
Triturus vulgaris	Smooth Newt	309419	2000		Bern App III	Offiy)		DAPS	Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9419	2000		Bern App III	only)			Records
Anas platyrhynchos	Mallard	SO9419	1995					BAP3	
Accipiter nisus	Sparrowhawk	SO9419	1995					BAP3	
Falco tinnunculus	Kestrel	SO9419	1995					BAP3	
Larus argentatus	Herring Gull	SO9419	1995					BAP3	
Alcedo atthis	Kingfisher	SO9419	1995			1		BAP3	
Picus viridis	Green Woodpecker	SO9419	1995					BAP3	
Hirundo rustica	Swallow	SO9419	1995					BAP3	
Delichon urbica	House Martin	SO9419	1995					BAP3	
Prunella modularis	Dunnock	SO9419	1995					BAP3	
Turdus pilaris	Fieldfare	SO9419	1995			1		BAP3	
Turdus philomelos	Song Thrush	SO9419	1995					BAP1ý	BAPL

	1				I				<u> </u>
					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
Turdus iliacus	Redwing	SO9419	1995			1		BAP3	
Sylvia atricapilla	Blackcap	SO9419	1995					BAP3	
Phylloscopus collybita	Chiffchaff	SO9419	1995					BAP3	
Phylloscopus trochilus	Willow Warbler	SO9419	1995					BAP3	
Parus caeruleus	Blue Tit	SO9419	1995					BAP3	
Parus major	Great Tit	SO9419	1995					BAP3	
Carduelis chloris	Greenfinch	SO9419	1995					BAP3	
Carduelis carduelis	Goldfinch	SO9419	1995					BAP3	
Erinaceus europaeus	Hedgehog	SO9419	1999		Bern App III		Common		
Hyacinthoides non-scripta	Bluebell	SO9420	1995			8		BAP3	
,		000.20				5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9420	1999		Bern App III	only)		BAP3	Records
····u			1000			5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9420	1973		Bern App III	only)		BAP3	Records
						_			
	_		4000		EC Annex Va;	`			Colin Twissell's
Rana temporaria	Common Frog	SO9420	1999		Bern App III	only)		BAP3	Records
Accipiter nisus	Sparrowhawk	SO9420	1994					BAP3	
Picus viridis	Green Woodpecker	SO9420	1994					BAP3	
Dendrocopos major	Great Spotted Woodpecker	SO9420	1994					BAP3	
Prunella modularis	Dunnock	SO9420	1995					BAP3	
Parus caeruleus	Blue Tit	SO9420	1995					BAP3	
Parus major	Great Tit	SO9420	1995					BAP3	
Carduelis chloris	Greenfinch	SO9420	1995					BAP3	
Pyrrhula pyrrhula	Bullfinch	SO9420	1995					BAP2+	-ýBAP2ýBAPL
Meles meles	Badger	SO9420	1995		Bern App III		Common		
						5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9421	1992		Bern App III	sale only)		BAP3	Records
									Roger Gaunts Moths
Psychoides filicivora	a micro-moth	SO9422	2004				Notable/Nb		1ar
Aricia agestis	Brown Argus	SO9422	1997				Local		GM Butterfly Survey

Full Name		0.DID 0.0	.,		International	WCA	00.04		0
Full Name	Common Name	GRID SQ		RDB	Status	Schedules	GB Status		Survey name
Argynnis paphia	Silver-washed Fritillary	SO9422	1997			F /IZ:II:	Local	BAP3	GM Butterfly Survey
						5 (Killing,			Oalia Turia a Illa
A consider from million	Ola salas	000400	4000		D A III	injuring,		D 4 D0	Colin Twissell's
Anguis fragilis	Slow-worm	SO9422	1980		Bern App III	sale only)		BAP3	Records
Phyllonorycter		000400	0004				N I - 1 - 1 - 1 - /N II		Roger Gaunts Moths
platanoidella	a micro-moth	SO9423	2004				Notable/Nb		1ar
Aricia agestis	Brown Argus	SO9423	1983				Local		GM Butterfly Survey
<u> </u>		000400							David Iliffs Hoverfly
Pipizella virens	a hoverfly	SO9423	2001				Notable/Nb		Records
						5 (Killing,			
						injuring,			Colin Twissell's
Lacerta vivipara	Viviparous Lizard	SO9423	1972		Bern App III	sale only)			Records
Motacilla alba yarrellii	Pied Wagtail	SO9423	1996					BAP3	
Turdus iliacus	Redwing	SO9423	1996			1		BAP3	
Parus caeruleus	Blue Tit	SO9423	1996					BAP3	
Pyrrhula pyrrhula	Bullfinch	SO9423	1996					BAP2+	-ýBAP2ýBAPL
									Roger Gaunts Moths
Ochsenheimeria vacculella	a micro-moth	SO9424	2004				Notable/Nb		1ar
									Roger Gaunts Moths
Synanthedon tipuliformis	Currant Clearwing	SO9424	2004				Notable/Nb		1ar
Synanthedon									Roger Gaunts Moths
myopaeformis	Red-belted Clearwing	SO9424	2004				Notable/Nb		1ar
									Roger Gaunts Moths
Parocystola acroxantha	a micro-moth	SO9424	2004				pRDB3		1ar
									Roger Gaunts Moths
Mompha divisella	a micro-moth	SO9424	2003				Na		1ar
									Roger Gaunts Moths
Phalonidia manniana	a micro-moth	SO9424	1996				Notable/Nb		1ar
Aricia agestis	Brown Argus	SO9424	1983				Local		GM Butterfly Survey
-	<u> </u>								Roger Gaunts Moths
Eurois occulta	Great Brocade	SO9424	1996				Na		1ar
									Roger Gaunts Moths
Polia bombycina	Pale Shining Brown	SO9424	1995				Local	BAP2ý	•

Full Name	Common Name	GRID SQ	Voor	DDD	International Status	WCA Schodulos	GB Status	BAP	Survey name
ruii Naiile	Common Name	GKID 3Q	i eai	KDB	Status	Scriedules	GD Status	DAP	Roger Gaunts Moths
Egira conspicillaris	Silver Cloud	SO9424	1999				Na		1ar
J									Roger Gaunts Moths
Earias clorana	Cream-bordered Green Pea	SO9424	2004				Notable/Nb		1ar
					EC Annex IIa,				
					IVa; Bern App				Colin Twissell's
Triturus cristatus	Warty Newt	SO9424	1995		II	5		BAP1ý	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9424	1997		Bern App III	only)		BAP3	Records
					FO A	5 (0.1.			O. P. T. P
Dana tamanayayia	Common From	000404	1000		EC Annex Va;	`		D A DO	Colin Twissell's
Rana temporaria	Common Frog	SO9424	1999		Bern App III	only) 5 (Killing,		BAP3	Records
						injuring,			Colin Twissell's
Lacerta vivipara	Viviparous Lizard	SO9424	1992		Bern App III	sale only)			Records
Lacerta vivipara	VIVIPAIOUS LIZAIU	003424	1002		Всті Арр пі	5 (Killing,			rccords
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9424	1976		Bern App III	sale only)		ВАР3	Records
· · · · · · · · · · · · · · · · · · ·					- 11	5 (Killing,			
						injuring,			Colin Twissell's
Natrix natrix	Grass Snake	SO9424	1996		Bern App III	sale only)		BAP3	Records
					EC Annex IIa,				
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9425	2004		II	5		BAP1ý	/BAPL
Salvia pratensis	Meadow Clary	SO9518	-1992	2		8		BAP3	
Orobanche hederae	Ivy Broomrape	SO9518	-1992				Nationally S	carce	
									Mark and Clare
		000=46					l		Kitchen General
Herminium monorchis	Musk Orchid	SO9518	2005				Nationally S	carce	Records
Synanthedon		000540	0000				Nickel A		Roger Gaunts Moths
andrenaeformis	Orange-tailed Clearwing	SO9518	2003				Notable/Nb		1ar
Pombooio oponigoro	Six halted Cleanuing	CO0510	2002				Notable/Nh		Roger Gaunts Moths
Bembecia scopigera	Six-belted Clearwing	SO9518	2003				Notable/Nb		1ar

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
									Roger Gaunts Moths
Microstega hyalinalis	a pyralid moth	SO9518	2002				Notable/Nb		1ar
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9518	1995			only)	Notable/Nb		GM Butterfly Survey
						5 (Sale			
Cupido minimus	Small Blue	SO9518	-1992			only)	Local	BAP3	
Aricia agestis	Brown Argus	SO9518	2000				Local		GM Butterfly Survey
						5 (Sale			
Lysandra coridon	Chalk-hill Blue	SO9518	2003			only)	Local	BAP3	GM Butterfly Survey
						5 (Sale			
Hamearis lucina	Duke of Burgundy Fritillary	SO9518	1995			only)	Notable/Nb	BAP3	GM Butterfly Survey
						5 (Sale			
Boloria euphrosyne	Pearl Bordered Fritillary	SO9518	0			only)	Notable/Nb	BAP1	BAPL
Argynnis aglaja	Dark Green Fritillary	SO9518	1996				Local		GM Butterfly Survey
					Bern II				
					(subject to a				
					reservation by	5 (Sale			
Eurodryas aurinia	Marsh Fritillary	SO9518	1976		GB). EC IIa.	only)	Notable/Nb	BAP1	GM Butterfly Survey
									David Iliffs Hoverfly
Rhingia rostrata	a hoverfly	SO9518	2002	2			Notable/Nb		Records
						5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9518	1996		Bern App III	sale only)		BAP3	Records
						5 (Killing,			
						injuring,			Colin Twissell's
Vipera berus	Adder	SO9518	2000		Bern App III	sale only)		BAP3	Records
Anthus pratensis	Meadow Pipit	SO9518	-1992					BAP3	
Locustella naevia	Grasshopper Warbler	SO9518	-1992					BAP3	
Pammene fasciana									Roger Gaunts Moths
f.herrichiana	a tortrix moth	SO9519	2003				Notable/Nb		1ar
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9519	1989			only)	Notable/Nb		GM Butterfly Survey

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status		GB Status	ВАР	Survey name
						5 (Sale			
Cupido minimus	Small Blue	SO9519	1987			only)	Local	BAP3	GM Butterfly Survey
Aricia agestis	Brown Argus	SO9519	2001				Local		GM Butterfly Survey
						5 (Sale			
Lysandra coridon	Chalk-hill Blue	SO9519	1995			only)	Local	BAP3	GM Butterfly Survey
Argynnis aglaja	Dark Green Fritillary	SO9519	1996				Local		GM Butterfly Survey
									Roger Gaunts Moths
Eupithecia expallidata	Bleached Pug	SO9519	2002				Notable/Nb		1ar
					EC Annex IIa,				
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9519	1964		II	5	5	BAP1ý	
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9519	1965		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9519	1964		Bern App III	only)		BAP3	Records
					EC Annex Va;	`			Colin Twissell's
Rana temporaria	Common Frog	SO9519	2002		Bern App III	only)		BAP3	Records
						5 (Killing,			
					L	injuring,			Colin Twissell's
Lacerta vivipara	Viviparous Lizard	SO9519	1970		Bern App III	sale only)			Records
						5 (Killing,			
			4004			injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9519	1991		Bern App III	sale only)		BAP3	Records
						5 (Killing,			O. P. T. P
Alace and		000543	0000		D A 111	injuring,		D 4 D 2	Colin Twissell's
Natrix natrix	Grass Snake	SO9519	2002		Bern App III	sale only)		BAP3	Records
					EC Appay N/a				
Diniotrolluo niniotrolluo	Dinietrelle	000540	2002		EC Annex IVa;		Commen	D A D4:	(DADI
Pipistrellus pipistrellus Meles meles	Pipistrelle	SO9519	2003		Bern App III		Common	BAP1ý	DAPL
IVIEIES ITIEIES	Badger	SO9519	1993		Bern App III		Common		Pagar Causta Matha
Cunanthadan tinulifarmia	Current Clearwing	SO0500	2002				Notable/Nb		Roger Gaunts Moths
Synanthedon tipuliformis	Currant Clearwing	SO9520	2003				Notable/Nb		1ar

					1				
					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
Aricia agestis	Brown Argus	SO9520	1996				Local		GM Butterfly Survey
Argynnis aglaja	Dark Green Fritillary	SO9520	1995				Local		GM Butterflies 500m
Argynnis paphia	Silver-washed Fritillary	SO9520	1995				Local	BAP3	GM Butterfly Survey
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9520	1997		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9520	1997		Bern App III	only)		BAP3	Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9520	1997		Bern App III	only)		BAP3	Records
•						5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9520	1966		Bern App III	sale only)		BAP3	Records
-									Mark and Clare
									Kitchen General
Meles meles	Badger	SO9520	1997		Bern App III		Common		Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9521	2002		Bern App III	only)		BAP3	Records
Turdus iliacus	Redwing	SO9521	2005			1		BAP3	
						- /2 .			
_	_				EC Annex Va;	`			Colin Twissell's
Rana temporaria	Common Frog	SO9522	2000		Bern App III	only)		BAP3	Records
Populus nigra ssp.									
betulifolia	Black Poplar	SO9523	-1992				Vulnerable		
Ctesias serra	Cobweb Beetle	SO9523	2001				Notable/Nb		
Prionychus ater	a darkling beetle	SO9523	2001				Notable/Nb		
Aricia agestis	Brown Argus	SO9523	1997				Local		GM Butterfly Survey
									David Iliffs Hoverfly
Melangyna triangulifera	a hoverfly	SO9523	2000				Notable/Nb		Records
							l		David Iliffs Hoverfly
Criorhina asilica	a hoverfly	SO9523	1944				Notable/Nb		Records
Lasius brunneus	Brown Ant	SO9523	2001				Na		

			.,			WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	5 (Sale	GB Status	BAP	Survey name Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9523	1981		Bern App III	only)		BAP3	Records
Titurus vaigaris	Smooth Newt	309323	1901		Бепт Арр пі	5 (Sale		DAF 3	Colin Twissell's
Bufo bufo	Common Toad	SO9523	1981		Bern App III	only)		ВАР3	Records
Rana temporaria	Common Frog	SO9523	1981		EC Annex Va; Bern App III	5 (Sale only)		D V D 3	Colin Twissell's Records
Aricia agestis	Brown Argus	SO9524	1997		Бепт Арр пі	Orliy)	Local	DAPS	GM Butterfly Survey
Ancia agestis	DIOWII Algus	309324	1997				Locai		Givi Butterily Survey
Dama (amananania		000504	0004		EC Annex Va;	`		DADO	Colin Twissell's
Rana temporaria	Common Frog	SO9524	2004		Bern App III	only)		BAP3	Records
Muotolo putorius	Polecat	SO9524	1993		EC Annex Va; Bern App III				
Mustela putorius							V. do a valeda	DADO	Mark and Clare Kitchen General Records
Salvia pratensis	Meadow Clary	SO9618	2000	2		C	Vulnerable	BAP3	Mark and Clare
Hyacinthoides non-scripta	Bluebell	SO9618	2001			8		BAP3	Kitchen General Records
Herminium monorchis	Musk Orchid	SO9618	2005				Nationally S	•	Mark and Clare Kitchen General Records
					Bern III. EC Va. Vulnerable (Collins & Wells 1987, Invertebrates in need of special protection in				
Helix pomatia	Roman Snail	SO9618	2005		Europe)		Notable/Nb	BAP3	

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
									Roger Gaunts Moths
Pancalia leuwenhoekella	a micro-moth	SO9618	2002				Notable/Nb		1ar
						5 (Sale			
Cupido minimus	Small Blue	SO9618	2000			only)	Local	BAP3	
Aricia agestis	Brown Argus	SO9618	1996				Local		GM Butterfly Survey
						5 (Sale			
Lysandra coridon	Chalk-hill Blue	SO9618	1997			only)	Local	BAP3	GM Butterfly Survey
						5 (Sale			
Hamearis lucina	Duke of Burgundy Fritillary	SO9618	2000			only)	Notable/Nb	BAP3	GM Butterfly Survey
Ladoga camilla	White Admiral	SO9618	1986				Local		GM Butterfly Survey
						5 (Sale			
Boloria euphrosyne	Pearl Bordered Fritillary	SO9618	1987			only)	Notable/Nb	BAP1ý	GM Butterfly Survey
Argynnis aglaja	Dark Green Fritillary	SO9618	1998				Local		GM Butterfly Survey
Argynnis paphia	Silver-washed Fritillary	SO9618	1996				Local	BAP3	GM Butterfly Survey
									David Iliffs Hoverfly
Epistrophe diaphana	a hoverfly	SO9618	1984				Notable/Nb		Records
						5 (Killing,			
						injuring,			Colin Twissell's
Vipera berus	Adder	SO9618	1964		Bern App III	sale only)		BAP3	Records
Hyacinthoides non-scripta	Bluebell	SO9619	1988			8		BAP3	
,		0000.0				5 (Sale			
Hamearis lucina	Duke of Burgundy Fritillary	SO9619	1992			only)	Notable/Nb	BAP3	GM Butterfly Survey
Argynnis paphia	Silver-washed Fritillary	SO9619	1992			37	Local	BAP3	GM Butterfly Survey
0, 1						5 (Killing,			, ,
						injuring,			Colin Twissell's
Lacerta vivipara	Viviparous Lizard	SO9619	1965		Bern App III	sale only)			Records
•	·					5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9619	2001		Bern App III	sale only)		BAP3	Records
Strix aluco	Tawny Owl	SO9619	1988					BAP3	
Picus viridis	Green Woodpecker	SO9619	1992					BAP3	
Dendrocopos major	Great Spotted Woodpecker	SO9619	1988					BAP3	

						WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status		GB Status	BAP	Survey name
						5 (Sale			
Satyrium w-album	White Letter Hairstreak	SO9620	1990			only)	Notable/Nb		GM Butterfly Survey
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9620	1981		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Triturus helveticus	Palmate Newt	SO9620	1974		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9620	1989		Bern App III	only)		BAP3	Records
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9620	1984		Bern App III	only)		BAP3	Records
						5 (Killing,			
						injuring,			Colin Twissell's
Anguis fragilis	Slow-worm	SO9620	1987		Bern App III	sale only)		BAP3	Records
0						5 (Killing,			
						injuring,			Colin Twissell's
Natrix natrix	Grass Snake	SO9620	1968		Bern App III	sale only)		BAP3	Records
					EC Annex IIa,				
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9621	1966		II	5	5	BAP1ý	
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9621	1966		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Triturus helveticus	Palmate Newt	SO9621	1982		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9621	1969		Bern App III	only)		BAP3	Records
					FO A	5 (Oala			Callia Turia a allia
D (00000	4000		EC Annex Va;	`		D 4 D 2	Colin Twissell's
Rana temporaria	Common Frog	SO9621	1982		Bern App III	only)		BAP3	Records
						5 (Killing,			Oalin Tudas : We
Ma (vice va a (vic		000004	407.		D = A : - !!!	injuring,		D 4 D 6	Colin Twissell's
Natrix natrix	Grass Snake	SO9621	1974		Bern App III	sale only)		RAP3	Records

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status		GB Status	BAP	Survey name
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9622	2004		Bern App III	only)		BAP3	Records
						5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9622	2004		Bern App III	only)		BAP3	Records
					EC Annex Va;	5 (Sala			Colin Twissell's
Rana temporaria	Common Frog	SO9622	2004		Bern App III	only)		BAP3	Records
Tana temperana	Common rog	003022	2004		Вент дру на	5 (Killing,		D/ 11 0	rccords
						injuring,			Colin Twissell's
Natrix natrix	Grass Snake	SO9622	1969		Bern App III	sale only)		BAP3	Records
									Roger Gaunts Moths
Oncocera semirubella	a pyralid moth	SO9623	1998				Notable/Nb		1ar
			4000						Roger Gaunts Moths
Eupithecia expallidata	Bleached Pug	SO9623	1998				Notable/Nb		1ar
Cryphia muralis	Marbled Green	SO9623	2003				Notable/Nb		Roger Gaunts Moths 1ar
Crypnia murans	Marbled Green	309023	2003				INOLADIE/IND		Tai
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9623	1989		Bern App III	only)		ВАР3	Records
,	, and the second					5 (Killing,			
						injuring,			
Anguis fragilis	Slow-worm	SO9623	2006		Bern App III	sale only)		BAP3	
									Alan Waka Orthantara
Conocephalus discolor	Long-winged Conehead	SO9624	2004				Na		Alan Wake Orthoptera Records up to 2004
Coriocephalus discolor	Long-winged Conenead	309024	2004		EC Annex IIa,		iva		Necolus up to 2004
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9624	1984		II	5	5	BAP1ý	BAPL
						5 (Sale			
Triturus vulgaris	Smooth Newt	SO9624	1984		Bern App III	only)		BAP3	
						5 (Sale			
Triturus helveticus	Palmate Newt	SO9624	2004		Bern App III	only)		BAP3	

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
					Bern III. EC				
					Va. Vulnerable	,			
					(Collins &				
					Wells 1987,				
					Invertebrates				
					in need of				
					special				
					protection in				
Helix pomatia	Roman Snail	SO9718	1991		Europe)		Notable/Nb	ВАР3	
, , , , , , , , , , , , , , , , , , ,						5 (Sale			
Cupido minimus	Small Blue	SO9718	1984			only)	Local	BAP3	GM Butterfly Survey
Aricia agestis	Brown Argus	SO9718	1995			,	Local		GM Butterfly Survey
Argynnis aglaja	Dark Green Fritillary	SO9718	1995				Local		GM Butterfly Survey
Argynnis paphia	Silver-washed Fritillary	SO9718	1995				Local	BAP3	GM Butterfly Survey
						5 (Sale			Colin Twissell's
Triturus vulgaris	Smooth Newt	SO9718	1982		Bern App III	only)		BAP3	Records
-						5 (Sale			Colin Twissell's
Triturus helveticus	Palmate Newt	SO9718	1982		Bern App III	only)		BAP3	Records
					EC Annex IIa,				
					IVa; Bern App				
Triturus cristatus	Warty Newt	SO9719	1999		II	5		BAP1ý	BAPL
						5 (Sale			
Triturus vulgaris	Smooth Newt	SO9719	1999		Bern App III	only)		BAP3	
						5 (Sale			
Triturus helveticus	Palmate Newt	SO9719	1999		Bern App III	only)		BAP3	
					EC Annex Va;	5 (Sale			Colin Twissell's
Rana temporaria	Common Frog	SO9719	1977		Bern App III	only)		BAP3	Records
						5 (Killing,			
						injuring,			Colin Twissell's
Vipera berus	Adder	SO9719	1963		Bern App III	sale only)		BAP3	Records
Aricia agestis	Brown Argus	SO9720	1997				Local		GM Butterfly Survey

			.,	 	WCA			
Full Name	Common Name	GRID SQ		Status	Schedules		BAP	Survey name
Argynnis aglaja	Dark Green Fritillary	SO9720	1999			Local		GM Butterfly Survey
				FC Amas: \/a.	E (Colo			Calin Turionallia
Dama (amananania	0	000700	4005	EC Annex Va;	`		D 4 D0	Colin Twissell's
Rana temporaria	Common Frog	SO9720	1985	Bern App III	only)		BAP3	Records
					5 (Killing,			Oalin Turianallia
M Land		000700	4005	D A III	injuring,		D 4 D0	Colin Twissell's
Vipera berus	Adder	SO9720	1995	Bern App III	sale only)		BAP3	Records
								Mark and Clare
	<u></u>							Kitchen General
Hyacinthoides non-scripta	Bluebell	SO9721	2000		8		BAP3	Records
	1							David Iliffs Hoverfly
Epistrophe diaphana	a hoverfly	SO9721	1994			Notable/Nb		Records
								David Iliffs Hoverfly
Cheilosia soror	a hoverfly	SO9721	1986			Notable/Nb		Records
								David Iliffs Hoverfly
Volucella inflata	a hoverfly	SO9721	1987			Notable/Nb		Records
								David Iliffs Hoverfly
Xylota xanthocnema	a hoverfly	SO9721	1986			Notable/Nb		Records
					5 (Sale			Colin Twissell's
Bufo bufo	Common Toad	SO9721	1964	Bern App III	only)		BAP3	Records
				EC Annex Va;	•			Colin Twissell's
Rana temporaria	Common Frog	SO9721	1967	Bern App III	only)		BAP3	Records
					5 (Killing,			
					injuring,			Colin Twissell's
Natrix natrix	Grass Snake	SO9721	1969	Bern App III	sale only)		BAP3	Records
								Mark and Clare
								Kitchen General
Hyacinthoides non-scripta	Bluebell	SO9722	2000		8		BAP3	Records
					5 (Sale	_		Colin Twissell's
Triturus helveticus	Palmate Newt	SO9722	1969	Bern App III	only)		BAP3	Records

					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status	Schedules	GB Status	BAP	Survey name
Rana temporaria	Common Frog	SO9722	1967		EC Annex Va; Bern App III	5 (Sale only)		BAP3	Colin Twissell's Records
,					EC Annex IIa, IVa; Bern App	,			
Triturus cristatus	Warty Newt	SO9723	1998		II	5		BAP1	BAPL
Cupido minimus	Small Blue	SO9818	2001			5 (Sale only)	Local	BAP3	GM Butterfly Survey
Argynnis aglaja	Dark Green Fritillary	SO9818	1995				Local		GM Butterfly Survey
Lacerta vivipara	Viviparous Lizard	SO9819	1965		Bern App III	5 (Killing, injuring, sale only)			Colin Twissell's Records
Anguis fragilis	Slow-worm	SO9819	1965		Bern App III	5 (Killing, injuring, sale only)		BAP3	Colin Twissell's Records
Austropotamobius pallipes	Freshwater Crayfish	SO9820	2000		Bern III. EC IIa, Va. Vulnerable (Collins & Wells 1987, Invertebrates in need of special protection in Europe)	5 (Taking and sale only)	Local	BAP1ý	
Hyacinthoides non-scripta	Bluebell	SO9821	1988			8		BAP3	
Tilia platyphyllos	Large-leaved Lime	SO9822	2003				Nationally S	•	Mark and Clare Kitchen General Records
	Bluebell	SO9822	2003			8			Mark and Clare Kitchen General Records

