

**STRATEGIC DEVELOPMENT AREAS. PRELIMINARY ECOLOGICAL
SURVEYS AND ASSESSMENT**

**SITE NAME: BATH URBAN EXTENSION LOCATION
OPTION 3 -**

LOCATION: ODD DOWN / SOUTH STOKE

GRID REFERENCE: ST736614(CGR)

SURVEY DATE: 07/05/2008

WEATHER: SUNNY AND HOT

THIS REPORT CONTAINS CONFIDENTIAL INFORMATION

Bristol Regional Environmental Records Centre (BRERC)
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1 INTRODUCTION

The Bristol Regional Environmental Records Centre (BRERC) was commissioned by Bath and North East Somerset Council to conduct an extended Phase 1 field survey of **Bath Urban Extension Location Option 3 - Odd Down / South Stoke**. Two members of BRERC staff visited the site on 07/05/2008. The survey and this report reflect the level of detail required by the survey brief.

The objective of the survey was to undertake a general ecological evaluation of the site and to verify and update the nature conservation data of the target site using **Phase 1 habitat mapping (Figure 1)** with additional **detailed Target Notes (Figure 2)** and to evaluate the condition, extent and structure of **hedgerows (Figure 3)** of the area in order to:

- confirm and update the existing baseline information
- identify any potential constraints to development, including the presence of European Protected Species, UK Priority Habitat and important hedgerows
- to identify key ecological features that could merit retention within strategic development areas
- Identify the nature and extent of further detailed surveys that would be required to inform future master planning of selected areas.

Appendix 1. Target Notes

Appendix 2. Phase 1 codes

Figure 1. Phase 1 Map

Figure 2. Target Notes

Figure 3. Hedgerow Condition

Figure 4. Designated Sites

Figure 5. Recommended Feature Retention

Figure 6. Aerial Photo

2 SURVEY

Species in **bold** are notable in the BRERC region.
Other notable features are also in **Bold**.

Methods:

- Phase 1 habitat mapping following the Handbook for Phase 1 habitat survey (JNCC).
- Detailed target notes of key ecological features and areas that could require further detailed surveys and that could merit retention within any potential development (Handbook for Phase 1 habitat survey JNCC).
- Hedgerow characteristics*.
- Identification of areas and features

*Hedgerows were audited for all woody species and associated features such as banks, ditches and associated trees.

2.1 Habitat Overview

Within the target area the following habitat types were found:

Arable fields
Amenity grassland
Improved grassland
Broad-leaved woodland
Broad-leaved planted woodland
 Semi-improved neutral grassland
Scattered scrub
Hedgerows
Isolated hedgerow and field trees of significant interest
Green lane
Tall ruderal

2.2 Habitat Description – Summary of survey

There are **two designated sites** within this Option area (**Figure 4**). **Fuller's Earth Works - Southstoke complex** Site of Nature Conservation Interest (SNCI) and part of **Wansdyke Footpath** (SNCI). Part of the Fuller's Earth Works - Southstoke complex SNCI occurs within the Option area boundary in two places. These are: a triangular section east of Combe Hay Lane (Target Note 007) and at the waste management works to the east of the A367.

Three designated sites are either directly adjacent to this Option area or close by. These are **Down Wood SNCI**, **Middle Wood SNCI** and **Vernham Wood SNCI (Figure 4)**.

There was some limitation of access (see Figure 1). The land owned by the waste management works was not visited due to **access restrictions** (Target Note 024).

The land parcels within this option area are primarily of large fields under arable crop. These fields are very often bounded by dry-stone walls, many of which are at least partially collapsed. Occasionally strips of these fields have been recently planted with trees. Other land parcels are of level but uneven semi-improved neutral grassland or either domestic curtilage or business premises.

The **scarp slope along the southern edge of this area** is potentially of high conservation value. It lies adjacent to or within the Fuller's Earth Works - Southstoke complex SNCI.

Several of the road and track verges are species-rich and support a suite of limestone flora.

There are occasional signs of **Badger *Meles meles*** presence and **Skylarks *Alauda arvensis*** were singing over the arable fields to the east.

3 RECOMMENDATIONS OF IMPORTANT ECOLOGICAL FEATURES / AREAS TO RETAIN

3.1 Important ecological features identified that warrant retention and / or further survey include:

- **Fuller's Earth Works - Southstoke complex SNCI** (parts of).