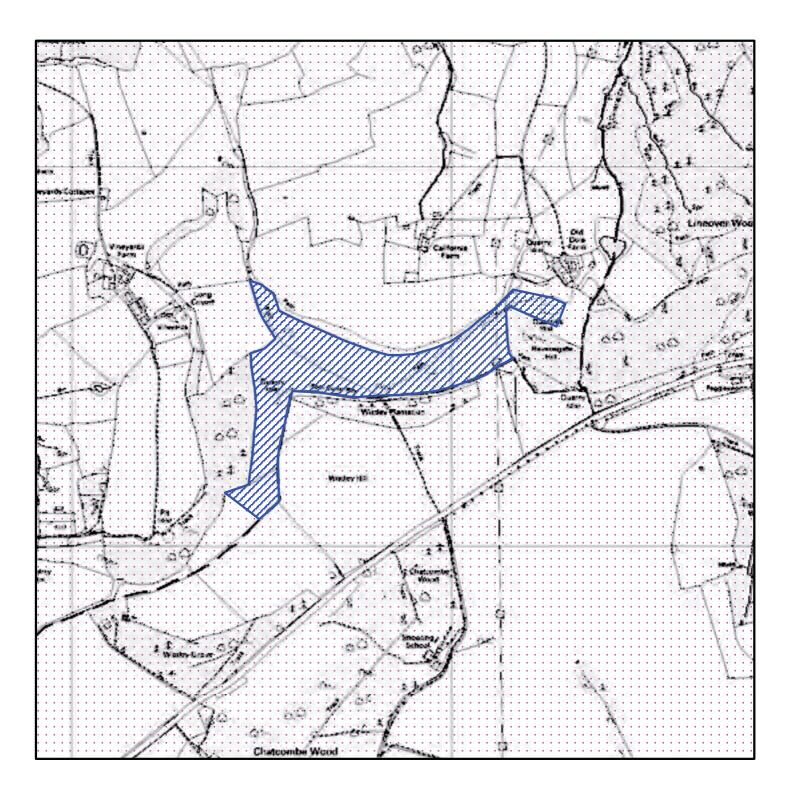
							1		
					International	WCA			
Full Name	Common Name	GRID SQ	Year	RDB	Status		GB Status	BAP	Survey name
						5 (Sale			
Lysandra coridon	Chalk-hill Blue	SO9822	1975			only)	Local	BAP3	GM Butterfly Survey
									Mark and Clare
							_		Kitchen General
Capreolus capreolus	Roe Deer	SO9822	2004		Bern App III		Common		Records
									Mark and Clare
Populus nigra ssp.									Kitchen General
betulifolia	Black Poplar	SO92B	-1997				Vulnerable		Records
									Mark and Clare
Populus nigra ssp.									Kitchen General
betulifolia	Black Poplar	SO92L	-1997				Vulnerable		Records
									Mark and Clare
Populus nigra ssp.									Kitchen General
betulifolia	Black Poplar	SO92A	-1997				Vulnerable		Records
									Mark and Clare
									Kitchen General
Lepidium latifolium	Dittander	SO92G	-1997				Nationally S	carce	Records
									Mark and Clare
<u> </u>							l		Kitchen General
Euphorbia platyphyllos	Broad-leaved Spurge	SO91U	-1997				Nationally S	ВАР3	
									Mark and Clare
			400-						Kitchen General
Hyacinthoides non-scripta	Bluebell	SO91U	-1997			8		BAP3	Records
									Mark and Clare
	5	00000	4007					D 4 D0	Kitchen General
Hyacinthoides non-scripta	Bluebell	SO92B	-1997			8		BAP3	Records
									Mark and Clare
The same the date of the second of	Di di di	00001	400-				1	D 4 D 6	Kitchen General
Hyacinthoides non-scripta	Rinepell	SO92L	-1997			8		BAP3	Records
									Mark and Clare
li estadesta		00000	400-					D 4 5 5	Kitchen General
Hyacinthoides non-scripta	IRINEPEII	SO92R	-1997			8		IRA ₅ 3	Records

					luta un ati a u al	IMO A			
Full Name	Common Name	GRID SQ	Vear	RDR	International Status	WCA Schedules	GB Status	RΔP	Survey name
T dii Ndiile	Common Name	CINID OQ	i cai	NDB	Otatus	Concadics	OD Otatus	DAI	Mark and Clare
									Kitchen General
Hyacinthoides non-scripta	Bluebell	SO92A	-1997			8		BAP3	Records
									Mark and Clare
									Kitchen General
Hyacinthoides non-scripta	Bluebell	SO92F	-1997			8		BAP3	Records
									Mark and Clare
									Kitchen General
Hyacinthoides non-scripta	Bluebell	SO92K	-1997			8		BAP3	Records
									Mark and Clare
									Kitchen General
Hyacinthoides non-scripta	Bluebell	SO92Q	-1997			8		BAP3	Records
									Mark and Clare
									Kitchen General
Hyacinthoides non-scripta	Bluebell	SO92V	-1997			8		BAP3	Records
Hyacinthoides non-scripta	Bluebell	SO92A	1987			8		BAP3	BSBI Local Change
,									Mark and Clare
									Kitchen General
Ruscus aculeatus	Butcher's-broom	SO92K	-1997		EC Annex Vb				Records
								-	Mark and Clare
									Kitchen General
Herminium monorchis	Musk Orchid	SO91U	-1997				Nationally S	carce	Records
	<u></u>								Alan Wake Orthoptera
Gomphocerippus rufus	Rufous Grasshopper	SO92	1961				Notable/Nb	BAP3	Records up to 2004
Aricia agestis	Brown Argus	SO91P	1985				Local		GM Butterfly Survey
Scotopteryx bipunctaria									Roger Gaunts Moths
cretata	Chalk Carpet	SO92	1993				Notable/Nb	BAP2ý	1ar

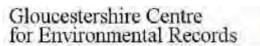
Site Name : Ravensgate Hill Site Code : SO91/012

Grid Ref: SO977185

Reason for selection: Semi-natural grassland



Map scale 1:10000



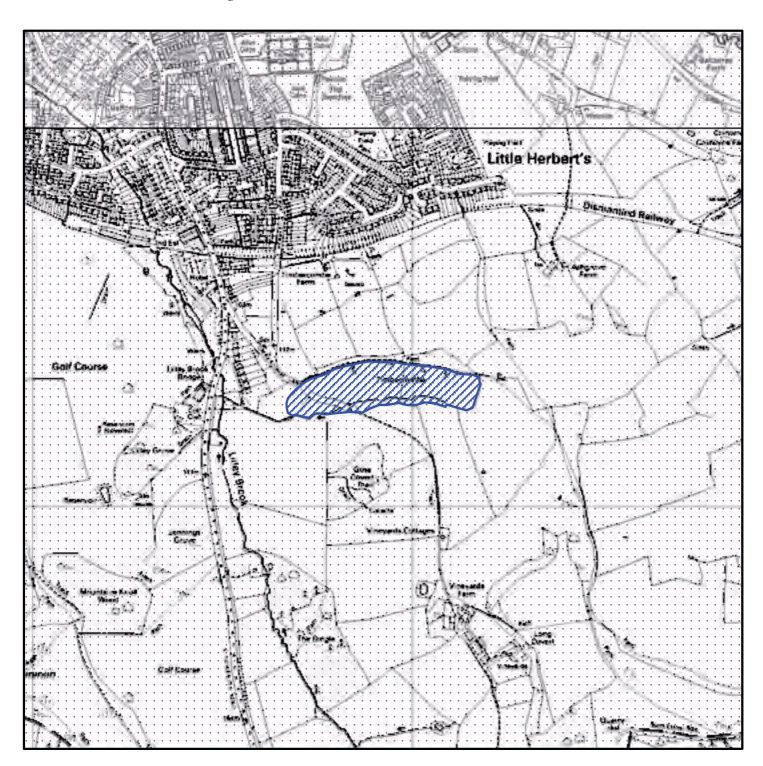


Site Name : Timbercombe Site Code : SO91/022

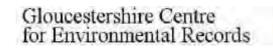
Grid Ref: SO969193

Reason for selection: Ancient semi-natural broad-leaved woodland

site larger than 2 ha



Map scale 1:10000

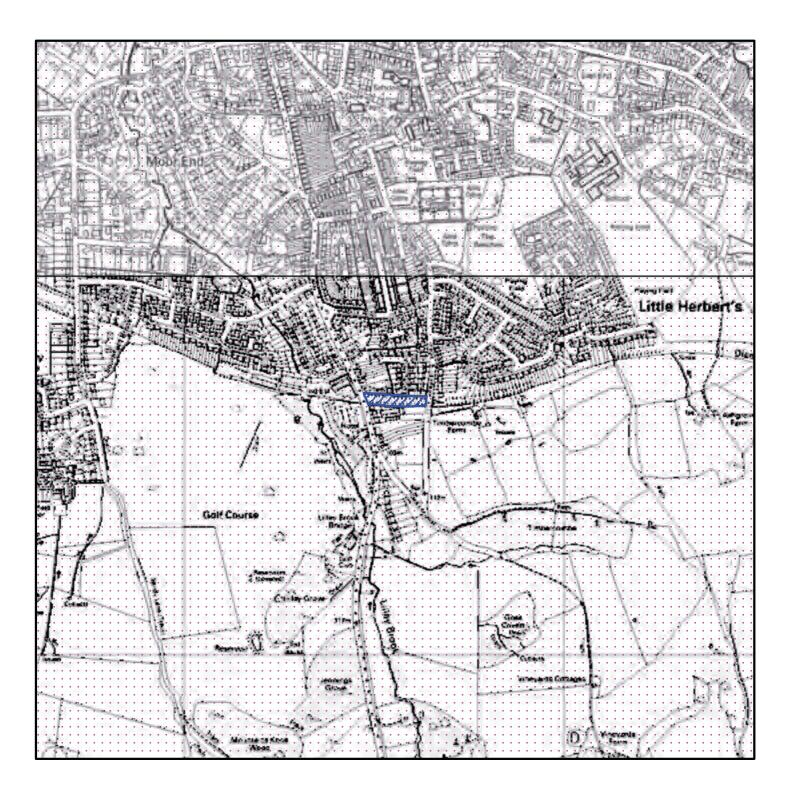




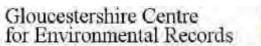
Site Name : Charlton Kings Railway Line Nature Reserve Site Code : SO91/035

Grid Ref: SO966197

Reason for selection: Plant, bird and invertebrate interest



Map scale 1:10000

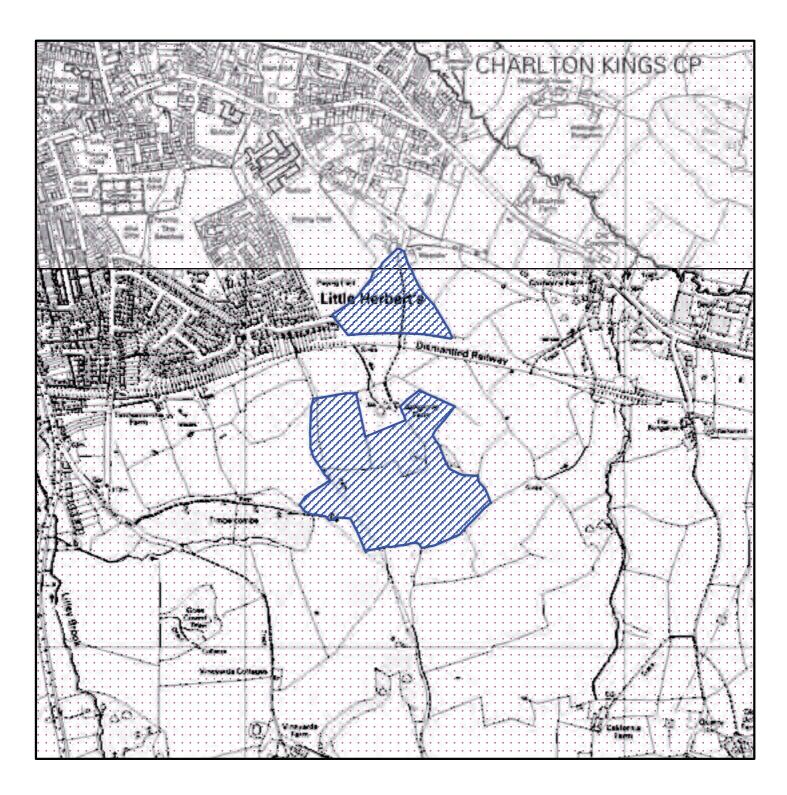




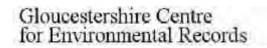
Site Name : Ashgrove Farm Meadow Site Code : SO91/045

Grid Ref: SO974199

Reason for selection: Semi-natural grassland



Map scale 1:10000



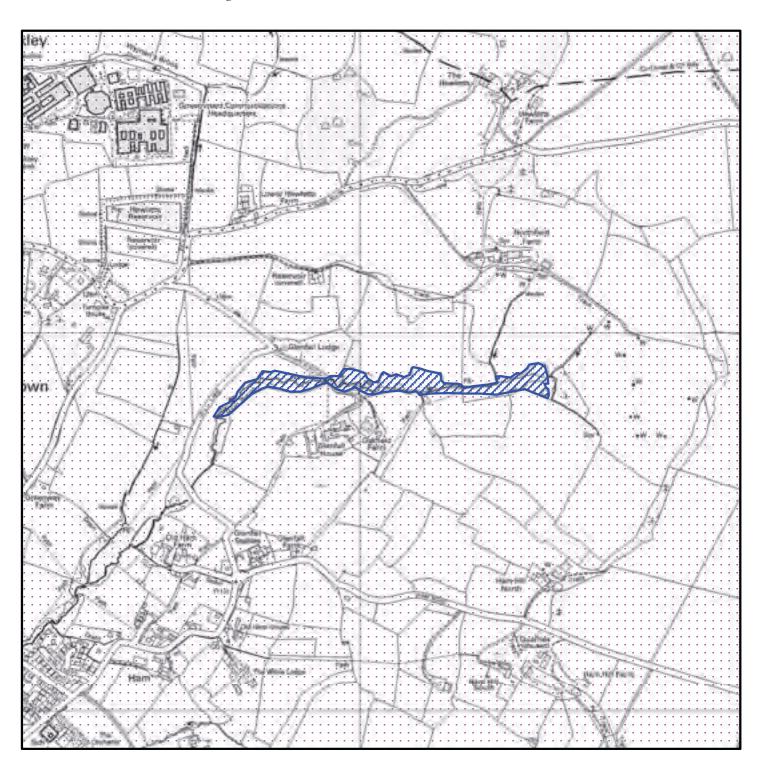


Site Name : Glenfall Wood Site Code : SO92/010

Grid Ref: SO981219

Reason for selection: Ancient semi-natural broad-leaved woodland

site larger than 2 ha



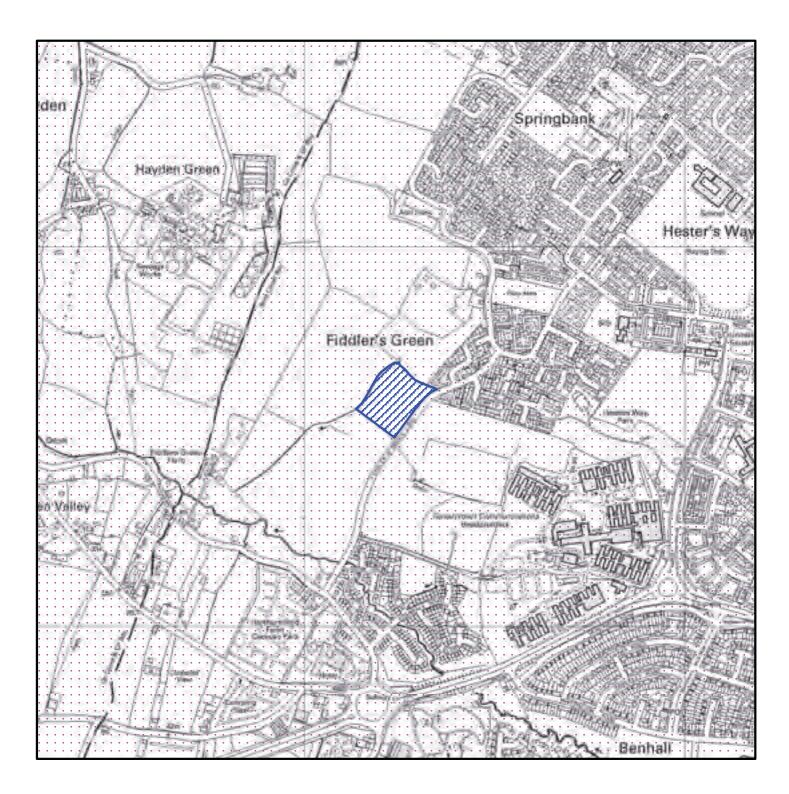
Map scale 1:10000



Site Name : Fiddlers Green Lane Meadow Site Code : SO92/016

Grid Ref: SO913226

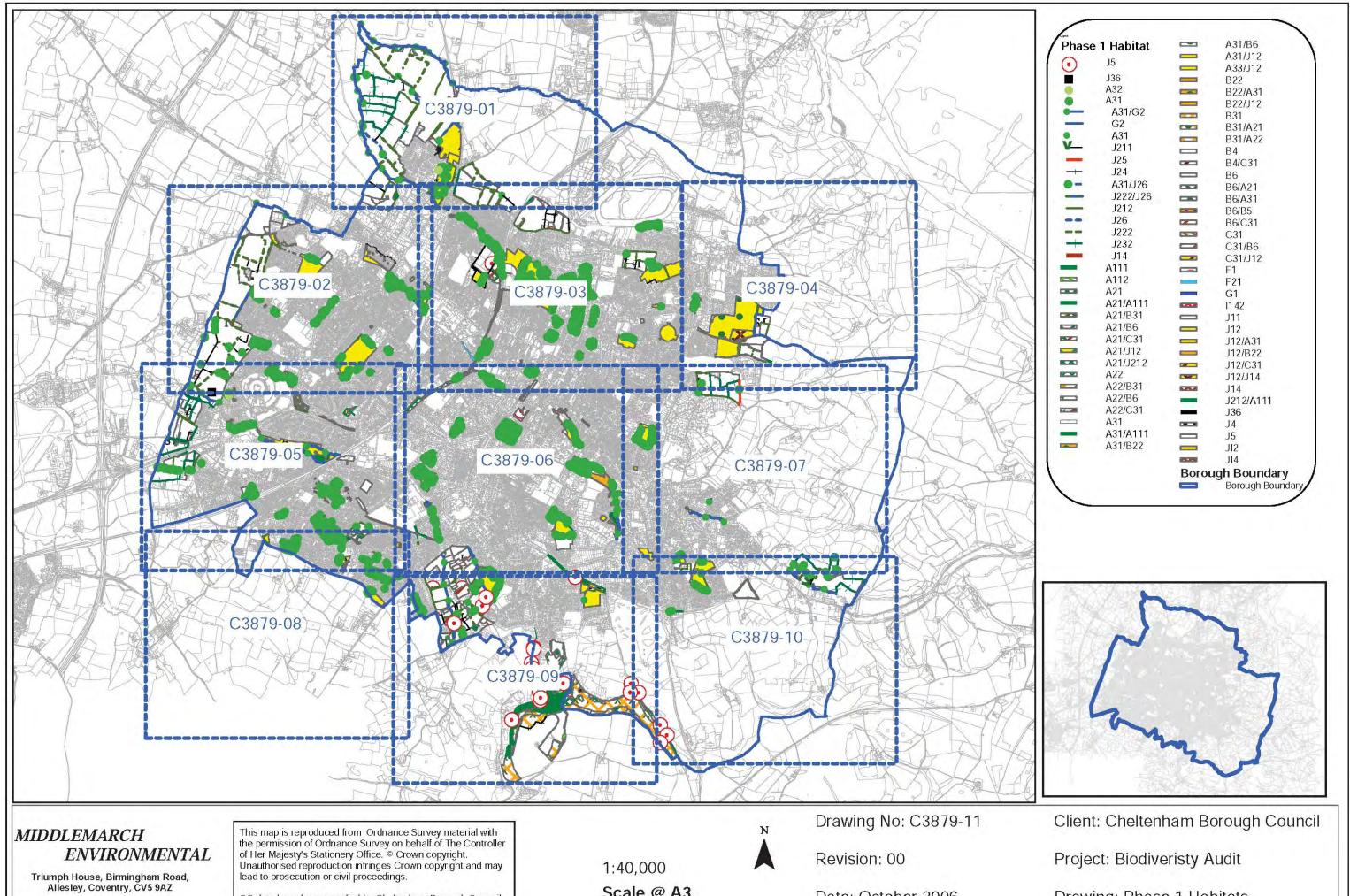
Reason for selection: Semi-natural grassland



Map scale 1:10000



Biodiversity Audit Cheltenham Borough Council	RT-MME-3879-rev01
APPENDIX 3: EXTENDED PHASE 1 HAB	ITAT DRAWINGS



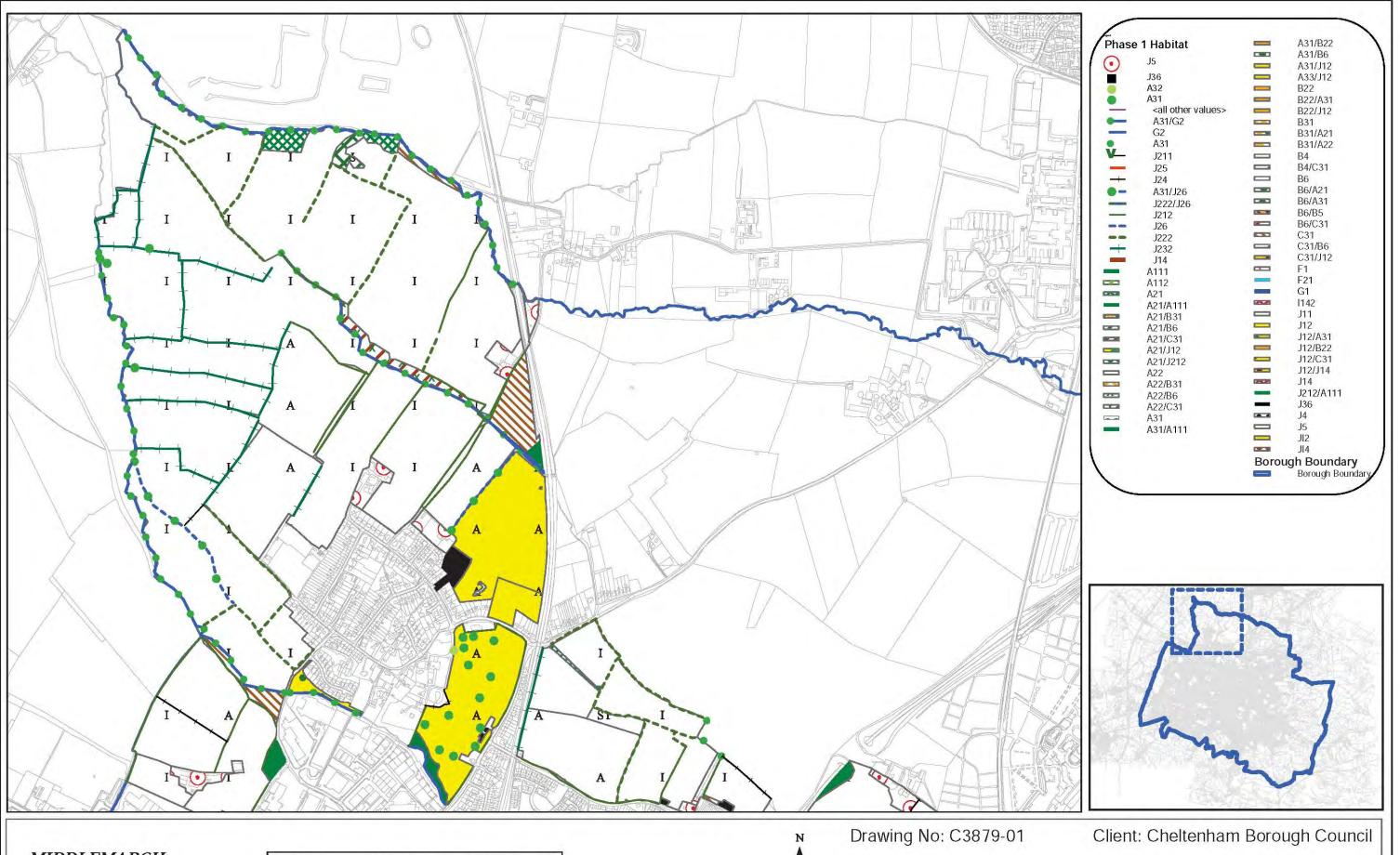
Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

Scale @ A3

Date: October 2006

Approved by: PS

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright.
Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

Scale @ A3

1:10,000

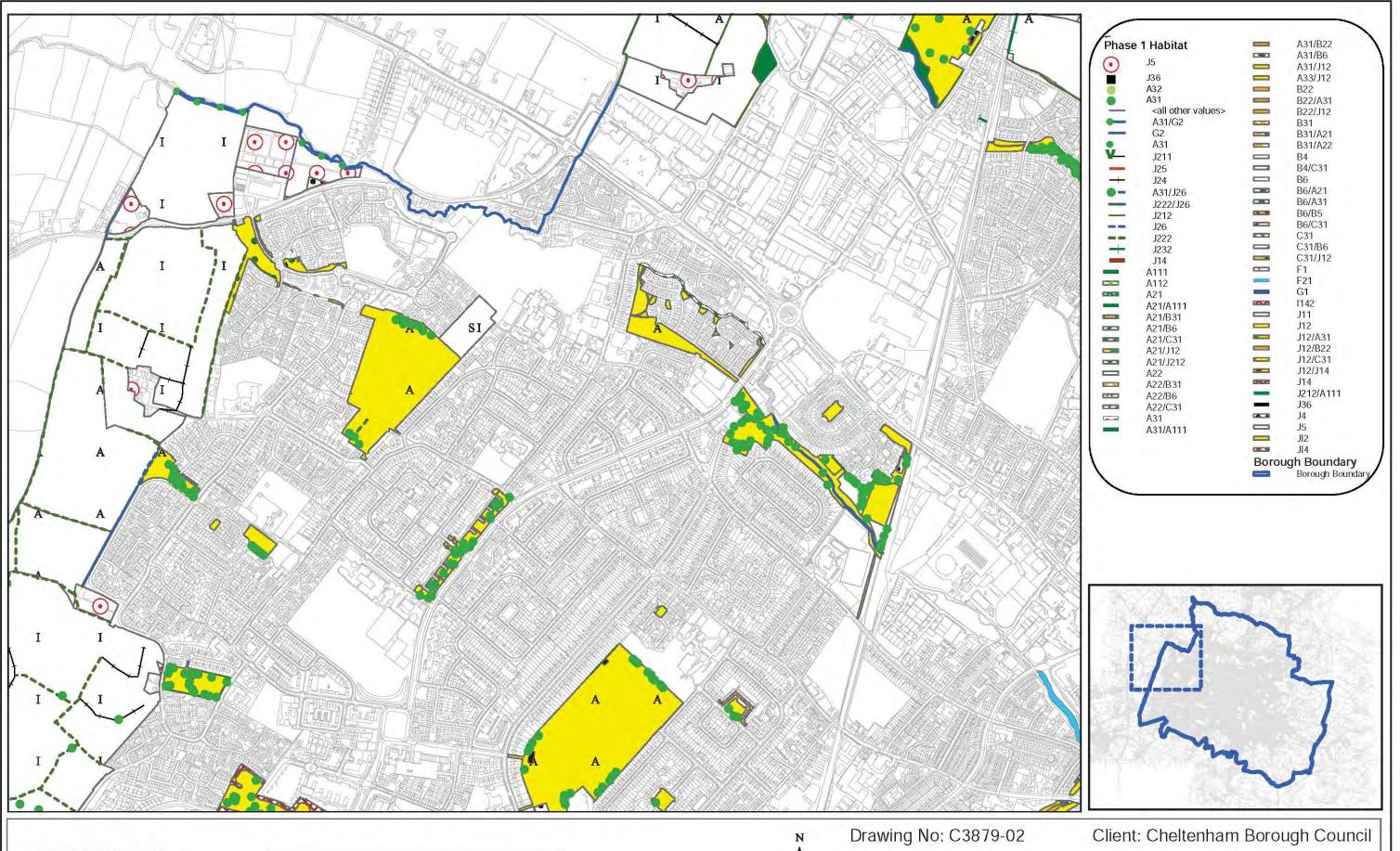
Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

1:10,000

Scale @ A3

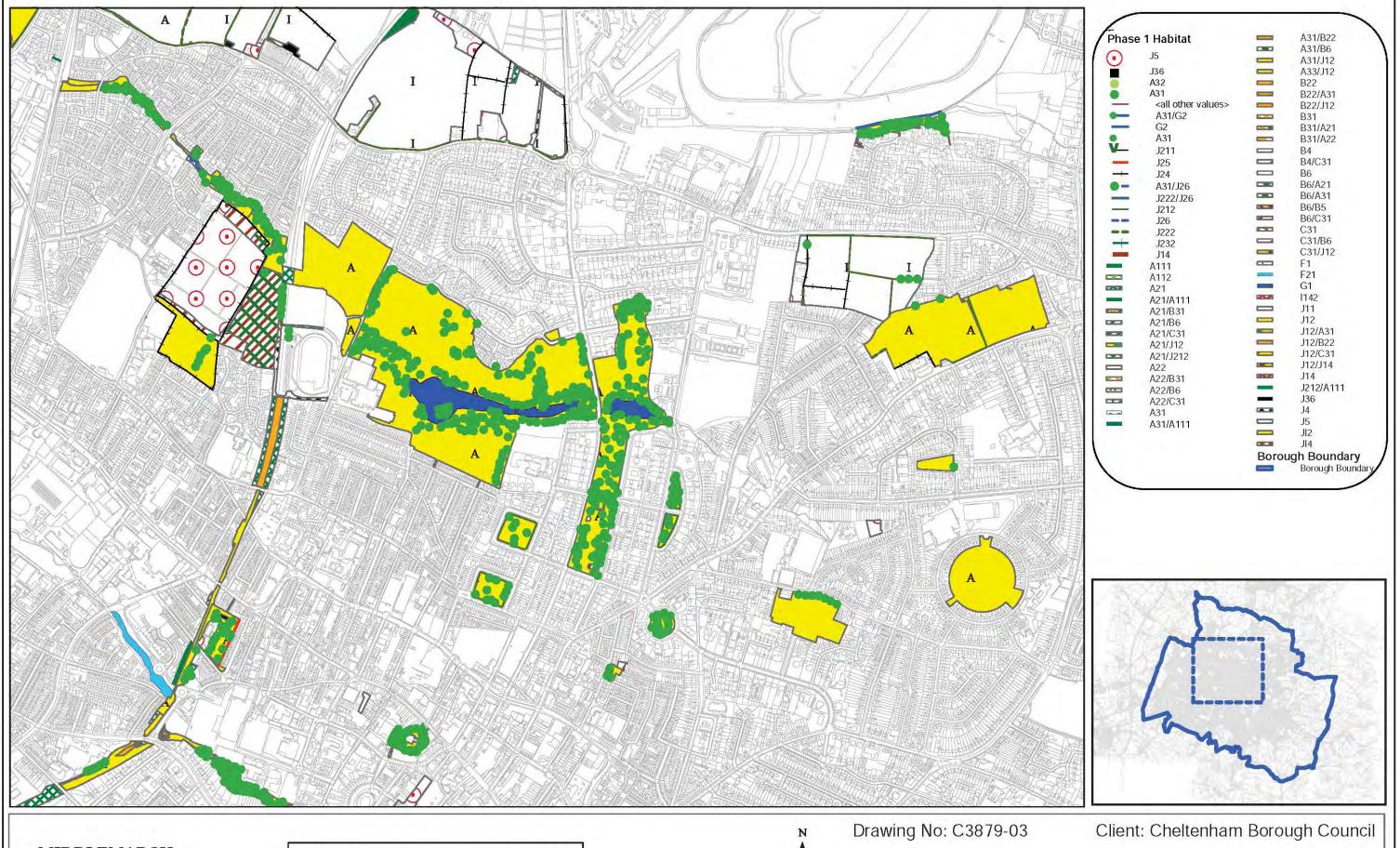
Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright.
Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384 1:10,000

Scale @ A3

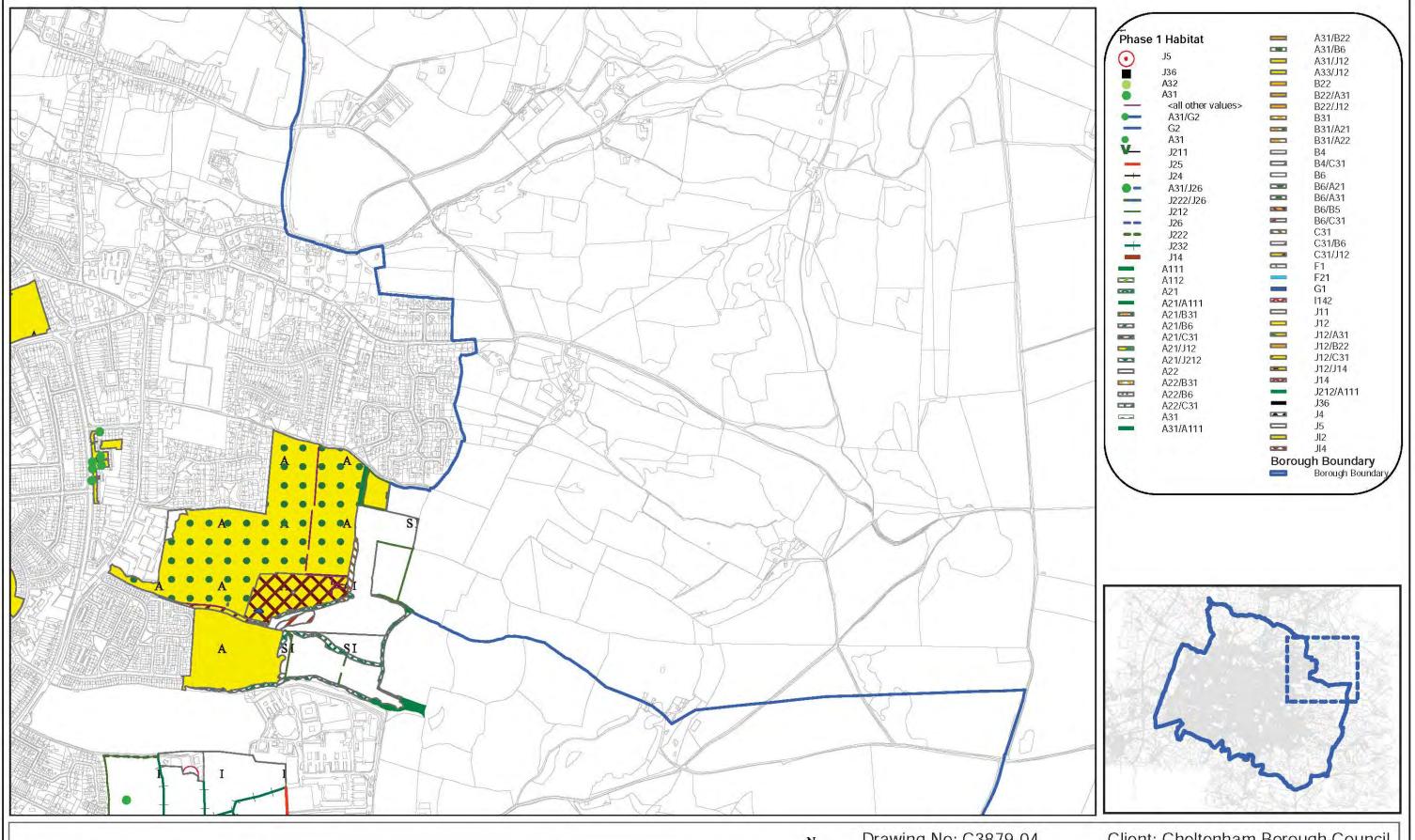
Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

1:10,000 Scale @ A3 Drawing No: C3879-04

Revision: 00

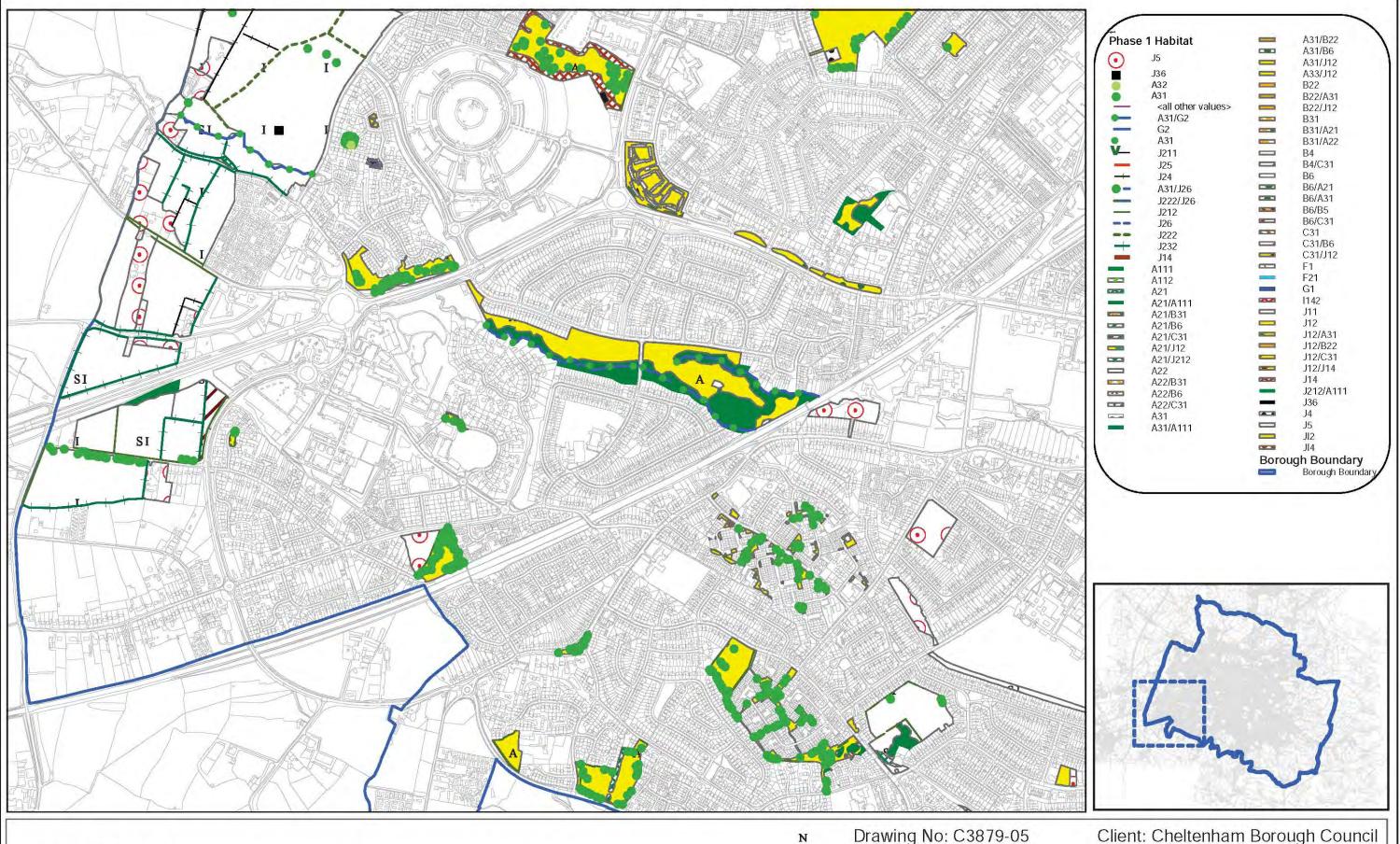
Date: October 2006

Approved by: DS

Client: Cheltenham Borough Council

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

1:10,000

Scale @ A3

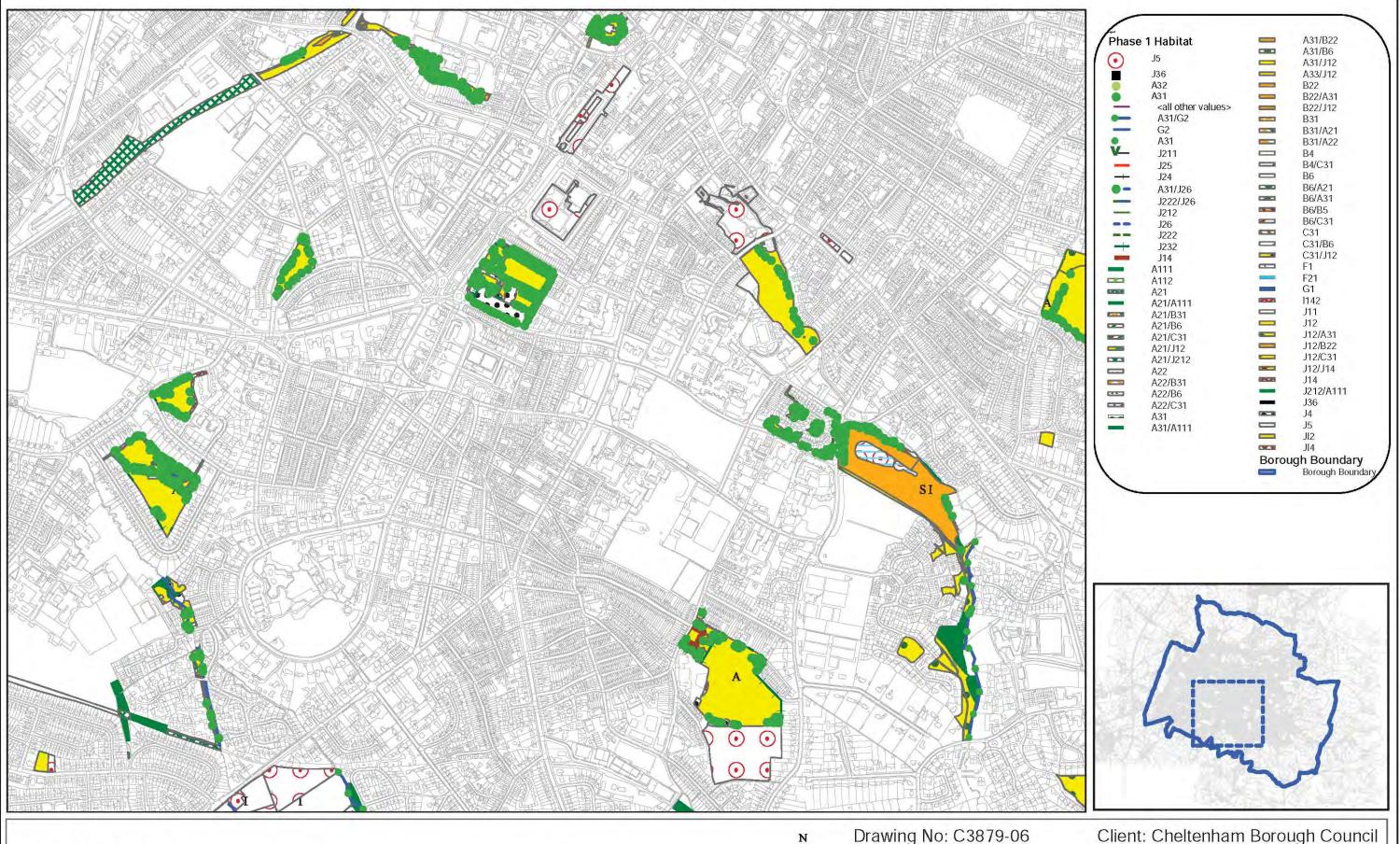
Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

1:10,000

Scale @ A3

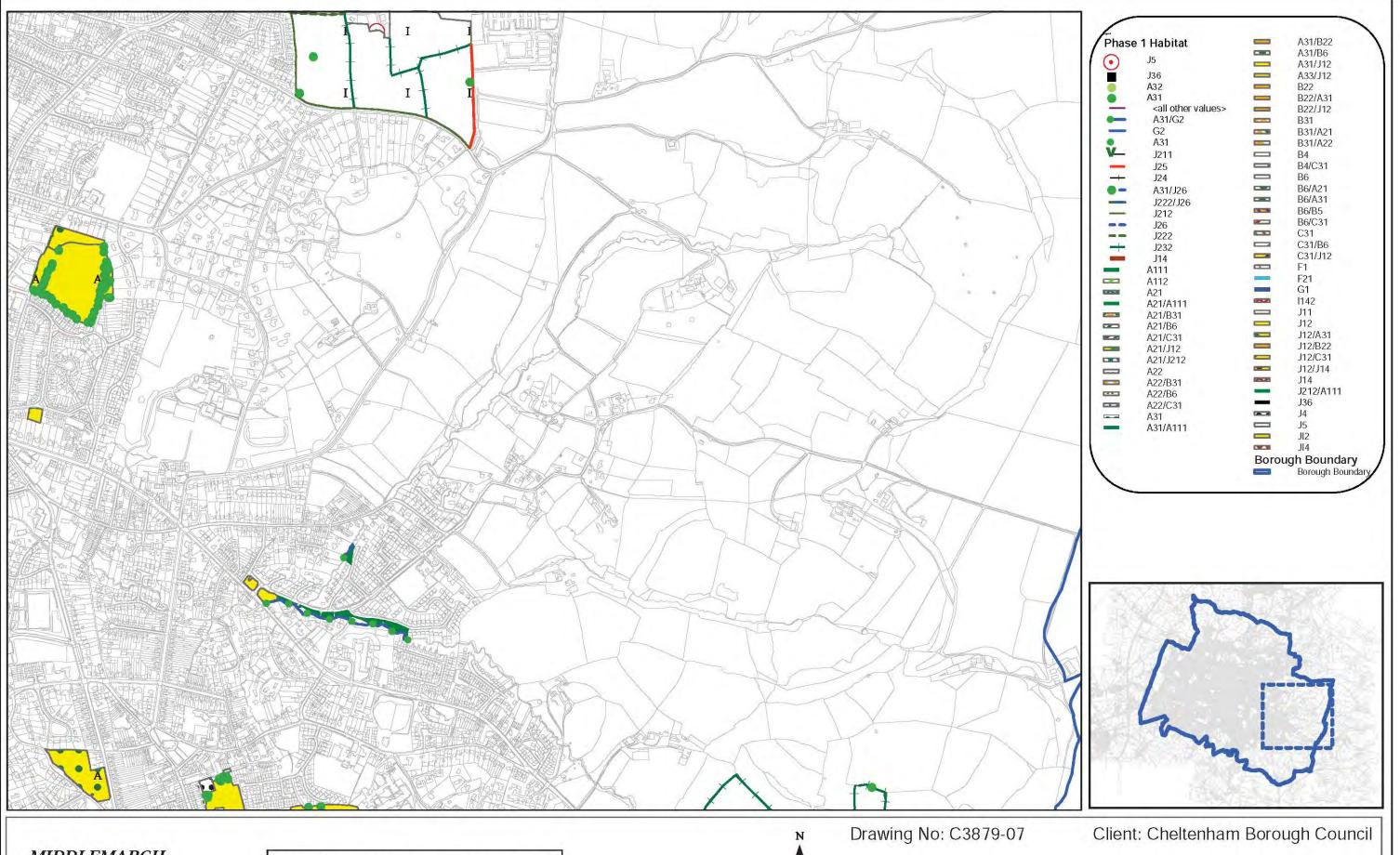
Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

Scale @ A3

1:10,000

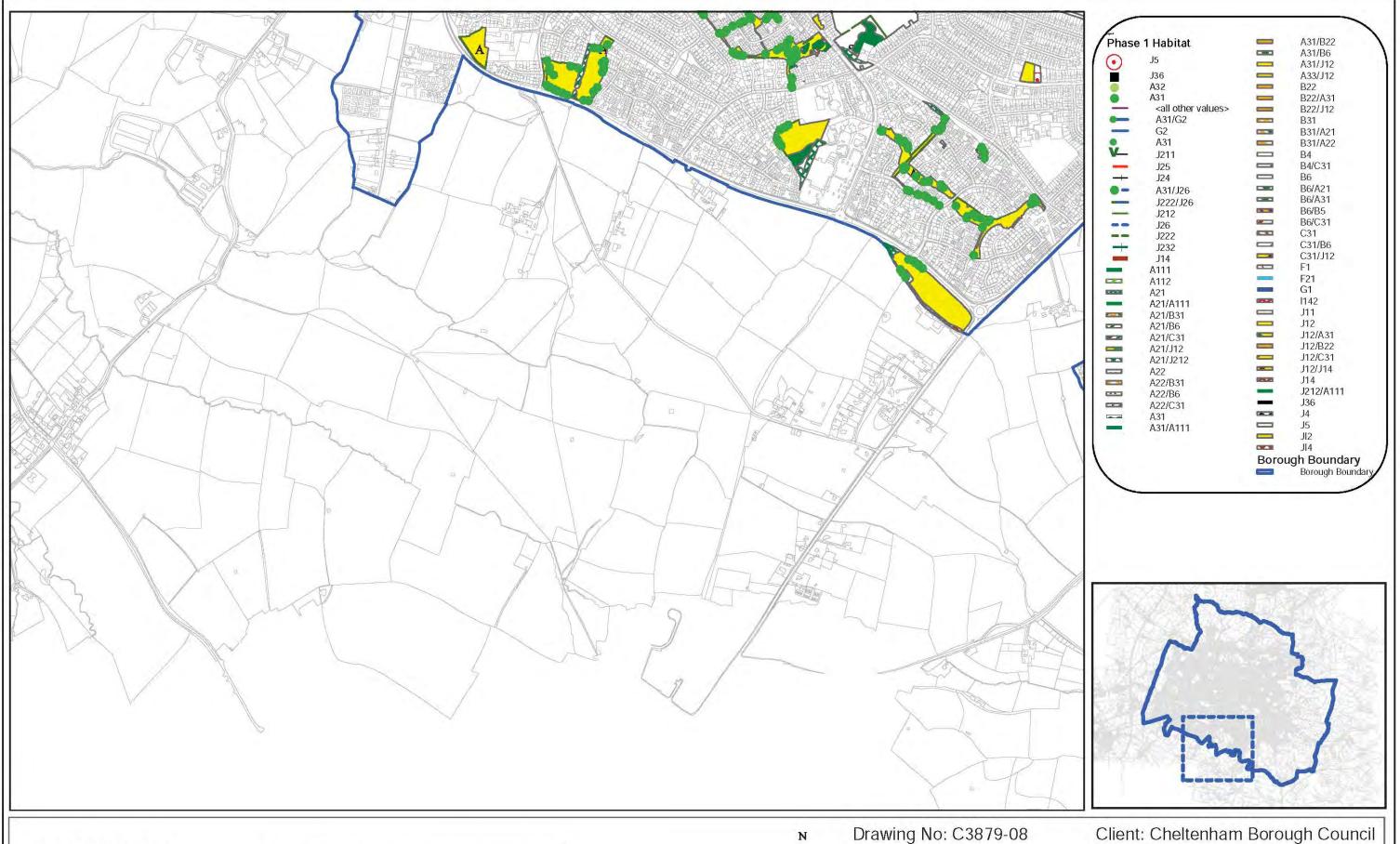
Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

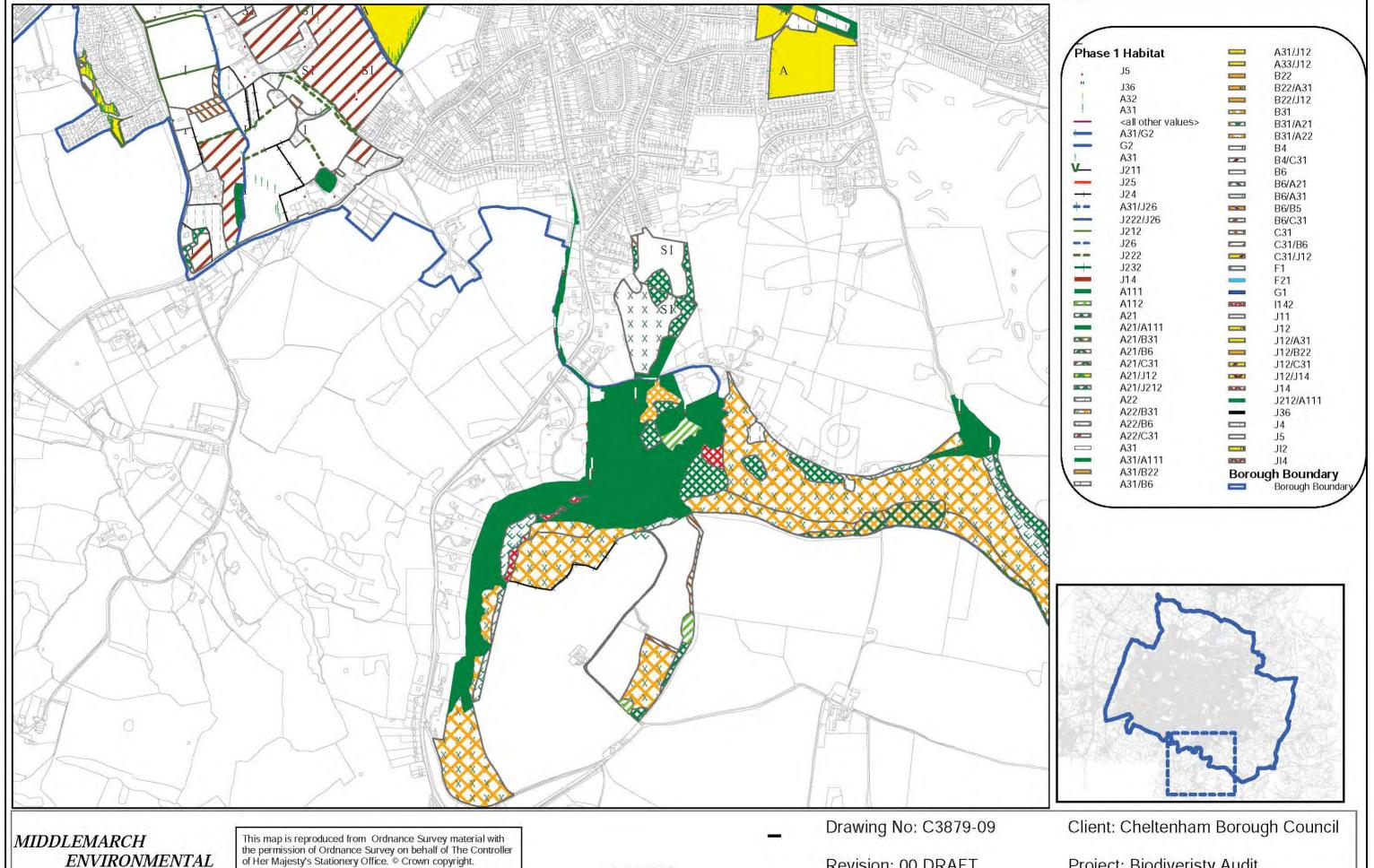
1:10,000 Scale @ A3 Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright.

Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

1:10,000

Scale @ A3

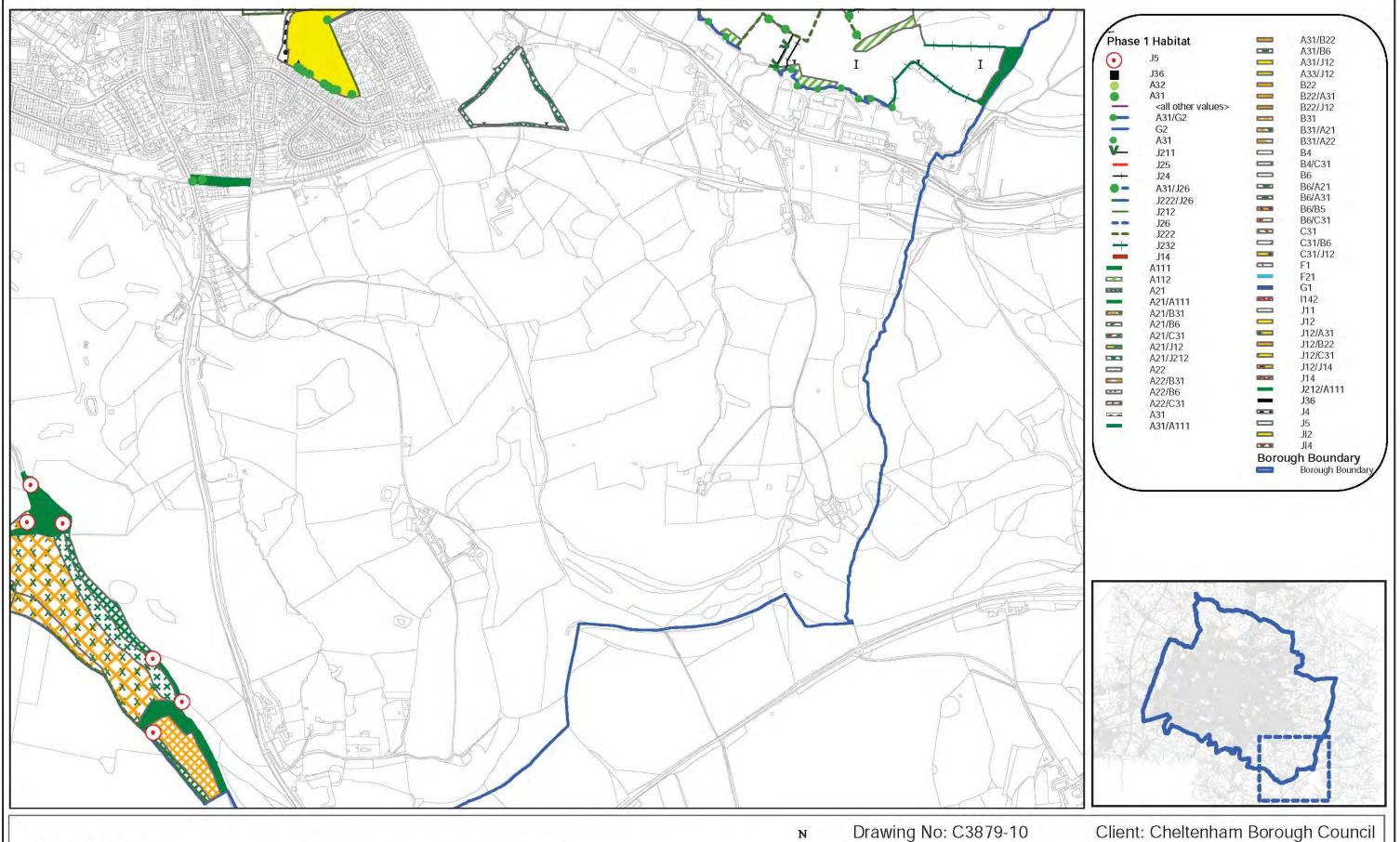
Revision: 00 DRAFT

Date: September 2006

Approved by:

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats



Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

Scale @ A3

1:10,000

Revision: 00

Date: October 2006

Approved by: DS

Project: Biodiveristy Audit

Drawing: Phase 1 Habitats

APPENDIX 4: SITE DESCRIPTIONS

This section provides a summary description of each of the sites assessed during this project; Middlemarch Environmental Drawing numbers C3879-14-01 to -05 show the locations of the sites.

A4.1 Allotments

Site 3001 Alma Road

Majority of allotment plots are cultivated.

Site 3002 Asquith

The majority of the allotment plots are well maintained. Others are currently fallow with areas of tall ruderal vegetation.

Site 3003 Hartherley

A mixture of fallow and cultivated allotments.

Site 3004 Hayden I

A mixed site of cultivated and fallow allotment plots.

Site 3005 Hayden II

A mixed site of cultivated and fallow allotment plots.

Protected species:

• The mature trees may have potential for bats.

Site 3006 Reddings Road

A mixture of fallow and cultivated allotments.

Site 3007 Severn Road

The majority of the allotment plots are well maintained.

Site 3008 Terry Ashdown Henley Way

A mixed site of cultivated and fallow allotment plots.

Site 3009 – no name

Majority of allotment plots are cultivated. A tree-lined stream forms the northern boundary of the site.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats. The discontinuous nature of the stream as a result of culverts may discourage the dispersion of otters. It has low-moderate suitability for water voles as a result of the heavy shading. The stream also has low-moderate potential for white-clawed crayfish.

A4.2 Cemetery or Churchyard

Site 3 Bouncers Lane Cemetery

This large site comprised the Bouncers Lane cemetery and contained amenity grassland, poor semi-improved grassland, scattered mixed trees, buildings, speciespoor hedge, introduced shrub, ponds and a stream/wet ditch. Amenity grassland with graves dominated the site, with species noted including annual meadow-grass, ribwort plantain, daisy, rough-stalked feather-moss, germander speedwell, cats-ear, common chickweed, dandelion, white clover, black medick, field wood-rush, meadow foxtail, greater plantain, sweet vernal grass, springy turf-moss, Yorkshire fog and mouse-ear hawkweed.

Of note was an area of amenity grassland adjacent to the entry road to the south-west of the site. This grassland had a very short turf that was relatively diverse, with species including field wood-rush, yarrow, white clover, smooth meadow-grass, ribwort plantain, self-heal, speedwell, cats-ear, black medick, daisy, common mouse-ear, germander speedwell, springy turf-moss, red fescue and moss sp.

There were numerous trees scattered throughout the site, many of which were mature specimens of considerable size and ecological value. Species recorded on site were cedar, conifer sp., lime, beech, Scots pine, cypress, maple, holly, yew, field maple, silver birch, willow, horse chestnut and holm oak. There were several species-poor hedges through the site, including single-species yew, beech, hawthorn, hazel or conifer sp. hedges. There was also a hedge containing several species including holly, privet, hawthorn, bramble and beech separating an area of poor semi-improved grassland, in the north-western corner, from the reminder of the site. This area also had a scrubby species-poor hedgerow along the western and northern boundaries, which contained cherry, ash, blackthorn, hawthorn, ivy and bramble. The poor semiimproved grassland contained wavy bittercress, Yorkshire fog, common vetch, germander speedwell, red fescue, creeping buttercup, hogweed, dandelion, meadow cranesbill, nettle, couch, ribwort plantain, broad-leaved dock, lords and ladies, cleavers, cow parsley, bramble and creeping bent. There was a potential badger sett in the south-west corner of this grassland, with cellophane noted to have been taken to most entry holes.

Scattered shrub was present throughout the amenity grassland areas on site, with shrub beds also present in the gardens of remembrance in the south-east corner. There were two ponds in this area, with an associated stream/wet ditch. The first pond was circular, concrete-sided with a fountain and a small amount of water lily but no other vegetation. This pond was not considered to offer habitat for protected species such as great crested newt. The second pond was larger and was fed by a well managed stream running from the wet ditch/stream that was located on the southern boundary. The pond had brick and mud banks with lots of emergent vegetation, including water mint, grass and sedge. Protected species such as great crested newt may potentially use this habitat. The stream was <1 m wide and c.10 cm deep with muddy banks in some places but with intensively managed sections including concrete sides, steps, waterfalls and pipes. It is considered unlikely that protected species such as water vole, otter and white-clawed crayfish would use this habitat.

There were several buildings on site, including the large main cemetery buildings at its centre. These main buildings may have potential of providing suitable features for

bats. Additional buildings were situated adjacent to the access road to the south west of the site. These were both stone buildings, one with a pitched, tiled roof, and the other with a flat roof. Neither had any visible suitable features for roosting bats. There were also two buildings within the poor semi-improved grassland to the west of the site. The first was a brick building with a corrugated metal roof and the other an open lean-to. Neither had any visible suitable features for roosting bats. There was another building adjacent to the main car-park on site. This was a brick building with a pitched roof that had moderate potential of offering suitable habitat for roosting bats. The many trees present on the site may provide roosting features for bats. Of note was a large, dead, mature tree to the west of the site, which was clad with dense ivy and had holes that may be suitable roosting features. This tree also had mistletoe.

Site 29 Jenner Gardens

The site comprised amenity grassland, hard standing, tree planting, broad-leaved woodland, introduced shrub and scattered trees. The amenity grassland contained white clover, perennial rye-grass, common vetch, spear thistle and dandelion, with patches of planted daffodil. There were several patches of recently planted trees, which were observed to contain young willow, elder, silver birch, beech and holly. There were also semi-mature and mature trees scattered throughout the site, including sycamore, cherry, turkey oak, yew, hazel birch, ash and Lombardy poplar, with some of the mature specimens of considerable size and ecological value. The mature turkey oak was noted to have dense ivy growth, therefore may have low-moderate potential of providing habitat for roosting bats. There was also a strip of broad-leaved woodland adjacent to the river, which ran through the site. This strip contained numerous mature horse chestnuts with associated ivy, bramble, violet, lesser celandine and sedge. The horse chestnuts were mature trees of considerable size and ecological value, with some having visible features that may be suitable for roosting bats.

Site 76 St Marys Parish Churchyard

The site comprised ephemeral/short perennial vegetation and a few scattered trees growing amongst gravestones. Species noted were ivy-leaved speedwell, cleavers, common field speedwell black horehound, shepherds purse, Yorkshire fog, willowherb, rough-stalked feather-moss, dandelion, nettle, couch, lesser celandine, groundsel and ivy. The scattered trees were young and were yew, conifer and a broadleaved species.

Site 96 Charlton Kings Cemetery

The site is a well maintained cemetery with a yew hedgerow around the boundary. The driveway up to the main cemetery is lined with mature trees, including holly and red cedar, and introduced shrub. The main habitat within the cemetery itself is amenity grassland with some species-poor semi-improved grassland around the edges.

Protected species:

• The mature trees may have potential for bats. The hedgerows are likely to be used as commuting routes by bats.

A4.3 Green corridor

Site 10 Charlton Park Open Space

The site is primarily a tree/broadleaved woodland lined watercourse with areas of amenity grassland with scattered trees. The majority of the scattered trees are non-native and are a mix of conifers and broadleaf. There are some mature, potential veteran oaks within the site.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats. The discontinuous nature of the stream as a result of culverts may discourage the dispersion of otters. It has low suitability for water voles as a result of the heavy shading. The stream also has low-moderate potential for white-clawed crayfish.

Site 26 Honeybourne Line Open Space

This large, linear site contained scrub, tall ruderal/ephemeral/short perennial vegetation, semi-improved grassland, amenity grassland, scattered broadleaved trees, hard standing, broad-leaved woodland and mixed woodland.

Scrub vegetation was frequent throughout the site and contained bramble, hawthorn, hogweed, curled dock, lesser celandine, cleavers, lords and ladies, cow parsley, willow, Japanese knotweed, ivy, maple, meadow cranesbill, white dead nettle, sycamore, blackthorn, buddleia and nettle.

In the far north section of the site, there was ephemeral/short perennial vegetation with tall ruderal species along each side of the path. Species in these areas included nettle, dandelion, hogweed, ground elder, annual meadow-grass, coltsfoot, perennial rye-grass, willowherb., broad-leaved dock, curled dock, lesser celandine, creeping cinquefoil, mugwort, weld, ivy-leaved speedwell, couch, yarrow, greater plantain, daisy, white clover, hoary cress, cleavers, lady's mantle and creeping buttercup.

There was semi-improved grassland situated in the section of the site to the north of St Paul's Road. These grassland areas were on steep banks up from the path and contained species including red clover, ribwort plantain, Yorkshire fog, soft brome, great burnet, yarrow, willowherb, red fescue, perennial rye-grass, common vetch, oxeye daisy, carrot, white clover, cocksfoot, false-brome.

Of note were two stands of Japanese knotweed that were found in the areas of scrub adjacent to the semi-improved grassland. Japanese knotweed is listed as an invasive species on the Wildlife and Countryside Act 1981 (as ameneded). Under the Wildlife and Countryside Act 1981, it is an offence under section 14(2) to plant or otherwise cause Japanese knotweed to grow in the wild. Works around stands of Japanese knotweed must be managed such that there is no spreading of vegetative or rhizomatous material that could cause the dispersal of this highly invasive species. Works within 7 metres of Japanese knotweed will require a method statement referring to Environment Agency best practice.

To the south of St Paul's Road, the site was much narrower and was dominated by amenity grassland each side of the path. Species recorded here were greater plantain,

dandelion, couch, cleavers and lady's mantle, with scattered broad-leaved trees including elder, cherry laurel and silver birch.

To the far south of the site there was a section of broad-leaved woodland to the north of west of the path. This contained ash, hawthorn, sycamore, nettle, elder, cow parsley, ivy-leaved speedwell, mugwort, willowherb, spear thistle, bramble, garlic mustard *Alliaria petiolata*, red fescue and cleavers. To the east of the path in this far southern section there was an area of mixed woodland containing sycamore, larch and Scots pine, an area used as allotments, scrub and areas of native planting.

Habitats included introduced shrub, ephemeral/short perennial vegetation, amenity grassland, mixed woodland, mixed scattered trees, broad-leaved woodland, scrub, tall ruderal, semi-improved grassland and species-poor hedge. The northern most section of this site is comprised of introduced shrub and tree planting over poor semi-improved grassland, with amenity grassland adjacent to the path. Both native and non-native species were noted to have been planted. There was also a patch of ephemeral/short perennial vegetation in this section, containing ivy, dandelion, creeping thistle, willowherb and creeping buttercup.

The central section of the site contained semi improved grassland with species recorded including perennial rye-grass, creeping buttercup, cleavers, common vetch, creeping cinquefoil, yarrow, St John's wort and white clover. There were several areas of woodland in this central section of the site. Species noted were sycamore, ivy, bramble, privet, larch, cherry laurel, Scots pine, maple, cherry, hawthorn and elder. The mixed woodland to the north of the path contained many trees clad with ivy, which may provide suitable roosting features for bats. The path in this section was sided by high walls with further areas of habitat at the higher level. Towards the southern end of this central section scrub and tall ruderal vegetation with scattered trees was present, with ephemeral/short perennial vegetation adjacent to the path. Species noted in these areas were bramble, nettle, rose, ivy and sycamore.

The southern section of the site contained a variety of habitats including several areas of mixed woodland. Species noted in these area included larch, sycamore, conifer sp., cherry laurel, lime, ivy, hawthorn, bramble, cherry, elder, Scots pine, cleavers, holly, silver birch, cocksfoot and nettle. There was also a large area of scrub with scattered trees at the western end of the southern bank. Species noted here included bramble, ivy, sycamore, horse chestnut and cowslip. There was also a children's play area on amenity grassland on the northern bank. Species noted here included perennial ryegrass, dandelion, greater plantain, white clover, ground ivy, lesser celandine, broadleaved dock and cow parsley.

Site 61 Wymans Brook Open Space

The site contained amenity grassland, scattered broad-leaved trees, scattered mixed trees, scrub, tall ruderal vegetation, poor semi-improved grassland, ephemeral/short perennial vegetation and a stream. The amenity grassland contained perennial ryegrass, dandelion, false oat-grass, cocksfoot, annual meadow-grass, speedwell, broad-leaved dock, violet, wavy bitter-cress, lesser celandine, daisy, creeping buttercup, creeping bent and ribwort plantain, with patches of planted daffodils. Daffodils were also present on site. There were small patches of tall ruderal/scrub vegetation to the

west of the site, containing nettle, bramble, cow parsley and hogweed. A stream ran the length of the site, from east to west. The stream varying from approximately 2 m to 3 m wide and 20-30 cm deep, with muddy, steep banks and bank strengthening in some places and concrete tunnels under roads. The water was clear with a pebbly, muddy bed and some emergent vegetation, with occasional clumps of sedge growing on the banks. It is considered that there is low-moderate potential of water vole, otter and/or white-clawed crayfish using this stream as habitat.

Scattered tree species noted on site were elder, willow, maple, non-native sp., cherry, silver birch, rowan, ash, pedunculate oak, hawthorn, sycamore, conifer sp. and poplar. Many trees were mature specimens of considerable size and ecological value.

Amenity grassland with scattered trees comprised bank vegetation to the north of the site. Centrally within the site, a section of the north bank reinforcement, situated to the south of the subway, comprised sloping masonry with ephemeral/short perennial vegetation growing in the gaps between stones. Species noted in this area were ivy, wavy bitter-cress, herb Robert, nettle, dandelion and ivy-leaved speedwell *a*. Amenity grassland with scattered trees provided the bank vegetation immediately south of this area. Further south, scrub vegetation dominated the south bank. This contained bramble, teasel and ivy, with scattered mixed trees. The north bank in this area had a strip of tall ruderal vegetation, dominated by cleavers, with hogweed, cow parsley, lords and ladies and nettle also present. An area of poor semi-improved grassland was present on the southern bank side. This contained species including cocksfoot, rough-stalked feather-moss, ribwort plantain, dandelion, crow garlic, cleavers, false oat-grass and nettle. To the far south of the site there was an area of amenity grassland used as a football pitch, with greater plantain and white clover found in addition to the amenity species found elsewhere on the site.

A4.4 Green open space

Site 1 The Beeches Playing Field

Site primarily consists of amenity grassland with scattered trees and species-poor hedgerows around the periphery. There is a strip of tall ruderal and scrub vegetation along the south-eastern edge. In the west is an area of hard standing and a children's playground. There are some veteran oak trees on the northern boundary. The hedgerows are generally well maintained.

Protected species:

• The mature trees may have potential for bats. The hedgerows are likely to be used as commuting routes by bats.

Site 2 Benhall Open Space

The site is dominated by amenity grassland with areas of semi-natural broadleaved woodland. The southern border comprises of a tree-lined stream. The woodland in the south-east of the site is dominated by hornbeam with minimal ground flora; the greatest diversity is along the north and south peripheries. Scattered trees occur throughout the amenity grassland.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats. The discontinuous nature of the stream as a result of culverts may discourage the dispersion of otters. It has low-moderate suitability for water voles as a result of the heavy shading. The stream also has low-moderate potential for white-clawed crayfish.

Site 5 Broad Oak Way Open Space

The site comprised amenity grassland, introduced shrub, scattered trees, species-poor hedge and planted woodland. Amenity grassland species included couch, annual meadow-grass, white clover, dandelion, daisy, perennial rye-grass, speedwell, greater plantain, common chickweed, cocksfoot, shepherds purse, lesser celandine, smallflowered cranesbill and creeping buttercup. There were many scattered trees of varying age throughout the site, including alder, hawthorn, beech, maple, pedunculate oak, willow, rowan, cherry, Acer sp., silver birch, conifer sp. and non-native broadleaved species. Of note were three mature oak trees and a mature Acer sp. tree that were considered to have low-moderate potential of offering suitable habitat for roosting bats. Species-poor hedges were also present on the site, including two overgrown hawthorn hedges, situated on land each side of Caernavon Road, that may offer suitable features for roosting bats due to dense ivy cladding. Introduced shrub, including cherry laurel, had been planted in a few areas. There were also large patches of tree planting, including maple, cherry and hawthorn, with associated vegetation including lords and ladies, ivy and cleavers. Collared dove was noted during the site visit.

Site 7 Campion Park Open Space, Davillia Drive Open Space & Jasmin Way/Justica Way Open Space

The site comprised amenity grassland, species-poor hedge, scattered trees and introduced shrub. Amenity grassland species recorded were cocksfoot, perennial ryegrass, greater plantain, daisy, lesser celandine, white clover and rough-stalked feathermoss. Species-poor hedges were present throughout the site, dominated mainly by hawthorn, with blackthorn, elder, rose, ivy, field maple and bramble also present. Introduced shrub was also planted throughout the site, including gorse *Ulex europaeus*, hawthorn, blackthorn and a variety of non-native berry producing species. Daffodil and scented narcissus bulbs were also planted on the site. There were many trees, of varying age, scattered throughout the site. A mature oak that had moderate potential of offering roosting habitat for bats was noted in the eastern section of the site. Other tree species noted on site were alder, lime, cherry, silver birch, conifer sp., maple, ash, rowan and hornbeam. Magpie was noted during the site visit.

Site 8 Chalford Avenue Open Space

The site comprised amenity grassland with scattered broad-leaved trees, hard standing and species-poor hedge. Amenity grassland species noted were annual meadow-grass, white clover, creeping buttercup, dandelion and cocksfoot. There were many and recently planted trees on the site, including ash and silver birch. There was an intermittent beech hedge around much of the site, enclosing the areas of hard standing with play equipment.

Site 9 Chargrove Lane Open Space

The site comprised amenity grassland, scrub/hedge, species-poor hedge and mixed scattered trees. Amenity grassland species recorded were daisy, dandelion, annual meadow-grass, rough-stalked feather-moss, white clover, creeping bent, ribwort plantain, creeping buttercup, meadow buttercup and speedwell. Scatter tree species included pedunculate oak, lime, horsechestnut, maple, cherry, willow, spruce and non-native broadleaved species. Species-poor hedgerows were present around the eastern section of the site. Species noted were blackthorn, hawthorn, cow parsley, bramble, elder, ivy and cleavers. There was also a small section of cherry laurel hedge on the eastern boundary of the site. A large, overgrown line of scrub/hedge separated the two fields of amenity grassland. This contained blackthorn, rose, bramble, ash, meadow cranesbill, lords and ladies, cleavers and cow parsley and was 6 to >15 m wide.

Site 11 Churchill Drive Play Area

The site comprised of amenity grassland and hard standing. Species noted in the amenity grassland were perennial rye-grass, common chickweed, red fescue, annual meadow-grass, curled dock and wavy bittercress.

Site 12 Cirencester Road Open Space

The site is dominated by amenity grassland with a range of species of scattered broadleaved trees. The trees range form young to mature.

Site 14 Clyde Crescent

The site comprised amenity grassland, broadleaved scattered trees and introduced shrub. Amenity grassland species noted were perennial rye-grass, white clover, groundsel, annual meadow-grass, yarrow, dandelion, wavy bitter-cress and cocksfoot.

Scattered tree species present were all recently planted and included birch, cherry and non-native species. Introduced shrub was present in beds within the grassland areas adjacent to the perimeter. It is recommended that native and wildlife attracting bulbs and shrubs are planted throughout the site. In addition, further tree planting, using native species only, should be undertaken, and a hedge, containing a variety of native species, should be planted adjacent to at the boundaries.

Site 15 Cox's Meadow Open Space

The site comprised of amenity grassland, semi-improved grassland, scattered trees, woodland, species-poor hedge and wetland vegetation. Semi-improved grassland dominated the site, including couch, dandelion, red fescue, chickweed, annual meadow-grass, shepherds purse, ladys mantle, mayweed, spear thistle, daisy, meadow cranesbill, greater plantain, broad-leaved dock, white clover, ribwort plantain, ox-eye daisy, yarrow, perennial rye-grass, common knapweed and violet. The grassland appeared to be recently seeded/colonising, as there were many bare patches, particularly on the undulating banks that surrounded a hollow, in which there was some wetland vegetation and a small amount of standing water. Species noted in this wetland area were hard rush, rush, sweet-grass, reedmace, creeping buttercup, coltsfoot, sedge species, meadow foxtail, cuckooflower, common reed, willowherb, annual meadow-grass, dandelion, greater plantain and broad-leaved dock.

There was an area of woodland in the far south of the site. Species noted were ash, hawthorn, conifer sp., nettle, elder, cleavers, cow parsley, broad-leaved dock, lords and ladies and sycamore. Adjacent to the woodland there was a large area of tall ruderal vegetation, including nettle, broad-leaved dock, cocksfoot, cow parsley, daffodil, false oat-grass, creeping clover and cleavers. There was an additional strip of scrubby woodland adjacent to the river. Species noted here included alder, hawthorn, nettle, couch, cow parsley, hogweed, elder, bramble, sedge, ivy, ribwort plantain, wild garlic, ground elder, ash and sycamore. Scattered tree species noted on site were poplar, elder, hawthorn, maple, willow, alder, ash, hazel, pedunculate oak, sycamore, cherry and lime. Of note was a mature oak to the far south of the site, which had moderate potential of providing habitat for roosting bats.

There was a small section of conifer hedge to the south of the site and a small section of defunct holly, hazel and ivy hedge to the west of the site. There was also a small strip of amenity grassland adjacent to the path leading onto the site in the south. This grassland contained daisy, annual meadow-grass, dandelion, couch, white clover and perennial rye-grass. There was a flat-roofed brick building to the west of the site. This was not considered to have suitable features for roosting bats.

Site 19 George Reading's Open Space

The site comprised amenity grassland with scattered trees and species poor hedge. Tree species noted included plane, cherry, sycamore, silver birch, ash, conifer sp. and non-native species. The species-poor hedge was situated along the southern boundary and was dominated by hawthorn. Amenity grassland species recorded included creeping buttercup, daisy, speedwell, ribwort plantain, Yorkshire fog, perennial ryegrass, lesser celandine and dandelion. Starling was also noted during the site survey. Starling is a red data list bird species of conservation concern.

The site comprised amenity grassland, species poor hedge, introduced shrub and a stream. The stream ran along the northern strip of the site. Bank vegetation comprised

introduced shrub in the eastern section, with mixed scattered trees, including willow, elder, alder and sycamore along the remainder to the west. Many of the willows were semi-mature and mature, with at least one tree potentially offering suitable features for roosting bats, due to dense ivy cladding. Other bank vegetation species noted included reed mace, lesser celandine, iris, sedge, nettle, cleavers, cowslip, cow parsley, ground-elder and false oat-grass. The banks were reinforced with rocks and boulders in places. The stream was subject to low-moderate shading, with clear water, moderate-fast flow and a stony bed. The stream is of value as a wildlife corridor, and may offer habitat for protected species such as water vole, kingfisher *s*, otter and white-clawed crayfish.

The eastern strip of the site was dominated by a beech hedge, introduced shrub, amenity grassland and scattered mixed trees including yew, cherry, conifer sp. and non-native species. The western strip of the site comprised amenity grassland with scattered trees including poplar, plane, beech and non-native species. There were also four patches of amenity grassland in the centre of the site.

Site 20 Golden Valley Open Space

The site comprised amenity grassland with scattered trees, poor semi-improved grassland, tall ruderal vegetation and species-poor hedge. Amenity grassland species recorded were dandelion, daisy, annual meadow-grass, perennial rye-grass, white clover, creeping buttercup, lesser celandine, speedwell, shepherds purse, thymeleaved speedwell and spear thistle. There was a bank of poor semi-improved grassland to the south of the site. Species noted here were red fescue, couch, false oat-grass, cocksfoot, heart-leaved spear-moss, creeping cinquefoil, broad-leaved dock, white clover, small-flowered cranesbill and dandelion. There were many trees scattered throughout the site, most of which were semi-mature. Species noted were ash, maple, sycamore, elder, horsechestnut, lime, cherry, birch, hawthorn. There was a section of overgrown species-poor hedge to the west of the site, containing hawthorn, lime, hazel, elder, cow parsley, ivy and bramble. There was a tree at the southern end of this site, which had moderate potential of offering suitable habitat for roosting bats, and a lime tree containing mistletoe. Sections of the northern boundary were bordered by adjacent garden hedges, with a patch of cherry laurel on site. A small patch of tall ruderal vegetation was also present along the northern boundary.

Site 21 Grange Tip Open Space

The site is dominated by amenity grassland with scattered, young broadleaved trees. There is an area of hard standing in the north-west corner.

Site 24 Henley Road Open Space

The site comprised amenity grassland and scattered trees, including maple, ash and cherry. Amenity grassland species noted were perennial rye-grass, daisy, creeping buttercup, dandelion, common chickweed, cocksfoot, ribwort plantain and broadleaved dock. Scented narcissus bulbs were also noted.

Trees species noted included cherry and non-native tree species. A defunct hedgerow ran along the north-west boundary of the site, comprising semi-mature ash, and ivy - clad young trees, including hawthorn. These ivy-clad trees may offer habitat for roosting bats. A ditch ran behind the hedge, along the boundary with the adjacent fields. Species associated with this ditch included bramble, nettle, cleavers and cow parsley.

Site 27 Honeybourne Way/Chelt Walk

The site comprised introduced shrub, poor semi-improved, scattered trees and a river with associated with bank vegetation. Introduced shrub had been planted in many areas of the site, and was noted to contain mostly non-native species, although areas of native sedge were present. There were additional areas of tree planting, which appeared to contain both native and non-native species. Weeping willow was also present. The River Chelt ran from south to north adjacent to the site. It was noted to potentially provide habitat for otter, water vole and white-clawed crayfish as it had vegetated banks, clear water, a moderate flow rate and a stony bed. Bank vegetation remained between the river and areas of planting. This bank vegetation comprised sedge, cleavers, nettle, dandelion, broad-leaved dock, hogweed, red fescue, creeping thistle, white clover and spurge. There was an area of poor semi-improved grassland to the north of the site. This contained couch, cleavers, hogweed, dandelion, meadow cranesbill, broad-leaved dock, creeping thistle, mugwort, ground elder and nettle.

Site 30 Jessops Avenue/Chelt Walk

The site comprised amenity grassland with flower beds, scattered mixed trees and a pond. Amenity grassland species included annual meadow-grass, dandelion, white clover, perennial rye-grass, daisy, lesser celandine and speedwell. A horse chestnut tree and two conifers were also present on site. A pond, situated to the south of the site was concrete and contained green murky water. It is considered unlikely that protected species such as great crested newt would use this habitat. Non-native introduced shrub was present surrounding the pond.

Site 32 King William Drive Open Space

The site is dominated by amenity grassland with a range of species of scattered broadleaved trees. The trees range from young to mature.

Site 33 Lansdown Crescent Open Space

The site comprised amenity grassland with introduced shrub, scattered mixed trees and bulb planting. Amenity grassland species noted were daisy, dandelion, creeping buttercup, perennial rye-grass, annual meadow-grass, white clover, lesser celandine, hogweed, burnet-saxifrage and common chickweed. Scattered tree species included sycamore, maple, hawthorn, conifer sp., lime, horse chestnut, silver birch, hornbeam, holm oak and pedunculate oak. The holm oaks were notably mature specimens of considerable size and ecological value. Some sycamores in the north corner were noted to have dead ivy growth that may provide suitable roosting features for bats. There was also a play area to the north of the site, with play equipment over amenity grass and hard standing.

Site 35 Manor farm Open Space

The site comprised amenity grassland, scattered broad-leaved trees and species-poor hedge. Species noted in the amenity grassland were dandelion, Yorkshire fog, speedwell, daisy, ribwort plantain, yarrow, soft brome, perennial rye-grass, annual meadow-grass, white clover, cocksfoot, creeping buttercup, rough-stalked feathermoss and meadow buttercup. Scattered tree species present were horse chestnut, ash and pedunculate oak. Of note was a mature oak tree in the north-western corner that was considered to have moderate-high potential of offering habitat for roosting bats. There were a few species-poor hedges on the site, containing hawthorn, elder, nettle,

blackthorn and cleavers. A hawthorn hedge has also been very recently planted along the western boundary. There was a small patch of bramble and nettle in the north-east corner of the site.

Site 36 Manor Road Open Space

The site comprises of amenity grassland with scattered broadleaved trees. There are a variety of native and cultivars trees of a range of ages. A tree lined stream forms the southern boundary of the site.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats and has potential for dispersing otters. It has low suitability for water voles as a result of the heavy shading.

Site 39 Pilgrove Way Open Space

The site comprises of amenity grassland with scattered broadleaved trees and a children's play area.

Site 45 Reddings Road Open Space (Humpty Dumps)

The site comprised amenity grassland, scattered broad-leaved trees, hard standing and scrubby species-poor hedge. The amenity grassland on this site was present on steep, undulating banks of a large mound that sloped up from road level. Species noted were annual meadow-grass, perennial rye-grass, ribwort plantain, greater plantain, daisy, white clover, dandelion, creeping buttercup, yarrow, lesser celandine, common chickweed, small-flowered cranesbill, shepherds purse, speedwell and cocksfoot. There were many trees scattered throughout the site, which were mostly semi-mature, including ash, willow, hornbeam, plane, maple, horse chestnut and cherry. An intermittent scrubby hedge ran along the western boundary, with species noted including blackthorn, hawthorn, elder, rose, ash, bramble, ivy, lords and ladies and cow parsley. There was an area of hard standing with play equipment situated on a plateau centrally within the site.

Site 46 Redthorne Way Open Space

The site comprised amenity grassland, species-poor hedge, scattered trees, planted broad-leaved woodland, scrub and poor semi-improved grassland. Amenity grassland species were dandelion, creeping buttercup, perennial rye-grass, white clover, daisy, rough-stalked feather-moss and meadow buttercup. A species-poor hedge was present along sections of the northern and western boundaries. This contained blackthorn, bramble, hawthorn, lords and ladies, ivy, privet, cherry laurel and rose. Scattered trees present were hawthorn, willow and elder. There were also two areas of planted broad-leaved woodland to the south of the site, containing, maple, ash, rose, hawthorn, lords and ladies, rough-stalked feather-moss, hazel, crow garlic, blackthorn, conifer sp., cleavers and privet. The area of woodland adjacent to the boundary was noted to be scrubby, whilst that adjacent to the amenity grassland appeared more recently planted, with no ground flora or additional structuring. A clearing between these two planted areas contained poor semi-improved grassland of false oat-grass, couch, willowherb, cleavers, bramble and common vetch. There was also a small area

of introduced shrub to the east of the site. Bird species noted during the site visit were blackbird, house sparrow and magpie.

Site 47 Rowena Cade Open Space

The site comprised amenity grassland, mixed woodland, scattered mixed trees, species-poor hedge, introduced shrub, bare ground, a stream and bank vegetation. Amenity grassland species noted were perennial rye-grass, white clover, broad-leaved dock, spear thistle, greater plantain, creeping buttercup, ribwort plantain, speedwell, meadow buttercup and cocksfoot. Some areas of amenity grassland were in the process of being re-seeded and were hence recorded as bare ground. Other landscaping work also appeared to be in progress on the site, with several hollows apparently created each side of the existing stream, bordered by new tree planting of willow and silver birch. The stream ran from south to north through the site, and was noted to be between 1 –2 m wide and approximately 20-40 cm deep with clear water, a moderate flow, muddy banks and a pebbly silty bed. Bank vegetation associated with the stream included lesser celandine, garlic mustard, sedge, cleavers, nettle and perennial rye-grass. It is considered that the stream has low-moderate potential of offering suitable habitat for the protected species water vole, white-clawed cray-fish and otter. Scattered trees present on site included sycamore, willow, ash, alder, yew, conifer sp. and non-native broad-leaved species. There was also an area of mixed woodland to the north of the site, situated each side of the stream. This contained mature trees and species including beech, yew, ivy, dogs mercury, wood anemone, lesser celandine, bluebell, pedunculate oak, cherry laurel and bramble. There was a species-poor hedge, dominated by hawthorn and ivy, to the north west of the site, as well as scattered small patches of introduced shrub and daffodil planting. There was also a children's play area, comprising equipment over hard-standing, adjacent to Sarah Siddons Walk. Mallard was noted during the survey.

Protected species:

- A mature oak on site was noted to provide potential roosting sites for bats.
- Bluebell was recorded on site.

Site 48 Salisbury Avenue Recreation Ground

The site comprised amenity grassland, introduced shrub, hard standing and scattered broad-leaved young trees. Amenity grassland species noted were perennial rye-grass, greater plantain, white clover, dandelion and creeping buttercup. Scattered tree species were cherry, hawthorn and non-native species, with all specimens noted to be young. There were small areas of sparse introduced shrub adjacent to the hard standing children's play area.

Site 64 Murvagh Close Open Space

The site comprised several patches of land surrounding houses and comprised amenity grassland, scattered trees, bulb planting, species-poor hedge and introduced shrub. Species noted in the areas of amenity grassland were daisy, white clover, perennial rye-grass. Greater plantain, dandelion, springy turf-moss, common chickweed, annual meadow-grass, rough-stalked feather-moss, Yorkshire fog and creeping buttercup. There were many semi-mature and mature trees scattered throughout the site, with species including maple, ash, non-native broad-leaved sp., rowan, ash, horse chestnut, alder, lime and pedunculate oak. Of note was a mature lime tree adjacent to Sandford Road that had moderate potential of proving habitat for roosting bats, due to the

presence of at least one hole. Bulb planting surrounded most of the trees, and provided areas of grass that appeared to be less regularly cut, and hence had a different composition. Species noted in these areas included daffodil, black horehound, ribwort plantain, brome, speedwell, yarrow, bulbous buttercup, common chickweed and cow parsley. Small patches and beds of introduced shrub had also been planted throughout the site.

Site 65 Pittville Circus Roundabout Open Space

The site comprised amenity grassland with scattered trees. The grassland contained perennial rye-grass, white clover, bulbous buttercup, dandelion, lesser celandine, cow parsely, speedwell, ribwort plantain, daisy, field wood-rush, springy turf-moss and creeping buttercup. Daffodils were also planted on the site. Scattered tree species noted were beech, cherry, yew, pedunculate oak, lime, horse chestnut, weeping willow and maple.

Site 66 Grace Gardens Open Space

The site comprised amenity grassland, introduced shrub and scattered broad-leaved trees. Species noted in the amenity grassland areas included red fescue, rough-stalked feather-moss, dandelion, creeping buttercup, meadow-grass, small-flowered cranesbill and spear thistle. The scattered trees present on site were all young, with the exception of a semi-mature maple. Species noted were lime, maple and a non-native broad-leaved species. A variety of introduced shrub species, including cherry laurel, had also been planted in large patches throughout the site.

Site 67 Apple Orchard Space

The site comprised amenity grassland, scattered broad-leaved trees, scrub, introduced shrub and bank vegetation. The amenity grassland included dandelion, daisy, white clover, lesser trefoil, ribwort plantain, creeping buttercup, perennial rye-grass, lesser celandine, rough-stalked feather-moss, annual meadow-grass, spear thistle, self-heal, greater plantain and cranesbill. There were also large patches of daffodil planting, with associated cow parsley and long grass, possibly timothy. Semi-mature broadleaved trees were scattered throughout the site, including weeping willow, hawthorn, maple, cherry, ash, alder, hornbeam, goat willow and silver birch. Hawthorns located centrally within the site were also noted to have dense ivy growth and hence may provide roosting habitat for bats. Scrub was also present on the site, in patches adjacent to the western boundary. This habitat contained bramble, elder, hawthorn, ivy and cow parsley. A stream ran adjacent to the northern boundary of the site. Vegetation associated with the stream banks within the site included scrub and tall ruderal species including curled dock, nettle, hogweed, timothy, willowherb, creeping thistle, cleavers, bramble and lords and ladies. The stream, although not within the site, was noted to have steep, muddy, vegetated banks, with clear, moderately-flowing water and a muddy bed, and was approximately 1 m wide and 10 cm deep.

Protected species:

• Of note was a willow tree on the western boundary that had high potential of offering roosting habitat for bats due to decay, holes and dense ivy growth.

Site 71 Alan Robson Memorial Field

The site comprised amenity grassland and species-poor hedge. The amenity grassland contained species including daisy, annual meadow-grass, dandelion, creeping buttercup, lesser celandine, speedwell, greater plantain, common ragwort and white clover. Hedge species included blackthorn hawthorn, cow parsley, ash, bramble, sycamore, horse chestnut, nettle, dogs mercury, ivy, hazel and dandelion. A hawthorn on the southern boundary of the site was noted to contain mistletoe. Also of note was a wet ditch running parallel to the northern boundary of the site.

Site 74 Windermere Estate Green Spaces

The site comprised amenity grassland, introduced shrub, scattered mixed trees, scrub and species-poor hedge, distributed throughout many small patches of land surrounding a residential estate. Amenity grassland dominated these areas, with species noted including annual meadow-grass, dandelion, perennial rye-grass, cocksfoot, daisy, small-flowered cranesbill, speedwell, white clover, greater plantain, lesser celandine, ivy-leaved speedwell, red fescue, yarrow, creeping cinquefoil, common chickweed, rough-stalked feather-moss, cats-ear, couch and ribwort plantain. There were many trees scattered throughout the site, which ranged in age from young to mature, with a mature plane specimen of note due to its considerable size and ecological value. Other tree species noted were sycamore, silver birch, ash, cherry, pedunculate oak, conifer sp., hawthorn, beech, yew, maple, lime and hornbeam. Introduced shrub and bulb planting were also present within and adjacent to some of the areas of amenity grassland. There were a few hedges on site, with species noted including conifer sp., beech, elder, ash, bramble and maple. There was also a small patch of scrub, comprising bramble, nettle, cleavers and lords and ladies.

Site 77 Brizen Lane Open Space

The site comprised amenity grassland, scattered broadleaved trees, species-poor hedge, scrub, and poor semi-improved grassland/wetland /tall ruderal vegetation. Amenity grassland species noted weredandelion, daisy, annual meadow-grass, creeping cinquefoil, Yorkshire fog, cocksfoot, creeping buttercup, white clover, couch, common chickweed, shepherds purse, meadow buttercup, speedwell and ribwort plantain. A species-poor hedge was present around much of the perimeter of the southern section of the site. Species included hawthorn, blackthorn, bramble, elder, dogwood, rose and holly. Sections of beech hedge and introduced/conifer sp. hedge were also present along the boundary to the southern section of the site. A strip of scrub vegetation was present along the western boundary of the northern section of the site. This included blackthorn, hawthorn, elder and bramble. A patch of poor semiimproved grassland with wetland vegetation was also present in the northern section of the site. Species found here included tufted hair-grass, lesser celandine, hard rush, meadow buttercup, bramble, thistle, willowherb, curled dock, timothy and cuckooflower. A mature oak, in good condition, was present in this area. Trees were scattered throughout the site and included maple, silver birch, cherry, horse chestnut and sycamore.

Site 78 Clevedon Square

The site comprised amenity grassland with scattered semi-mature trees including cherry, silver birch and lime. Amenity grassland species recorded included cocksfoot, Yorkshire fog, white clover, yarrow, daisy, annual meadow-grass, perennial rye-grass, lesser celandine and dandelion.

Site 79 Edward Wilson House & Scott House

The site comprised amenity grassland and scattered broad-leaved trees including willow, maple, silver birch, hornbeam and non-native species. The amenity grassland was dominated by perennial rye-grass with lesser celandine, creeping buttercup, white clover, dandelion, daisy, annual meadow-grass and small-flowered cranesbill also noted. Planted daffodils and a dis-used flower bed were also noted.

The site comprised amenity grassland with scattered broad-leaved trees including willow, silver birch, cherry, ash and hornbeam. Amenity grassland species noted were common chickweed, dandelion, daisy, annual meadow-grass, cocksfoot, white clover and groundsel.

Site 81 Lynworth Place

The site comprised amenity grassland and a broadleaved tree, which was noted to contain mistletoe. The grassland was particularly species-poor, containing perennial rye-grass, daisy, dandelion, white clover, broad-leaved dock, creeping buttercup, couch and speedwell. Starling was noted during the survey, this is a red list species of conservation concern.

Site 83 Norfolk Avenue

The site comprised amenity grassland with perennial rye-grass, dandelion, daisy, cocksfoot and white clover. A mature plane tree was also present on site.

Site 84 Monkscroft Estate

The site comprised amenity grassland, scattered mixed trees, species-poor hedge and introduced shrub, situated around several residential estate buildings. Amenity grassland dominated these areas, with species noted including annual meadow-grass, daisy, dandelion, common chickweed, white clover, greater plantain and yarrow. Young to semi-mature trees were scattered throughout the site, including silver birch, willow, cherry, hornbeam, conifer sp., ash, sycamore and lime. There were several species-poor hedges and strips of introduced shrub on the site, which were dominated by introduced species. Also of note were empty beds to the north-west of the site, which may have been prepared for planting.

Site 85 Niven Courtyard

The site comprised amenity grassland, species-poor hedge and scattered broad-leaved trees. The amenity grassland was dominated by grass species including red fescue and perennial rye-grass, with rough-stalked feather-moss, creeping buttercup, red clover, dandelion and bristly ox-tongue also noted. The grass areas were bordered by beech hedges, with a broad-leaved single-species hedge towards the centre, with newly planted scattered broad-leaved trees around the perimeter. Narcissus species were also noted along the borders.

Site 86 Caine Square

The site comprised amenity grassland with introduced shrub. The grassland areas were relatively diverse, with species including red fescue, creeping buttercup, white clover, common ragwort, dandelion, meadow buttercup, red clover, rough-stalked feather-moss, Yorkshire fog, bristly oxtongue, lesser celandine, meadow vetchling, tormentil, perennial rye-grass, cowslip, curled dock and common vetch. Introduced

shrub surrounded the areas of grassland, and contained a variety of non-native berry-producing species.

Site 87 Coburn Gardens

The site comprised a pond surrounded by poor semi-improved grassland, amenity grassland and scattered tree planting. The site could not be accessed so observations were made from the eastern boundary. The pond contained reedbed vegetation, including reed mace and common reed. Tree planting included silver birch, elder, alder, willow and hawthorn. The poor semi-improved grassland appeared to contain coarse grass species and broad-leaved dock.

Site 88 Kings Oak (Triscombe Way)

The site comprised amenity grassland and recently planted scattered trees, including silver birch and non-native species. Species noted in the amenity grassland were perennial rye-grass, white clover, ribwort plantain and broad-leaved dock.

The site could not be directly accessed, therefore habitat were assessed from the fenced boundaries. The site comprised amenity grassland, with a strip of recently-cleared ground in the process of being planted with a variety of shrubs and trees. A children's play area was also under construction to the west of the site. The grassland appeared to have mostly been recently seeded, although some patches appeared older, with species such as wavy-bittercress, broad-leaved dock, dandelion, white clover and germander speedwell noted.

Site 89 Wharfedale Square

The site comprised mainly of amenity grassland with species noted including white clover, dandelion, speedwell, Yorkshire fog, perennial rye-grass, wavy bitter-cress, creeping buttercup, broad-leaved dock, annual meadow-grass and shepherds purse. Introduced shrub that appeared to have been recently planted was also present around the perimeter of the site. A variety of species were present, including native species such as beech, willow and cherry.

Site 90 Gloucester Road Open Space

The site comprises of amenity grassland with scattered trees and introduced shrub.

Protected species:

• The mature trees may have potential for bats.

Site 93 Billings Way Open Space

The site comprised amenity grassland, scrub, bank vegetation, scattered trees and introduced shrub. The site was situated adjacent to Hatherley Brook and was dominated by amenity grassland comprising dandelion, white clover, broad-leaved dock, cow parsley, creeping buttercup, greater plantain, daisy, perennial rye-grass, annual meadow-grass and cocksfoot. Scattered tree species included willow, sycamore, cherry and elder. Scrub was also abundant, with species present including blackthorn, nettle, bramble, cherry, ground elder, sycamore, elder and hawthorn. Bank vegetation, associated with the adjacent stream, included sedge, lesser celandine, bramble, ground elder, nettle, ivy, broad-leaved dock, cow parsley, couch, willowherb, false-brome and common sorrel. Introduced shrub, including box, cherry laurel and a gum tree, was also present. The small section of land within this site,

situated at the end of Billings Way, was a play area with hard standing, surrounded by introduced shrub and amenity grassland.

Site 94 Farmfield Road/Squires meadow Open Space

The site comprised a strip of scrub derived from an overgrown hedgerow. Species noted were hawthorn, blackthorn, rose, cleavers, maple, bramble, ivy, wood avens, privet, lords and ladies, hazel, ash, elder and a conifer sp.

Site 95 Daisy Bank Field

The site consists of a mosaic of semi-improved species poor grassland, tall ruderal vegetation and scrub. There are also small pockets of more diverse calcareous grassland, although the coarse grasses appear to be dominating and out competing these species. Scrub and tall ruderal vegetation is invading into the grassland, although there are indications of management taking place to reduce this invasion. There is a damp area in the northwest. Overall the site has the appearance of a degraded calcareous grassland.

A4.5 Local nature reserve

Site 34 Leckhampton Hill

The site primarily consist of two habitats; semi-natural broadleaved woodland in the west and unimproved calcareous grassland in the east. Transition habitats occur between these two key habitats.

Scattered scrub and regenerating broadleaved trees, notably birch and ash, occur across the grassland habitats with areas of dense scrub. Within the semi-natural broadleaved woodland there are areas of coniferous plantation (larch) and exposed basic rock/cliff face as well as scattered coniferous trees, notable larch and pine. The semi-natural broadleaved woodland has a varied species and structural diversity.

Notable species include a variety of orchids: white helleborine, broadleaved helleborine, birds nest orchid, common twyblade, common spotted orchid.

Protected species:

- The mature trees and rock faces may have potential for bats.
- The woodland has potential to support badgers, although no setts were noted during the survey.
- The roman snail was noted on the calcareous grassland in the east of the site.
- Areas of bare ground provide potential habitat for a variety of invertebrates.

Site 40 Pilley Bridge Nature Reserve

The site is a linear habitat dominated by semi-natural broadleaved woodland. The habitats includes open glades of grasses and tall ruderal vegetation. There is some natural regeneration, particularly of ash.

Protected species:

- The mature trees may have potential for bats. The linear nature of the site makes it suitable for commuting routes and foraging by bats.
- There is a badger sett at the eastern end of the site.

Site 73 Griffiths Avenue Local Nature Reserve

A site comprises of semi-natural broadleaved woodland.

Site 92 Little Herberts Nature Reserve

The site comprises of semi-natural broadleaved woodland with grass/tall ruderal vegetation glades.

Protected species:

- The mature trees may have potential for bats. The linear nature of the site makes it suitable for commuting routes and foraging by bats.
- Bat boxes have been erected at the western end.

A4.6 Natural green space

Site 56 Weaver's Field Open Space

The site comprised poor semi-improved grassland, scrub/woodland, scrub, scattered trees, amenity grassland and species-poor hedge. Poor semi-improved grassland dominated the site, with species noted including meadow foxtail, tall fescue, red fescue, cocksfoot, cowslip, dandelion, greater plantain, cow parsley, white clover, cleavers, hogweed, dovesfoot cranesbill, red clover, meadow buttercup, common vetch and crow garlic. There were also large areas of scrub on the site, comprising hawthorn, blackthorn, horse chestnut, cow parsley, cleavers, hogweed, rough-stalked feather-moss, nettle, lords and ladies, cocksfoot and ivy. Scrubby woodland was present centrally within the site, with hawthorn, blackthorn, elder, ivy, cleavers and bramble. Scattered trees present included cherry, conifer sp. and a large, mature oak that was considered to have moderate-high potential of offering suitable features for roosting bats. Species poor hedges were also present, comprising hawthorn, bramble, ivy, rose and elder, with conifer, privet and beech hedges along the northern and western boundaries, associated with the adjacent residential gardens. There was a small area of amenity grassland to the south of the site that contained a small building that was considered to have no suitable features for roosting bats.

Site 70 Farmland at Priors

The site comprised semi-improved grassland, species-poor hedge, scrub, tall ruderal vegetation, scattered broad-leaved trees and a stream. Tussocky semi-improved grassland of varying species diversity dominated the site. Species present included red fescue, creeping buttercup, meadow cranesbill, creeping thistle, cocksfoot, meadow foxtail, cleavers, pignut, bramble, cow parsley, field wood-rush, crested dogstail, brome, ribwort plantain, greater plantain, white clover, cuckooflower, dandelion, couch, false oat-grass, tufted hair-grass, willowherb, curled dock, sweet vernal grass, Yorkshire fog, lesser celandine and meadow vetchling. The smaller section of poor semi-improved grassland that linked the larger fields was noted to have ridges and furrows, indicating past traditional agricultural use. Hedges provided many of the site boundaries, with many noted to be overgrown and/or containing semi-mature trees. Species recorded in these hedges were blackthorn, bramble, hawthorn, ash, maple, nettle, maple, willow spp., elder, sycamore, dogs mercury, rose, couch, hazel, ivy, pedunculate oak, yew and poplar. Streams/wet ditches were present along several of the boundaries. These were generally small, muddy and heavily shaded, although the stream running beneath the hedge in the north-east corner of the larger field sounded to be larger with fast-flowing water. These streams are considered unlikely to provide suitable habitat for protected species. A pond was present on the edge of the site boundary. This was very small, was overgrown with vegetation and was heavily shaded.

Tall ruderal vegetation was present throughout the site, often immediately in front of the hedgerows. Species noted included wood avens, hogweed, cleavers, curled dock, lesser celandine, cocksfoot, willowherb, tufted hair-grass, creeping thistle and rush *Juncus* sp. Scrub vegetation was also recorded throughout the site, often in front of the hedgerows. Species noted were bramble, nettle, sedge, cleavers, hawthorn, hazel and broad-leaved dock. A strip of scrub merging to woodland ran along Wymans Brook, which was situated adjacent to the southern boundary of the site. This scrub contained blackthorn, willow, hazel, hawthorn, ash, poplar, field maple and bramble.

Several trees within the hedgerows were noted to have moderate to high potential of offering habit for roosting bats. These included mature oak and ash and field maple.

A well-used animal track was noted, running from the hedge in the north-east corner of the southern main field out into the grassland. Fauna noted during the site survey were blackbird, wood pigeon, crow, jay and peacock butterfly.

The site included a strip of land enclosing a small path along the adjacent playing fields. This path was sided by amenity grassland, tall ruderal vegetation, scrub, a species-poor hawthorn and ivy hedge, poor semi-improved grassland and several scattered trees. Species noted in this strip included nettle, cleavers, bramble, couch, meadow cranesbill, broad-leaved dock and cow parsley. Of note was an animal track mid way along the path, running from the hedgerow across the path onto the adjacent playing field.

Protected species:

- The pond may provide valuable habitat for species such as great crested newt.
- An oak and ash tree within the grassland to the south of the site, which both exhibited moderate-high potential of providing suitable roosting features for bats.
- Several of the mature trees within the hedgerows may provide potential roost sites for bats.

Site 72 Noverton Proposed Gateway Park

Primarily consists of improved grassland fields divided by species-poor defunct hedgerows, some of which have mature trees. Most of the hedgerows were approximately 2 m height & 1.5 m width with management being undertaken at a low frequency. The key species within the species-poor hedgerows were blackthorn and hawthorn with mature oak and ash. There is a specie-rich hedgerow (7 woody species recorded within a 20 m section) in the centre of the site which may be covered by Hedgerow Regulations 1997. There was also evidence of this hedgerow having a history of laying.

Scattered broadleaved trees occurred across the site. The mains species were oak and ash, some of which could be considered as current or future veteran trees and/or have been pollarded.

The southern edge is bounded by a tree lined stream forming a value wildlife corridor. Also along the southern edge were young (less than 30 yrs) broadleaved plantations. The main tree species was ash with the ground flora comprising of tall ruderal and grassland vegetation.

The eastern edge comprises of mature semi-natural broadleaved woodland. This habitat had a variety of species, age and vertical structure but it's main characteristic was hazel coppice and ash standards.

Protected species:

- The stream is heavily shaded with minimal bankside vegetation making to have low potential for water vole.
- The stream has potential for use by dispersing otters.
- The stream and hedgerows are likely to provide foraging routes for bats.

- The frequency of species such as hazel along the southern edge and the hedgerows connecting broadleaved woodlands provide suitable dormouse corridor/habitat.
- Suitable habitat exists within the stream for white-clawed crayfish e.g. refuges, clear water, riffles and pools etc.
- Mature/veteran trees have potential for bats.

Site 75 Balcarras Field

Primarily an area of improved grassland with dense scrub forming a boundary around the site's periphery. There are scattered pear and apple trees in the east and west. The improved grassland had elements of semi-improved grassland where there was an increase in herb species richness.

Site 91 Tramway

The site is a linear habitat of semi-natural broadleaved woodland/scrub. It has good vertical structure and species diversity. There were several areas of snowberry within the site.

Protected species:

- The mature trees may have potential for bats. The linear nature of the site makes it suitable for commuting routes and foraging by bats.
- There was evidence (latrines) of badger using the site suggesting that it falls within a local populations territory. There was no indication of a sett.

A4.7 Parks & gardens

Site 6 Caernarvon Park

The site comprised amenity grassland, scattered trees, species-poor hedge, hard standing and recent tree and bulb planting. Amenity grassland species noted were perennial rye-grass, daisy, dandelion, white clover and lesser celandine. Scattered trees, including young and semi-mature specimens, were scattered throughout the site, including ash, horse chestnut, silver birch, cherry, willow, lime and holm oak, with recently planted trees including hawthorn, willow, cherry and blackthorn. Species-poor hedge was present along all the boundaries and included hawthorn, blackthorn, ivy and cleavers. The hedges along the western boundaries were noted to be interrupted, overgrown and clad with ivy. There were several areas of hard standing associated with play equipment in the central area of the site.

Site 13 Clarence Square

The site comprised amenity grassland with mixed scattered trees and species-poor hedge. The amenity grassland contained perennial rye-grass, daisy, white clover and dandelion. Daffodils were planted throughout the site. There were several scattered mature plane, yew and holm oak trees, with the plane trees of particular age and size. The site was enclosed by a holly and ivy hedge.

Site 18 Fairfield Open Space

The site comprised amenity grassland, mixed scattered trees, introduced shrub and hard standing. The grassland was particularly species poor and was dominated by perennial rye-grass, daisy, creeping buttercup and dandelion. Tree species noted were lime, non-native and conifer species. To the north of the site there was a children's play area with an adjacent car park. It is recommended that native bulbs and native and wildlife-attracting shrubs be planted around the perimeters of the site.

Site 22 Hatherley Court Gardens

The site comprised amenity grassland, introduced shrub, scattered mixed trees, species-poor hedge and bulb planting. Amenity grassland species recorded were daisy, white clover, perennial rye-grass, dandelion, lesser celandine, cow parsley, speedwell, cocksfoot, annual meadow-grass, groundsel, and couch. There were trees of varying age scattered mainly around the perimeter of the site. Mature specimens of oak, horse chestnut and Scots pine were of considerable size and ecological value. Other tree species present were cherry, hornbeam, maple, silver birch, beech, sycamore and non-native broad-leaf species. The introduced shrub situated along the southern and eastern boundaries of the site was well-established, with a variety of species present. Daffodil and crocus bulbs were also noted to have been planted. There was a beech hedge along the western boundary of the site.

Site 23 Hatherley Park

The site comprised amenity grassland, scattered mixed trees, species-poor hedge, bare ground, bulb planting, introduced shrub and two ponds. Species recorded in the amenity grassland were annual meadow-grass, cocksfoot, daisy, dandelion, white clover, perennial rye-grass, speedwell, rough-stalked feather-moss and lesser celandine, There were many trees scattered throughout the site, including mature specimens of considerable size and ecological value. Species noted were silver birch, hawthorn, conifer spp., maple, weeping willow, yew, holly, horse chestnut, monkey-

puzzle, Scots pine, poplar and cherry. Of note were two weeping willow trees adjacent to the north-eastern boundary, which had holes suitable for roosting bats, and a large poplar tree on the same boundary which was very large and contained mistletoe. Two ornamental ponds were present on site. These ponds had brick sides with muddy water. A patch of sedge was present on the western bank of the larger pond. It is considered unlikely that these ponds would offer suitable habitat for protected species such as great crested newt. Introduced shrub was present along parts of the boundary, with a variety of species noted. Species-poor conifer hedge was also present along the thin corridor onto the site in the western corner. A new building with a tiled, pitched roof was present adjacent to the eastern boundary. This building did not have visible features that are considered suitable for bats.

Site 25 Hester's Way Park

The site comprised amenity grassland with introduced shrub, non-native species-poor hedge and mixed scattered trees. A small playground area was also present on-site. Tree species recorded on site were horse chestnut, poplar, willow, hawthorn, cedar, cherry, cypress, false acacia, pedunculate oak, silver birch and holm oak, with many non-native tree species also present. Mistletoe was noted on some of the mature trees. Species recorded within the amenity grassland were perennial rye-grass, daisy, creeping buttercup and dandelion. Wood pigeon, starling, blackbird, collared dove and yellowhammer were noted during the site visit. Yellowhammer and starling are red data list species of conservation concern. It is also considered likely that the UK BAP priority species bullfinch and song thrush may use the habitats present on site.

Site 28 Imperial Gardens

The site comprised amenity grass with scattered trees and introduced shrub. The amenity grassland to the west of the buildings contained perennial rye grass, groundsel, creeping buttercup, daisy, white clover, cats-ear, lady's mantle, broadleaved dock, yarrow, dandelion, lesser celandine, ribwort plantain, soft brome, Yorkshire fog, wavy bitter-cress, creeping bent and speedwell. Daffodils were also present.

A few scattered trees were present, including cherry, beech, silver birch and a conifer sp, with a mature beech tree on the southern boundary. Two strips of introduced shrub were present on the southern and northern boundaries, including cherry laurel. There was an additional area of amenity grassland to the east of the buildings. This was very species poor and was dominated by perennial rye-grass and couch.

Site 37 Montpellier Gardens

The site comprised amenity grassland, introduced shrub, scattered trees, species-poor hedge and buildings. Species noted in the areas of amenity grassland were daisy, smooth meadow-grass, lesser celandine, annual meadow-grass, perennial rye-grass, Yorkshire fog, common chickweed and creeping buttercup. Bulbs were planted throughout the site, including daffodil, hyacinth and crocus. The eastern boundary was provided by a bed of introduced shrub, with a species-poor hedge towards the southern end. Species noted in this hedge were privet, cherry laurel, hawthorn and box. There was also a species-poor hedge in the south-west corner of the site, containing privet and introduced shrub. Many trees were scattered across the site, with many mature specimens, including beech, lime and plane, of considerable size and ecological value, with some noted to contain mistletoe. Other tree species recorded

were holm oak, yew, cherry, silver birch, sycamore, hawthorn, conifer sp. and cypress.

Protected species:

- The mature trees may have potential for bats.
- The hedgerows are likely to provide foraging & commuting routes for bats.

Site 38 Nauton Park

Site comprises of amenity beds and grassland divided by gravel paths. Scattered trees occur within the amenity grassland. Well maintained yew and privit hedgerows form the southern and eastern boundaries of the site.

Site 41 Pittville Crescent

The site comprised amenity grassland with scattered mixed trees and species-poor hedge. Amenity grassland species noted were perennial rye-grass, daisy, cocksfoot, creeping buttercup, speedwell, cats-ear, wavy bitter-cress, spear thistle and dandelion. Scattered trees of varying age included non-native pine, weeping ash, tulip tree, holm oak, plane, elm and non-native broad-leaved species. These included mature specimens of plane and holm oak that were of considerable size and ecological value. A species-poor hedge containing privet, holly, ivy and elm was present around the perimeters of the two sections of the site.

Protected species:

- The mature trees may have potential for bats.
- The hedgerows are likely to provide foraging & commuting routes for bats.

Site 42 Pitville Park

Central area

The site comprised of amenity grassland, mixed scattered trees, introduced shrub, species-poor hedge, open water, watercourse, hard standing and buildings. The amenity grassland contained species including perennial rye-grass, lesser celandine, greater plantain, dandelion, cats-ear, speedwell, yarrow, rough-stalked feather-moss and white clover.

A variety of introduced shrub species, including cherry laurel, had been planted in beds throughout the site.

There are many scattered trees varying from young to mature. Species included beech, holm oak, Scots pine, cherry, silver birch, lime, oak, conifer, poplar, cedar, maple, Lombardy poplar and yew.

There was a species-poor hedge in the north-east corner comprised of yew. A hawthorn and beech hedge occurred along the northern boundary.

There was a large ornamental pond in the centre of the site. The banks were generally muddy and sparsely vegetated. The water appeared muddy and polluted. The pond is fed from the east by a heavily managed stream with reinforced concrete banks. The stream exited the pond in the west. The stream was generally shaded, with muddy banks to the west and sparse vegetation.

There was a large area of hard standing in the form of tennis courts and skate park situated in the east of the site. There were also two buildings on site. The first, on the southern boundary was a rendered brick building with a corrugated metal roof. The second building, to the east of the site, was a wooden building with pitched, tiled roof.

Eastern area

This area comprised of amenity grassland with mixed scattered trees, introduced shrub, ornamental ponds, hard standing and buildings.

Species noted in the areas of amenity grassland included perennial rye-grass, cocksfoot, daisy, lesser celandine, shepherds purse, dandelion and creeping buttercup. Daffodil cultivars were also present throughout the site.

A variety of introduced shrub species, including cherry laurel, had been planted throughout the site.

There were many scattered trees of varying ages. Species included cherry, silver birch, plane, yew, lime, holm oak, sycamore, horse chestnut, Lombardy poplar, weeping willow and cedar.

The linked ornamental ponds on site had brick banks with little vegetation except sparse tussocks of sedge. The water was noted to be murky and apparently heavily polluted in places.

There was an area of hard standing to the north of the site, adjacent to a large, Georgian-style building with a flat roof. There were three other buildings present on site. The first in the north-west, was a rendered building with a tiled, pitched roof. There was a building north of Central Cross Drive, centrally within this part of Pitville Park. This was a brick building with a tiled, pitched roof. The third building, situated to the south of Central Cross Drive, was a brick building with a flat roof.

Western area

This part of the site comprised of amenity grassland, mixed scattered trees, species poor hedge and scrub.

Amenity grassland species noted were perennial rye-grass, dandelion, daisy, rough-stalked feather-moss, thyme-leaved speedwell, red fescue, cocksfoot, small-flowered cranesbill, annual meadow-grass and common chickweed.

Trees of varying age were scattered around the perimeters of this part of Pitville Park. Species included maple, cherry, horse chestnut, weeping willow, ash, Scots pine, hornbeam, silver birch and larch.

A species-poor hedge, containing privet, ivy and hawthorn was present along the eastern end of the northern boundary.

There was an area of scrub in the south-west corner, which extended along the western boundary. This habitat was dominated by bramble, with other species including cow parsley, lesser celandine, hawthorn, nettle, cleavers, hogweed, couch and wavy bitter-cress.

Protected species:

- The mature trees in the centre of the site, particularly those in the golf course in the north have features that may be suitable for bats to roost.
- The stream through the centre of the site has potential to provide a foraging and dispersing corridor for a variety of species including bats, otter, water vole and white-clawed crayfish. Although as a result of the heavy shading is considered to have low potential for water voles. It was also considered to have low potential for white-clawed crayfish.
- The buildings provide low-moderate potential for roosting sites for bats.

Site 49 Sandford Park

This site comprised amenity grassland, scattered mixed trees, introduced shrub, mixed woodland, a stream and a pond. Species recorded in the amenity grassland include daisy, perennial rye-grass, white clover, broad-leaved dock and yarrow. There were many trees scattered throughout the site, including yew, holm oak, ash, sycamore, cherry, silver birch and conifer sp. There were several beds of introduced shrub, which included cherry laurel, rose and a variety of non-native species. There was a strip of mixed woodland along the eastern boundary, associated with a stream that ran the length of the boundary. Vegetation included elder, ash, sycamore, yew, willow, alder, dandelion, nettle, hogweed, lesser celandine, dock, cleavers, bramble, ivy, sedge, cow parsley, cocksfoot, buddleia and ramsons. The stream was approximately 3 m wide and of varying depth, generally 30 cm or less, with a moderate flow rate and clear water. The bed was pebbly with the channel often intensively managed including steps, concrete sides and tunnels. There was a formal garden area to the north-east of the site, which included a pond. This pond was artificial, with walled sides and fountains. The water was noted to be murky and green. It is considered unlikely that this pond offers suitable habitat for great crested newt.

The site comprised amenity grassland, mixed scattered trees, mixed woodland, introduced shrub, bare ground, species-poor hedge and a stream. The amenity grassland contained daisy, perennial rye-grass, white clover, speedwell and dock. Scattered trees species noted were lime, birch, silver birch, yew, holm oak, conifer sp., poplar, holly and non-native species. These included mature specimens of lime and poplar that were of considerable size and ecological value. Introduced shrub species included lavender, box, *Forsythia* sp., privet and holly. A beech hedge was present at the southern end of the western boundary. Also of note was a large area of bare-ground to the north of the site, which appeared to have been recently cleared.

The stream and associated strip of woodland described in Site 42a continued through this site, running along the eastern boundary. The stream was intensively managed with wall sides on the east bank and muddy steep vegetated sides on the west bank. The water remained clear with a pebbly bed which was approximately 3 m wide and 30 cm deep. Species noted in this strip were elder, willow, hawthorn, bramble, ivy, ramsons, cocksfoot, sycamore, cow parsley, dandelion, privet, lesser celandine, scented narcissus., introduced shrub and sedge. The southern most end of this strip appeared to have recently reinforced banks, with grassy banks that lacked any shading.

Protected species:

- The mature trees may have potential for bats.
- The hedgerows and stream corridor are likely to provide foraging & commuting routes for bats.
- The stream may provide a dispersal route for otters, although is considered to have low suitability for otter holts.

The stream is considered to be of low-moderate value for water vole and whiteclawed crayfish.

Site 58 Wellington Square

The site comprised amenity grassland, mixed scattered trees, introduced shrub and species-poor hedge. Amenity grassland species recorded were annual meadow-grass, bulbous buttercup, cats-ear, perennial rye-grass, creeping buttercup, rough-stalked feather-moss, yarrow, daisy, speedwell, ribwort plantain and Yorkshire fog. Nonnative bulbs had been planted throughput the site. There were several scattered trees on site, including yew, beech, holm oak, turkey oak, pine sp. and non-native species. The turkey oak was a particularly large, mature specimen tree, although there were other mature trees also on site. New tree planting was evident on site, as well as areas of planted shrub. There was a holly hedge around the perimeter of the site.

Protected species:

• The mature trees may have potential for bats.

Site 60 Winston Churchill Memorial

The site comprised of amenity grassland, introduced shrub, scattered trees hard standing and a building. Amenity grassland species noted were daisy, lesser celandine, yarrow, dandelion, Yorkshire fog, perennial rye-grass, white clover, creeping buttercup, speedwell and groundsel. A variety of introduced shrub species, including cherry laurel, had been planted in beds throughout the site. There were also many scattered trees, including horse chestnut, hornbeam, sycamore, yew, lime, conifer sp. and a variety of non-native species. To the north of the site there was a car park and large, Georgian-style, flat-roofed, brick building. There were no visible features deemed suitable for roosting bats. There was also a play area in the north east corner of the site, with play equipment over amenity grassland with scattered trees.

Site 62 Oxford & Priory Street Gardens

The site is an area of amenity grassland with scattered broadleaved trees and flowerbeds.

Protected species:

• The mature trees may have potential for bats.

Site 63 Hatherley Green

The site comprised amenity grassland with scattered trees and planted bulbs. Amenity grassland species noted were dandelion, annual meadow-grass, creeping cinquefoil, daisy, white clover, lesser celandine and speedwell. Scattered tree species recorded were Scots pine, beech, non-native broad-leaf species, turkey oak, fir, ash and cedar. Some of these trees were mature species of considerable size and ecological value. Bulb planting was associated with several of the scattered trees.

Protected species:

• The mature trees may have potential for bats.

A4.8 Playing fields

Site 4 Brizen Farm Playing Fields

The site comprised of amenity grassland, poor-semi-improved grassland/tall ruderal vegetation, scrub, scattered trees, buildings, hard standing and introduced shrub/hedge. Amenity grassland dominated the site, with species noted including dandelion, meadow cranesbill, creeping buttercup, couch, annual meadow-grass, shepherds purse, broad-leaved dock, meadow foxtail, white clover, meadow buttercup, soft brome, common vetch and bristly ox-tongue. There was a patch of poor semi-improved/tall ruderal vegetation, associated with a small bike-scrambling area. Species noted here were annual meadow-grass, nettle, spear thistle, cleavers, broad-leaved dock, shepherds purse, Yorkshire fog, creeping buttercup and white dead nettle. The north/west end of the site contained a dense patch of planted scrub, containing rose, bramble, dogwood and willow. Scrub was also present along the western end of the southern boundary, containing species including ash, hawthorn, blackthorn, bramble, rose, poplar and nettle. Introduced shrub/hedge was present along the eastern end of the southern boundary, and adjacent to the site entrance on the northern boundary. Species noted were cherry laurel, hawthorn, hazel, rose, dogwood, gum tree, bramble and privet. There were a few trees scattered throughout the site, including a small patch of planted silver-birch in the south/east corner. Other tree species noted were ash, field maple, and weeping willow.

There were two buildings on site, including a temporary metal porter-cabin and a larger brick building with a pitched roof. Features suitable for roosting bats were not visible on either building. There was a large area of hard standing at the north/west section of the site.

Site 17 Elmfield Playing Field

The site comprised of amenity grassland with a children's play area. Perennial ryegrass, couch, speedwell and daisy were recorded in the sward, which was notably species-poor.

Site 31 King George V Playing Field

The site was dominated by amenity grassland, with three plateaus separated by steep banks. Species recorded were perennial rye-grass, daisy, dandelion and white clover. Scattered broad-leaved trees were also present, including pedunculate oak, horse-chestnut, lime, ash and non-native species. Hedges were present along sections of the north-west boundary. Species noted were hawthorn, elder, box, privet, ivy, lesser celandine, garlic mustard, cleavers and bramble. Hedges were also present adjacent to access tracks onto the site, with one track sided by beech hedge, and the other track sided by privet, beech and conifer sp. Some hawthorn and pedunculate oak trees in the south of the site were noted to be clad with ivy that may provide suitable habitat for roosting bats.

There were three buildings on site. The first, adjacent to the northern section of the north-west boundary, was a brick building with a pitched, tiled roof. Gaps were noted in soffit boxes, therefore this building is deemed to have moderate potential of providing habitat for roosting bats. Another building was present adjacent to the north-west boundary, towards the south. This brick building had a flat roofs, with soffot boxes that featured holes which may provide entry-points for roosting bats. This building was considered to have low-moderate potential of providing habitat for

roosting bats. The third building, situated along the SE boundary, had a corrugated/flat roof and was not considered to offer potential habitat for roosting bats. A fenced children's play area was also present to the west of the site.

Protected species:

- The mature trees and buildings may have potential for bats.
- The hedgerows are likely to provide foraging & commuting routes for bats.

Site 38 Naunton Park

The site is dominated by amenity grassland with young (less than 5 years) broadleaved plantations/scattered trees at the periphery. In the north-east is an area of young, planted hawthorn scrub. There is a well maintained, brick building with corrugated roof in the south. The building has low potential for bats. There is a children's playground in the south-west corner of the site.

Site 43 Priors Farm Playing Field

The site comprised of amenity grassland, species-poor semi-improved grassland, scrub, species-poor hedge, tall ruderal vegetation, scattered broad-leaved trees, buildings and hard standing. Amenity grassland dominated the site, with species including daisy, greater plantain, white clover, annual meadow-grass, common chickweed, dandelion, speedwell and perennial rye-grass. There was a bank towards the eastern end of the site, on which the vegetation was noted to be more natural, including species-poor semi-improved grassland, scrub and tall ruderal vegetation. Species noted in the grassland in this area included cocksfoot, meadow foxtail, brome, creeping thistle, cuckooflower, meadow cranesbill, lesser celandine, curled dock, cow parsley, cleavers and campion. Tall ruderal species noted in this area were willowherb, curled dock, creeping thistle, common ragwort, shepherds purse and hogweed. The scrub in this area was dominated by blackthorn. Scrub was also present along Wymans Brook, which flowed west adjacent to the southern boundary. Species noted here were hawthorn, sedge, nettle, lords and ladies, elder, ivy, bramble, cleavers, cherry, rose, ash and broad-leaved dock. Scattered tree species noted were maple and a conifer sp. There were two buildings on the site, with the larger noted to be a brick building with a corrugated metal pitched roof. Neither this nor the adjacent smaller building were considered likely to provide suitable habitat for roosting bats. Hard standing was also present on site, associated with the car park and play areas on site.

Protected species:

- The mature trees may have potential for bats.
- The hedgerows and stream corridor are likely to provide foraging & commuting routes for bats.

Site 44 Queen Elizabeth II Playing Field

The site comprised of amenity grassland, scattered trees, species poor hedge and tall ruderal/woodland ground flora vegetation. Amenity grassland dominated the site, with species including dandelion, annual meadow-grass, shepherds purse, white clover, meadow buttercup, common chickweed, perennial rye-grass, greater plantain, lesser celandine and speedwell. Scattered tree species noted were poplar, maple, elder,

hawthorn, ash, sycamore, horse chestnut, pedunculate oak, silver birch, willow, lime and hornbeam. These trees ranged in age, from young to mature, and included many mature specimens of considerable size and ecological value. Species-poor hedge was present along sections of the western and eastern boundaries, and was noted to often be overgrown and contain semi-mature and mature trees. Species noted were blackthorn, hawthorn, buddleia, ivy, bramble, willow, ash, elder, dogwood, horse chestnut, Scots pine and conifer sp. tall ruderal/woodland ground flora species were present in association with the two strips of scattered trees to the north of the site. Species recorded were lesser celandine, lords and ladies, ground elder, cleavers, ivy and cow parsley. Areas of wood chippings and hard standing were associated with play areas and car park to the west of the site. Of note was an area of damp ground on the bank on the southern corner of the site, apparently originating from a spring or water leak from the adjacent houses.

Protected species:

- The mature trees may have potential for bats.
- The hedgerows are likely to provide foraging & commuting routes for bats.

Site 50 Sandy Lane

The site is dominated by amenity grassland with scattered trees and species poor hedgerows. There is a children's play area in the north-west. The north of the site consists of semi-natural broadleaved woodland and an all-weather playing pitch. Within the centre of the site is an area of hard standing and brick building.

Protected species:

• The mature trees may have potential for bats. The linear woodland in the north of the site connects to Site 40 and is suitable for commuting routes and foraging by bats.

Site 52 St Peters Playing Field

The site comprised amenity grassland characterised by perennial rye-grass, daisy, yarrow, shepherds purse, cats-ear, spear thistle, dandelion and false oat-grass. Other habitats present included tall ruderal/scrub vegetation along the east fence line, comprising bramble, cleavers and nettles, an ash tree adjacent to the east fence line, a species-poor hedge adjacent to the west fence line and amenity grassland with scattered trees to the south of the site. There was also an area of hard standing to the south of the site.

The site comprised amenity grassland with scattered broad-leaved trees and introduced shrub. Amenity grassland species recorded were perennial rye-grass, dandelion, daisy, wavy bitter-cress, shepherds purse and yarrow. Trees and shrubs on site were non-native.

The site comprised species-poor semi-improved neutral grassland with scattered trees and a stream along the southern boundary. The grassland, used as a bmx-biking track, contained meadow buttercup dandelion, ribwort plantain, heart-leaved spear-moss, red fescue, perennial rye-grass, cocksfoot, meadow foxtail and hogweed. There were also many scattered trees, including maple, ash and non-native species, and a large patch

of planted willow, beech and hawthorn on the northern bank of the stream. The stream was fast flowing with a rocky bed and was approximately 3 m wide with walled or vegetated banks. Shading was minimal, with some emergent vegetation, including reed mace.

The site comprised species-poor semi-improved neutral grassland with scattered broad-leaved trees, a stream, scrub and amenity grassland. Species present in the poor semi-improved neutral grassland, situated to the north of the site, included cocksfoot, red fescue, mugwort, nettle, spear thistle and Yorkshire fog. Scattered trees present included young maple and elder, and mature poplar and willow, which were of considerable size and ecological value. Scrub, comprising of bramble, was present in the north east corner of the site and along the thin strip of land to the south of the site, adjacent to the railway line. Scattered trees and amenity grassland were also present along this strip. The watercourse was relatively un-shaded and may provide habitat for a variety of protected species. These habitat areas are of value as wildlife corridors.

The site comprised amenity grassland with introduced shrub/scrub, mixed scattered trees, species-poor hedge and the stream. Species noted in the grassland included perennial rye-grass, dandelion and yarrow, with scattered cherry trees around the area. There was dense introduced shrub/scrub, comprising cherry laurel, yew and bramble along the banks of the stream, which were very steep, creating dense shade over the watercourse.

The site comprised amenity grassland with scattered mixed trees, scrub and the continuation of the stream. A childrens play area was also present on site. The amenity grassland contained daisy, perennial rye-grass and celandine, with scattered trees including elder, alder, maple, cherry, silver birch, Scots pine, conifer sp. and beech that varied in age from young to mature. Many trees on site were mature specimens of considerable size and ecological value. The watercourse had well vegetated banks, with a pebbly bed and fast-flowing, clear water. Bank vegetation caused minimal shading to the stream, and comprised scrub and trees on the north bank and trees and grass on the south bank, with cow parsley and sedge species noted. Cherry laurel was also present.

Protected species:

- The mature trees may have potential for bats.
- The hedgerows and stream corridor are likely to provide foraging & commuting routes for bats.
- The stream corridor may provide valuable habitat for dispersing otter and water voles.

Site 53 Swindon Village Playing Field

The site comprised amenity grassland with mixed scattered trees, broad-leaved woodland, species-poor hedge and a watercourse. Amenity grassland dominated the site, and comprised annual meadow-grass, lesser celandine, soft brome, perennial ryegrass, cow parsley, daisy, speedwell, rough-stalked feather-moss and common chickweed. There were a variety of scattered trees on site, including many mature specimens of considerable size and ecological value. Species included pedunculate oak, lime, turkey oak, Scots pine, yew, sycamore, holm oak, cedar, Lawson cypress,

conifer sp. and non-native species. Mistletoe was noted to be present in several trees to the north of the site.

There was a section of hawthorn hedge along the southern end of the western boundary. This was less than 1 m high and intensively managed. There was a conifer hedge to the north of this western boundary. There was also a section of species poor hedge, dominated by hawthorn and elder, along the northern boundary, with hawthorn-dominated hedge in the northern section of the eastern boundary of the site.

There was an area of broad-leaved woodland to the south of the site. This contained trees of varying age, from young to mature, including ash, oak, hawthorn, hazel, privet, sycamore and elder, with associated vegetation of cow parsley, lords and ladies, hogweed, cleavers, lesser celandine, ivy, bramble, rose, foxglove and couch. There was a slow-flowing stream running along the edge of the woodland, along the southern boundary of the site. The banks of the stream were muddy and generally poorly vegetated, with nettle and ivy providing most of the cover. In the south-east corner, the stream runs offsite beneath the adjacent road through a concrete-sided tunnel. The stream was approximately 1 m wide with a pebbly bed and clear water, and was noted to be blocked by a makeshift dam/bridge, which was restricting flow.

Several buildings were present on site. There was a brick building with a pitched tiled roof, with utilised roof space, to the south of the site. No features suitable for roosting bats were visible on this building. To the north of the site there was a wooden building with a pitched roof that also had no suitable features for bats.

Protected species:

- An oak in the centre of the site was noted to have low-moderate potential of offering suitable habitat for roosting bats, due to holes occurring where lateral branches have been lost.
- A small, brick building, also to the north of the site, may potentially offer habitat for bats, as holes were noted in decaying soffit boxes around the pitched roof.
- The stream is considered to have low potential of offering suitable habitat for protected species such as otter, white-clawed crayfish or water vole.
- The mature trees may have potential for bats.
- The hedgerows and stream corridor are likely to provide foraging & commuting routes for bats.

Site 54 The Burrows Playing Field

The site comprised amenity grassland, reeds, broad-leaved woodland, scrub, tall ruderal vegetation, scattered trees, a building and species-poor hedge. Amenity grassland dominated the site, with species including annual meadow-grass, greater plantain, dandelion, daisy and perennial rye-grass. There was a strip of reeds and associated vegetation along the western boundary of the site, adjacent to a small stream. Species noted here were common reed, meadowsweet, nettle and cleavers. This habitat merged with a strip of willow-dominated woodland, with several fallen and decaying willow specimens, as well as mature pollards, which may provide habitat for bats. Other species noted in this woodland strip were hawthorn, elder, nettle, bramble, hogweed, cow parsley, curled dock, sedge and cleavers. In the far north-west corner there was an area of scrub containing willow, bramble, blackthorn,

hawthorn and ivy, with tall ruderal vegetation in front, including nettle, cleavers, lesser celandine, hogweed, meadowsweet and cow parsley. Scattered trees were present around the perimeter of the site, including poplar, horse chestnut, ash, sycamore, hawthorn, willow, cherry, alder, plane and Scots pine. The poplar adjacent to the children's play area was notably large, contained mistletoe and may have had entry holes suitable for roosting bats. Species poor-hedges were present along the northern and eastern boundaries. Species noted were hawthorn, ivy, elder, holly and sycamore.

- The mature trees may have potential for bats.
- The hedgerows/woodland strip are likely to provide foraging & commuting routes for bats.

Site 57 Welch Road Playing Field

This site comprised amenity grassland, scattered broad-leaved trees and species-poor hedge. Amenity grassland dominated the site, and contained daisy, perennial ryegrass, white clover, dandelion and rough-stalked feather-moss. Scattered trees species noted were pedunculate oak (mature specimen), broad-leaved non-native sp., poplar and lime. To the south east of the site there was a scrubby hedgerow contained elder, hawthorn and willow. There was a single storey brick building with corrugated roofing to the north of the site. This building did not have any visible features that are suitable for roosting bats. There was also an area of hard standing to the north of the site.

Site 59 Whaddon Recreation Ground

The site comprised amenity grassland, scattered broad-leaved trees, introduced shrub and species-poor hedge. The main area of grassland was species poor, dominated by perennial rye-grass, daisy, couch, speedwell and greater plantain. An area of grassland in the western part of the site, adjacent to a play area, was somewhat more diverse, containing additional species such as red fescue, thyme-leaved speedwell, ribwort plantain, white clover and rough-stalked feather-moss. A number of scattered trees were present in this garden area of the site, including cherry, holly, yew, elder and non-native species. Introduced shrub was also present in this area, including a cherry laurel hedgerow. There was a line of mature lime trees along the northern boundary of the main part of the site. There were also two small sections of hedgerow along the eastern boundary, one dominated by privet and the other by a conifer species. Rose was also noted to be present adjacent to the western boundary.

Site 69 Prestbury Playing Field

The site consists of amenity grassland bounded by species-poor hedgerows. Semimature scattered trees occur along the northern edge. Also along the northern edge is a strip of tall ruderal vegetation and willow-bramble-elder scrub.

Protected species:

• The mature trees may have potential for bats. The hedgerows are likely to be used as commuting routes by bats.

A4.9 Potential development sites

Site 5002 Starvehall Farm

The site consists for improved grassland divided by species-poor hedgerows. There are residential properties and species poor semi-improved grassland in the west of the site. There are some mature scattered trees within the hedgerows. There is a mature pollarded crack willow in the north-east of the site.

Protected species:

• The mature trees may have potential for bats. The hedgerows are likely to be used as commuting routes by bats.

Site 5004 Land to NW Cheltenham

The site comprises of improved grassland and arable fields with species-poor defunct and intact hedgerows. The hedgerows are generally unmanaged and 2-4 m in height and 2 m wide. A tree lined stream passes north-west south-east through the site as does a dry, tree lined ditch. The stream is re-enforced with gabions in places. Residential properties occur in the south. There is an area of tall ruderal vegetation dominated by hemlock, bramble and nettle in the south-east of the site. There is an area of dense scrub developing into semi-natural woodland in the south-east of the site. This habitat is dominated by young ash.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats and has potential for dispersing otters. It has low suitability for water voles as a result of the heavy shading.
- There was evidence of badgers using the southern part of the site.

Site 5005 Land at Quat Goose Lane

The site comprises of an arable field (ploughed at time of survey) and amenity grassland playing field. There is an allotment site in the south. A sports centre, associated car parking and small area of semi-natural broadleaved woodland also occur in the south. A stream with scattered mature broadleaved trees and shrubs form the northern boundary. The stream is approximately 1 m wide with a cobble, gravel and sand substrate. A tree lined ditch forms a boundary between the arable field and the amenity grassland. This linear features becomes a hedgerow/scrub at the northern end and include old pollarded willows.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats and has potential for dispersing otters. It has low suitability for water voles as a result of the heavy shading.

Site 5006 Land at Home Farm

The site comprises of improved grassland with species-poor intact hedgerows dividing the fields. Residential properties occur in the south. The northern boundary consists of a stream lined with mature trees.

Protected species:

- The mature trees may have potential for bats.
- The streams are likely to provide a foraging route for bats and has potential for dispersing otters.

Site 5007 Land at Old Gloucester Road

The site is dominated by improved grassland with species-poor hedgerows. A scattered tree lined stream forms the northern boundary of the site. This stream is fairly open with a variety of bankside grasses and herbs, including Himalayan balsam. In places the channel has been canalised. Residential properties occur in the south of the site.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats and has potential for dispersing otters. It has moderate-high suitability for water voles. The stream also has low-moderate potential for white clawed crayfish.

Site 5008 Land at Bamfurlong lane

The site is in two parts separated by the main road into Cheltenham from the south-west. North of the road the site is comprised of species-poor semi-improved grassland with a species poor hedgerow with trees forming the boundaries. In the north-east of this field is an area of establishing vegetation, consisting of ephemeral and tall ruderal species.

South of the road the site is comprised of improved grassland and species-poor semi-improved grassland. There are also areas of semi-natural broadleaved woodland, tall ruderal vegetation and species-poor hedgerows. There were some scattered broadleaved trees (apple) in the south-east.

Site 5009 Land at Oakley Farm

The site is dominated by improved grassland with species-poor defunct and intact hedgerows forming the boundaries. The hedgerows were generally 2-2.5 m height and 1-1.5 m wide with at least one years growth since last cutting. The western edge has scattered bramble and tall ruderal vegetation. The hedgerows include mature oak and ash. There is a mature oak in the south-west corner which has undergone tree surgery to maintain it for future standing deadwood.

Protected species:

- The mature trees may have potential for bats.
- Future standing deadwood is an important habitat for a variety of invertebrates.

Site 5010 – no name

The site is dominated by improved grassland with species-poor defunct and intact hedgerows forming the boundaries. The hedgerows were generally 2-2.5 m height and 1-1.5 m wide with at least one years growth since last cutting. The eastern boundary comprises of a wall. There is a residential property in the north of the site. The hedgerows include mature oak and ash.

Protected species:

• The mature trees may have potential for bats.

Site 5011 – no name

The site is dominated by improved grassland fields divided by species-poor hedgerows. Other habitats include species-poor semi-improved grassland, orchards, scrub, tall ruderal vegetation, semi-natural broadleaved woodland, residential and business properties. The northern-eastern boundary comprises of a watercourse lined with a variety of mature trees. A tree lined watercourse also passes through the west of the site.

Mature scattered trees occur across the site, some of which have the potential to become veterans.

Protected species:

- The mature trees may have potential for bats. The hedgerows are likely to be used as commuting routes by bats.
- The stream is likely to provide a foraging route for bats. The watercourse provides a dispersion route for otters. It has low suitability for water voles as a result of the heavy shading. The stream also has low-moderate potential for white-clawed crayfish.

Site 5012 – no name

The site comprises of an improved grassland field with a species-poor hedgerow with trees forming the boundaries. There is a row of mature, old apple trees along the northern edge. A community centre occurs at the eastern end of the site.

Protected species:

• The mature trees may have potential for bats.

Site 5013 – no name

A site dominated by improved grassland with species-poor hedgerows. There are also some arable fields and fields that are currently fallow. Scattered broadleaved trees occur across the site, some of which have the potential as future veteran trees. The hedgerows include mature trees, notably ash and oak. The hedgerow forming the eastern boundary in the north of the site also has an associated ditch. There are several residential and small business properties in the south of the site. A tree lined stream bisects the site in the south.

One of the fields within this site, located at Fiddlers Green (approximate grid reference SO 912 226) is documented on the local plan proposals map as a key Wildlife Site.

Protected species:

- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats and has potential for dispersing otters. It has low-moderate suitability for water voles as a result of the heavy shading. The stream also has low-moderate potential for white clawed crayfish.

Site 5014 – no name

The site primarily consists of improved grassland fields divided by hedgerows. A tree-lined stream forms the northern boundary and part of the southern and western boundary. Other habitats along the northern edge include dense and scattered scrub with mature trees and tall ruderal vegetation. Arable fields (ploughed at time of survey) occur in the south. Residential properties occur in the eastern part of the site. Species-poor semi-improved grassland with regenerating scattered scrub occurred in the north-west of the site.

The hedgerows include species-poor defunct hedgerows and species-poor intact hedgerows. The hedgerows along the eastern edge of the suite, adjacent to the road are dominated by English elm and are generally well maintained. The hedgerows forming the field boundaries are generally less regularly managed, ranging in height from 1.5-3.5 m and have a greater variety of species including hawthorn and blackthorn.

The area of tall ruderal vegetation in the north of the site includes areas of blackthorn regeneration. The dense and scattered scrub, also in the north of the site, includes old field maple coppice stools and ash pollards.

The stream in the south of the site is bordered by tall ruderal vegetation and scrub.

Mature broadleaved trees occur periodically along the hedgerows. There are potential black poplars in the west of the site. A mature oak pollard occurs in the west of the site.

Protected species:

- The mature trees may have potential for bats.
- The streams are likely to provide a foraging route for bats and has potential for dispersing otters.
- There is some potential for water voles along the watercourses, although along most of the lengths the watercourses were heavily shaded. Evidence of mink was also noted along the stream in the west of the site.
- The watercourses generally have low potential for white-clawed crayfish.
- The old pollards in the north of the site provide potential bat roost sites.
- There was evidence of badger (tracks) in the south of the site by the stream.

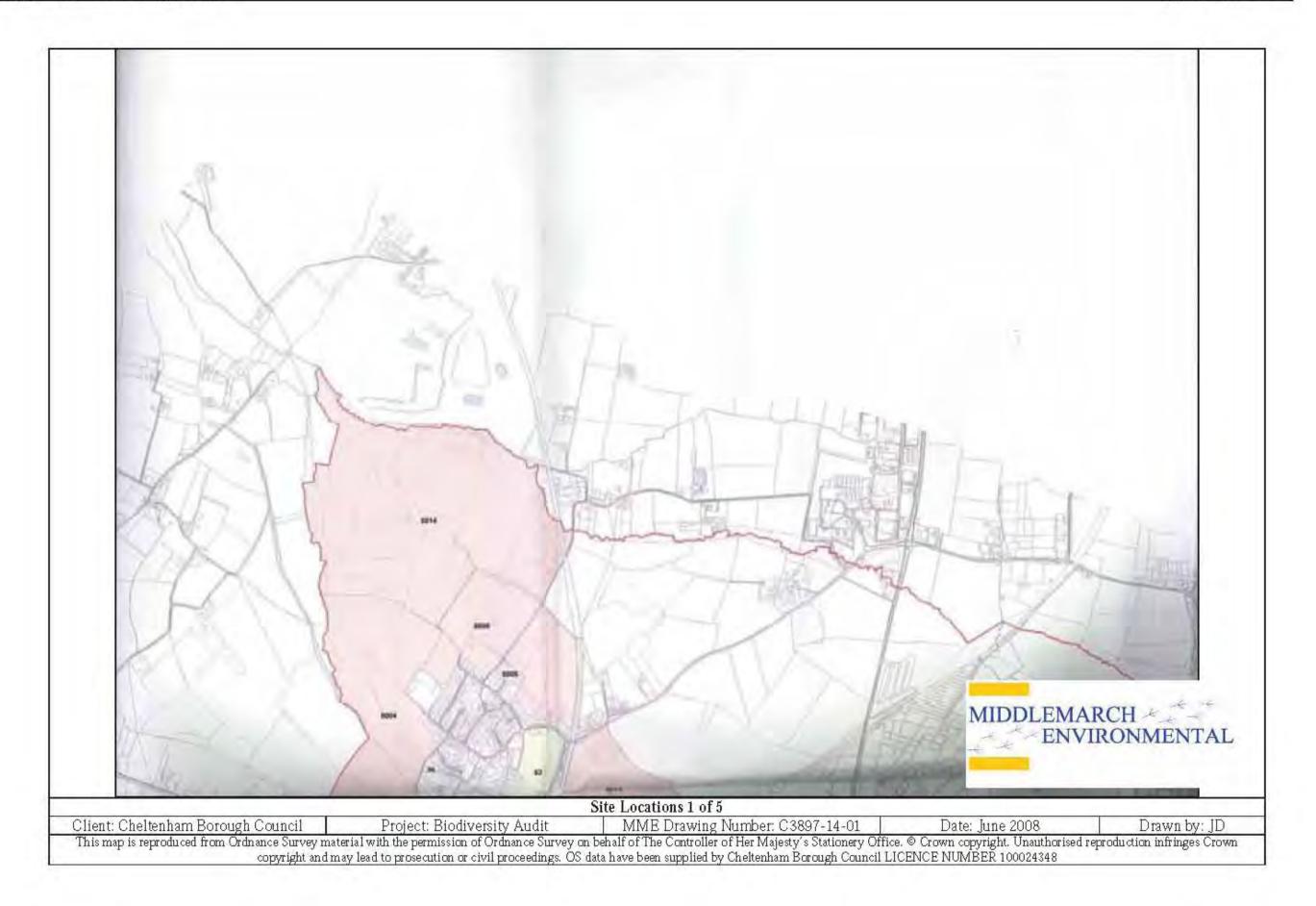
Site 5018 – no name

Site comprised of a field dominated by tall ruderal vegetation. At the eastern end is an area of scrub/semi-natural broadleaved woodland with abundant privit in the understorey. Ash is the main canopy species. A ditch and stream with scattered

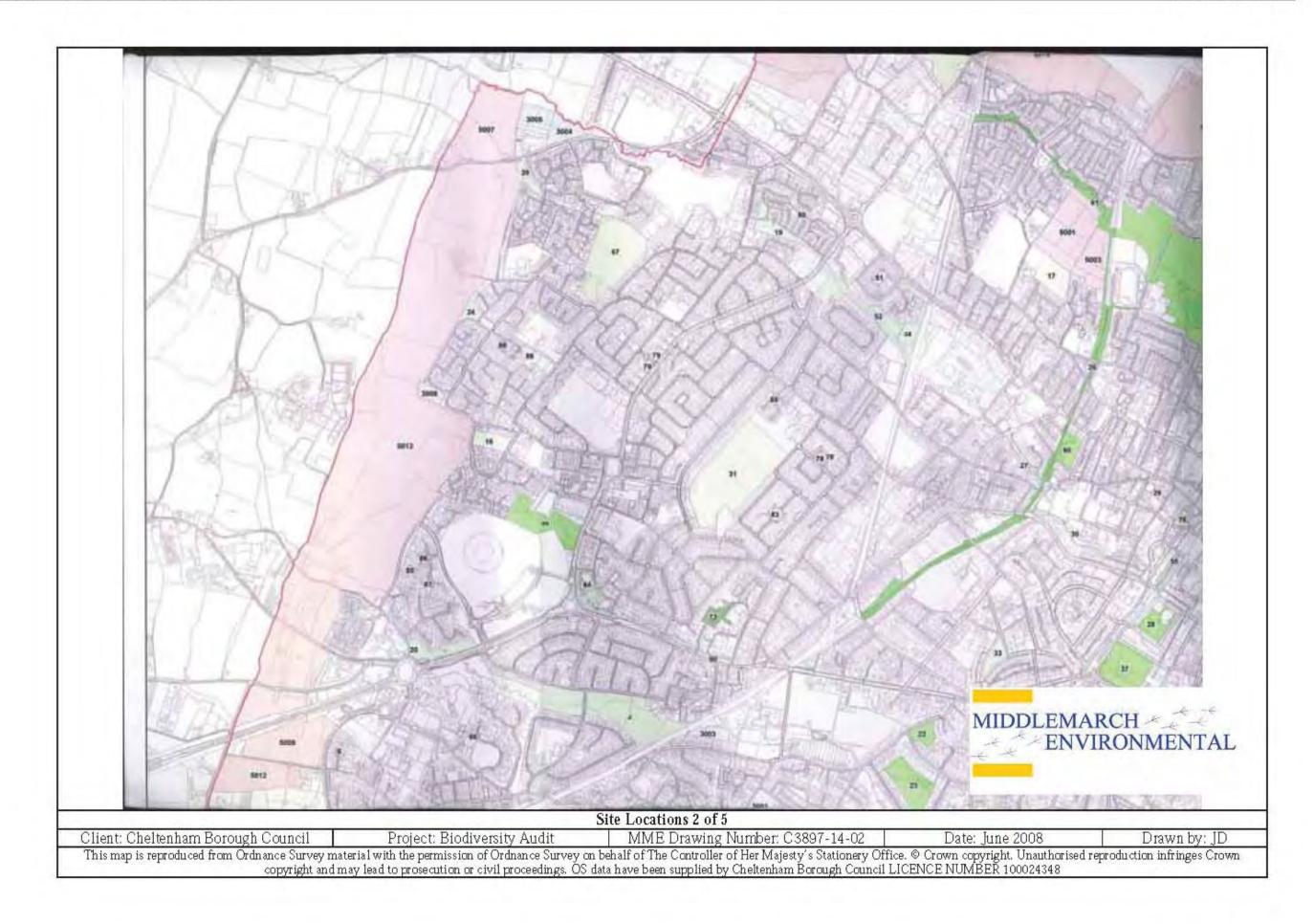
mature broadleaved trees and shrubs form the southern boundary. The stream is approximately 1 m wide with a cobble, gravel and sand substrate.

Protected species:

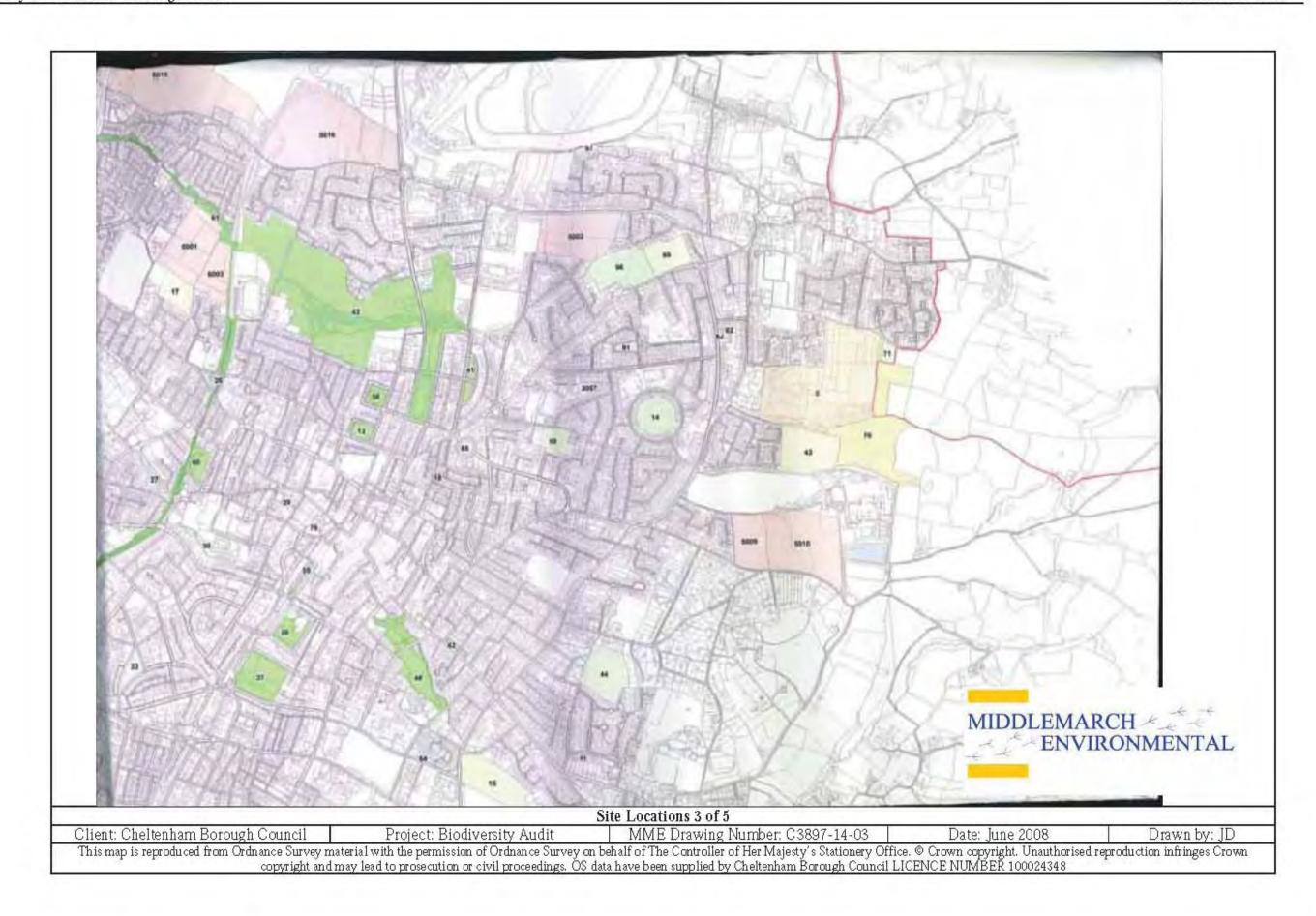
- The mature trees may have potential for bats.
- The stream is likely to provide a foraging route for bats and has potential for dispersing otters. It has low suitability for water voles as a result of the heavy shading.

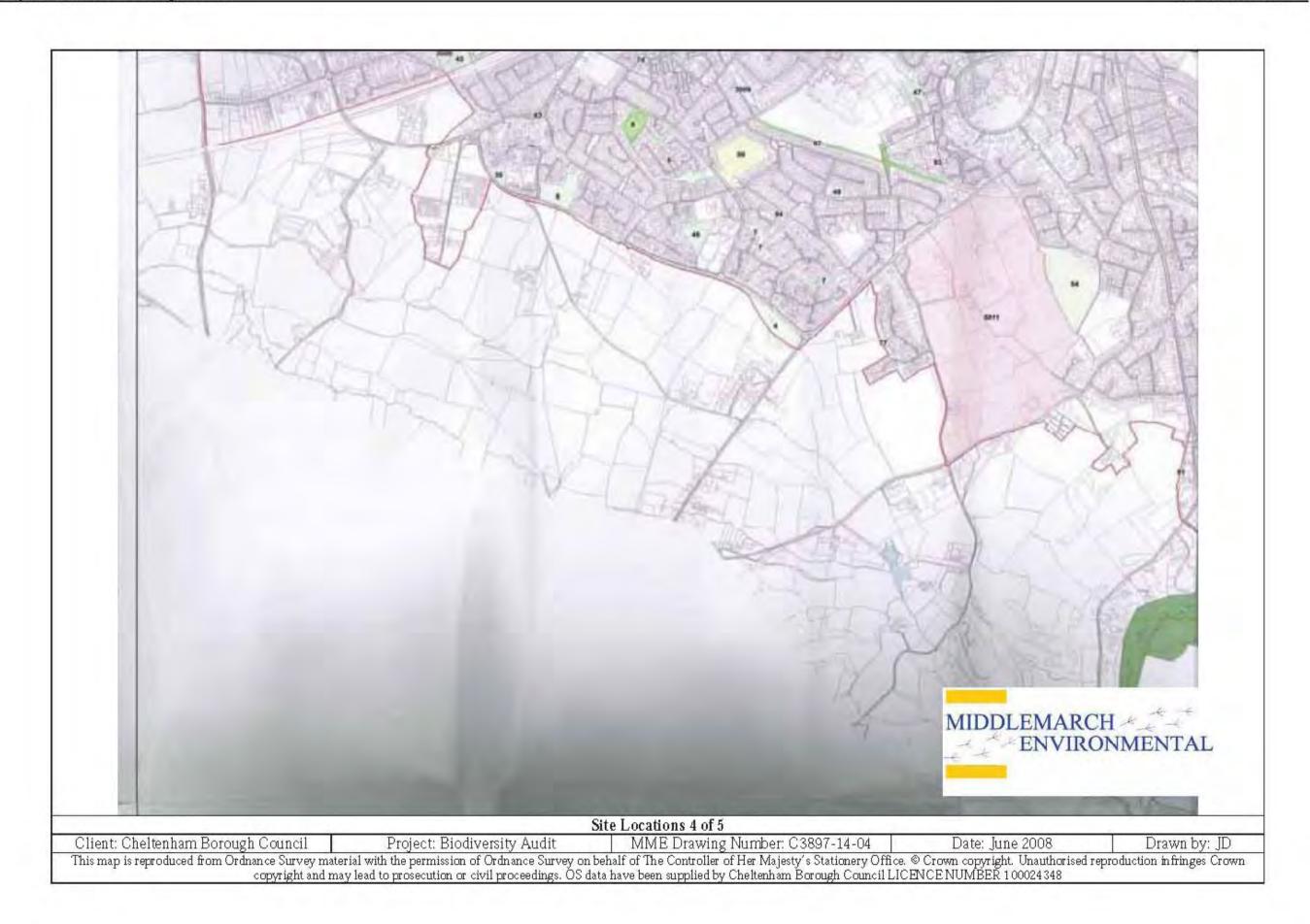


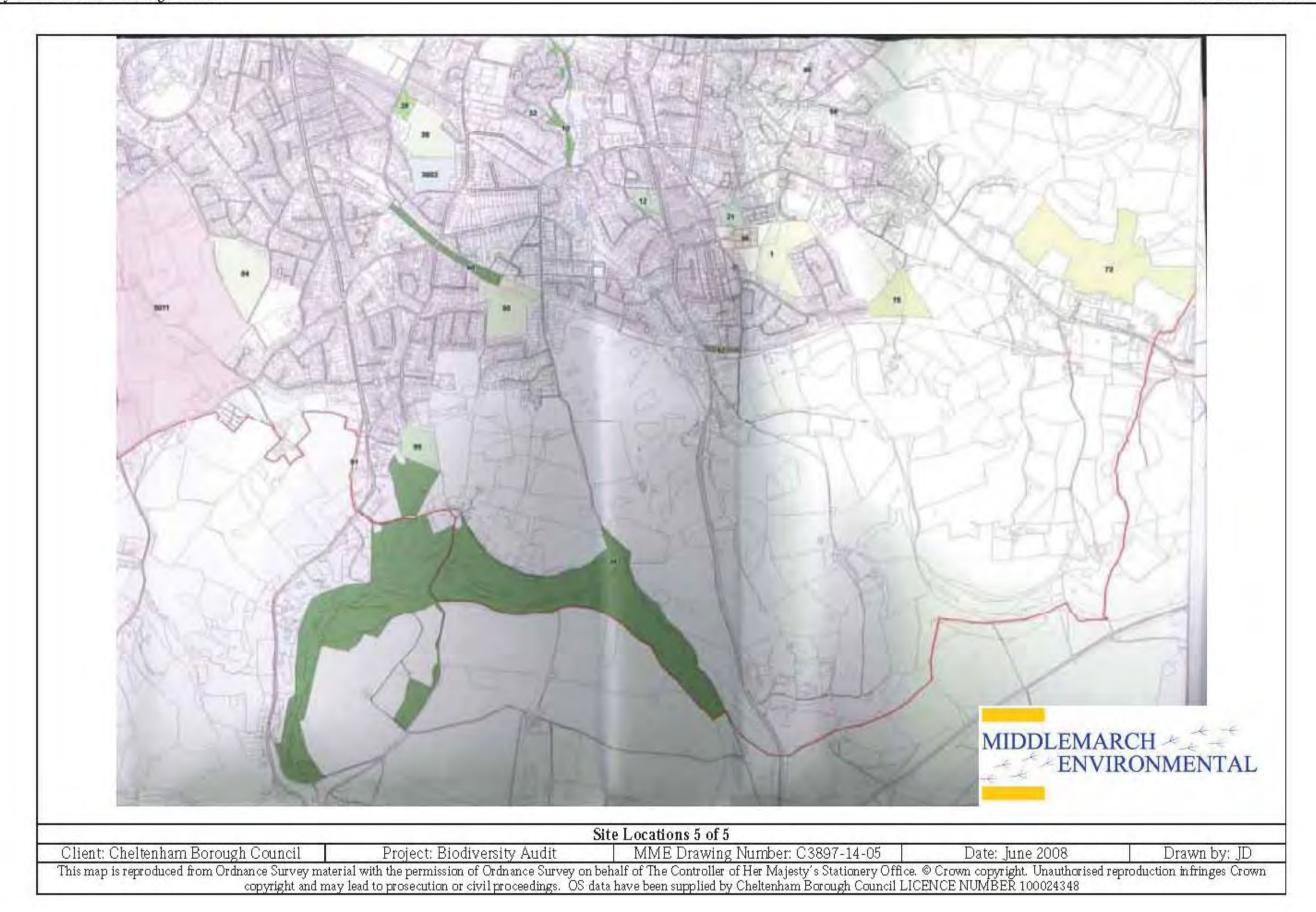
Biodiversity Audit Cheltenham Borough Council



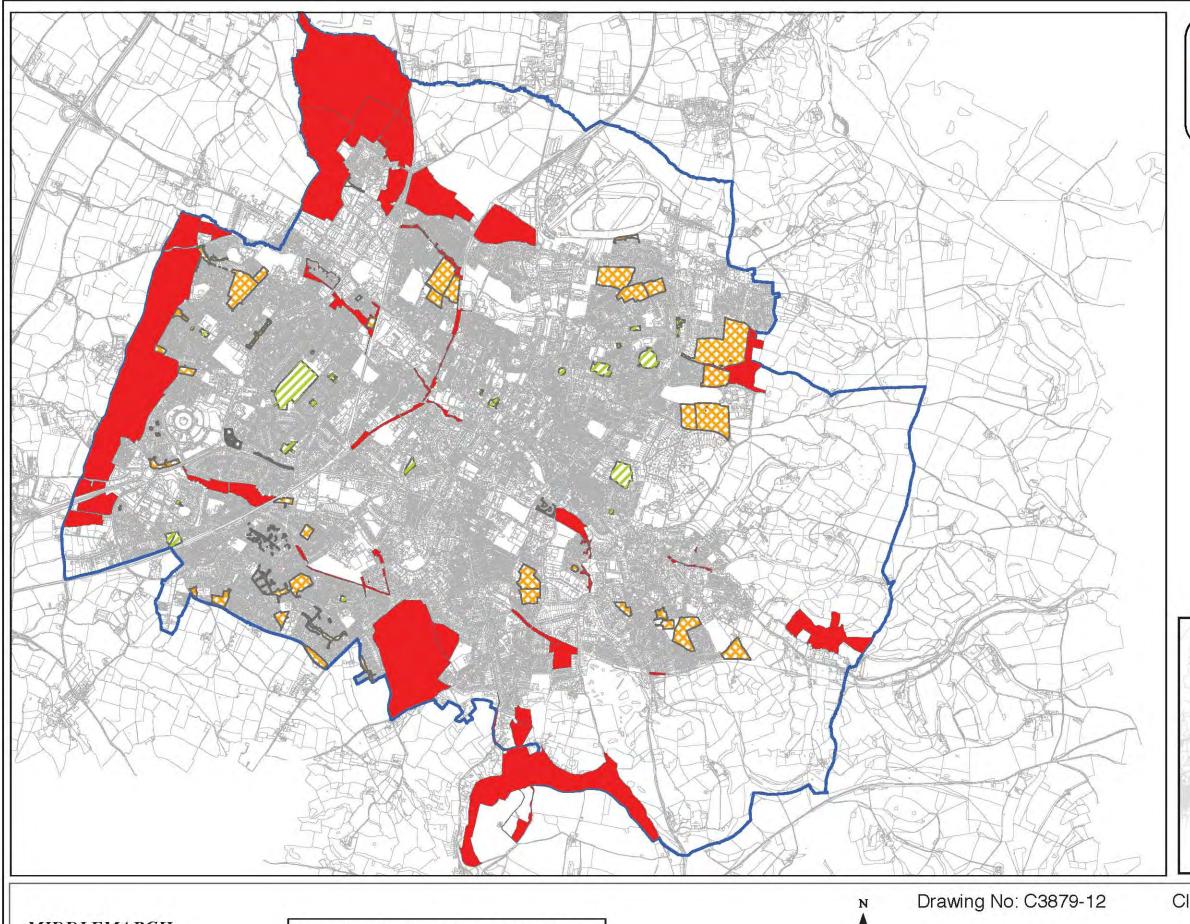
Biodiversity Audit Cheltenham Borough Council







Biodiversity Audit Cheltenham Borough Council	RT-MME-3879-rev01
APPENDIX 5: WILDLIFE CORRIDOR VALUE	
ATTENDIA 3. WILDLIFE CORRIDOR VALUE	
Middlemarch Environmental Ltd.	Page 117



Legend

Wildlife corridor value



high moderate low

Borough Boundary

MIDDLEMARCH ENVIRONMENTAL

Triumph House, Birmingham Road, Allesley, Coventry, CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400 E: admin@middlemarch-enviromental.com

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

OS data have been supplied by Cheltenham Borough Council LICENCE NUMBER 100024384

A

Scale @ A3

1:40,000

Revision: 00

Date: October 2006

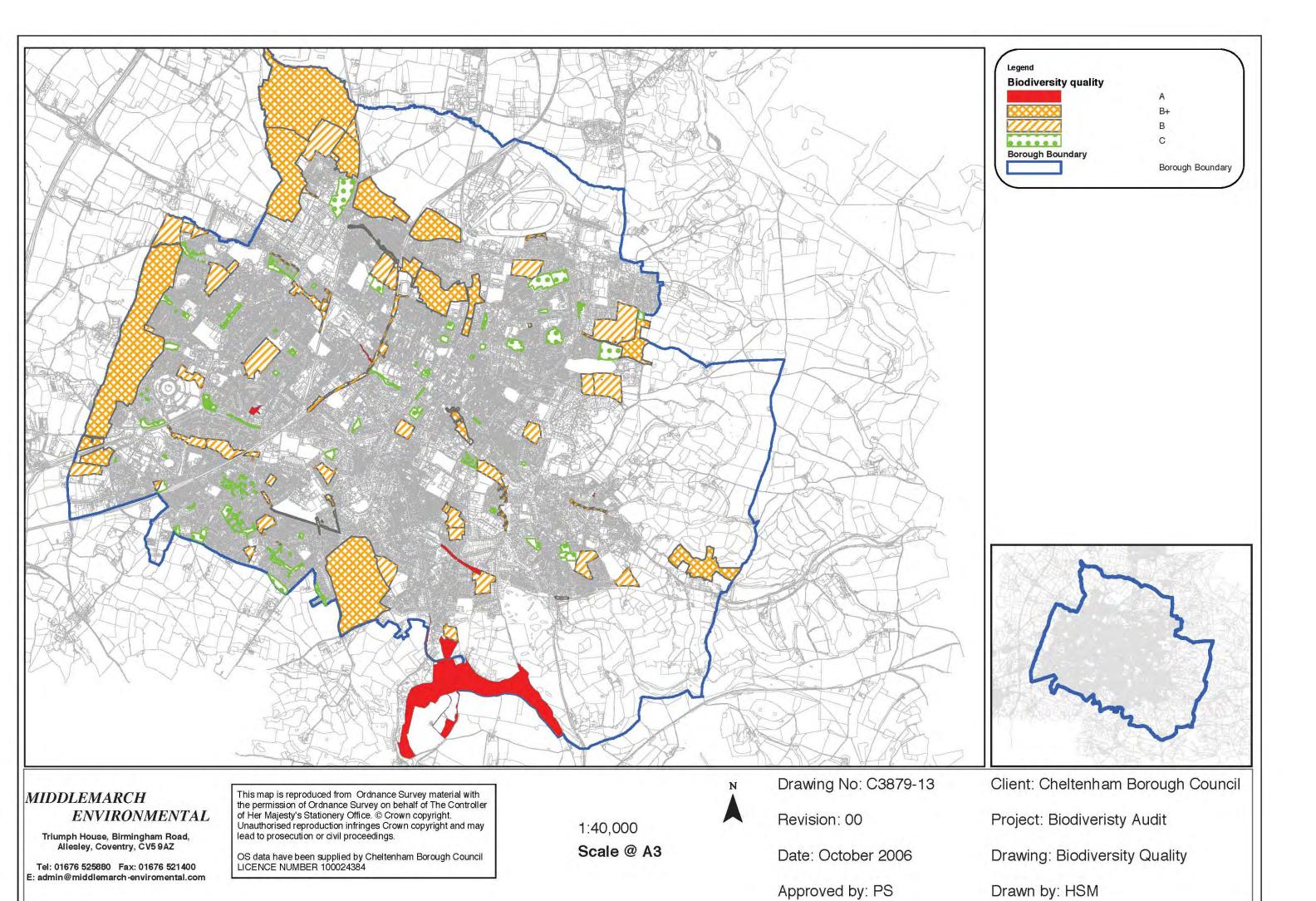
Approved by: PS

Client: Cheltenham Borough Council

Project: Biodiveristy Audit

Drawing: Wildlife Corridor Value

Drawn by: HSM



MIDDLEMARCH ENVIRONMENTAL QUALITY ASSURANCE

TITLE: BIODIVERSITY AUDIT CHELTENHAM BOROUGH COUNCIL

A Report to Cheltenham Borough Council

Contract Number: C3879 & C102866

Report Number: RT-MME-3879-rev01

Revision Number: 01

Description: Final

Date: June 2008

Checked by:

James Calow **Principal Biodiversity Consultant**

Approved by:

Dr Philip Fermor **Managing Director**