-
- **Wansdyke Footpath** SNCI (part of) (possible protected Ancient Monument).
 - **Scarp edge / slope.** Although the Scarp edge / slope along the southern edge of this area this falls outside of the Option area boundary this area warrants special consideration is potentially of high conservation value as it lies adjacent to the Fuller's Earth Works - Southstoke complex SNCI.
 - **Semi-improved neutral grassland - Fuller's Earth Works - Southstoke complex SNCI** (target Note 007). There is also an area of semi-improved neutral grassland **south of the Park and ride** that may warrant retention (Target Note 005).
 - **Hedgerows with seven or more woody species** qualify as "important hedgerows" under the Hedgerow Regulations 1997 (**Figure 3**).
 - **Potential bat roosts** (Target Note 012)
 - **Target noted trees** in fields and hedgerows (Target Notes 012 and 023).
 - **Badger setts** and / or habitats such as hedgerow and scrub that contain or potentially contain (Target Notes **002**, **003**, 004, 008, 009, **011** and 013). *Target Notes in **Bold** denotes definite presence, non-bold denotes possible presence.*
 - **Potential reptile habitat** – dry-stone walls (Target Notes 010, 015, 016, 017, 018, 021, 022, 025, 026 and 027).
 - **Species-rich road and track verges** (Target Notes 009 and 014).
 - There was some **limitation of access (see Figure 1)**. The land owned by the waste management works was not visited due to access restrictions (Target Note 024). Some of this land is covered by the Fuller's Earth Works - Southstoke complex SNCI.

In addition to the Target Noted areas identified for further survey (see Appendix 1), it is **recommended that all the areas listed in section 3.1 are subject to further detailed** survey if likely to be affected by development. Such areas may also warrant protection with buffer zones with to reduce any potential impacts.

APPENDICES
Appendix 1 – Target Notes
Appendix 2 - Phase 1 Codes

MAPS

- Figure 1. Phase 1 Map**
- Figure 2. Target Notes**
- Figure 3. Hedgerow Condition**
- Figure 4. Designated Sites**
- Figure 5. Recommended Feature Retention**
- Figure 6. Aerial Photo**

Appendix 1. Odd Down Target Notes

Target Note Number	Grid Ref	Date	Site name	Habitat etc.	Notes	Further survey required
001	ST73186163	07/05/2008		Road verge - species-rich	North of lane. Veronica persica, Crepis vesicaria. Dog's Mercury. May be out of area	n
002	ST72656135	07/05/2008		Badger presence - latrine	Badger presence - latrine	y
003	ST72556104	07/05/2008		Badger presence	Wide verge with coarse grasses/scattered scrub. Badger signs - digging. Possible sett in hedge.	Y
004	ST73036140	07/05/2008		Possible Badger presence - Hedgerow	Possible Badger presence - Hedgerow	Y
005	ST73176135	07/05/2008		Scattered scrub & SNG	Blackthorn/Bramble scrub with Tall Ruderal/SNG. Ploughed. Whitethroat. Scrub/planted trees around cp. Some spp of int Hypericum hirsutum, Centaurea nigra, Woolly thistle, White campion, Common toadflax, Veronica serpyllifolia.	Y
006	ST73356134	07/05/2008		Road verge - species-rich	Both sides - more on East. Carex flacca, Bromopsis erecta, Vicia spp., Sanguisorba minor, Hypochaeris radicata, Poa pratensis, Daucus carota, White Campion, Lathyrus pratensis	y
007	ST73426133	07/05/2008	Fuller's Earth Works - Southstoke complex	Semi-improved grassland	Rough, uneven, coarse grasses with some ruderals. Cow Parsley, D. carota, Lathrus pratensis, White Campion, Ruseda lutea, Woolly thistle. Mammal signs - vole tracks/runs, Rabbit droppings. Anthills. Bramble scrub	y
008	ST73516126	07/05/2008		Possible Badger presence	Wooded scarp edge. Badger tracks	y
009	ST73786133	07/05/2008		Boundary - species rich	Fenced boundary with some interest. Woolly thistle, Marjoram, Helictotrichon pubescens, Anthills. Encroaching Blackthorn - possible Badgers	y
010	ST73646140	07/05/2008		Dry stone wall - collapsed	Potential reptile interest. Also scattered trees/shrubs Ash, Elder	y
011	ST73476145	07/05/2008		Badger presence - latrine	Badger presence - latrine	y
012	ST73616148	07/05/2008		Significant tree - Hedgerow	2 x pollard Ash	y

013	ST73916141	07/05/2008		Possible Badger presence - Garden	Areas of semi-natural Beech wood of some value - with some assoc ground flora. Amenity grassland. Possible Badger signs - track/digging.	y
014	ST73946134	07/05/2008		Road verge - species-rich	Track verge. Common Lizard, Bromopsis erecta, Brachy sylv, Agrimony, Marjoram, Veron pers, Ploughman's Spikenard, Lotus corn, Lathyrus prat, White Campion, Hyp perf+hirs, Carex flacca, Salad Burnet, Com Rock-rose, Medicago lupulina	n
015	ST74286134	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest	y
016	ST74456138	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest	y
017	ST74366145	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest. With Elder	y
018	ST74496147	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest. With Elder, Clematis. Sycamore x 1, Ash x 1. Mammal tracks over wall.	y
019	ST74576163	07/05/2008		LBAP species	Skylark singing	n
020	ST74406183	07/05/2008	Wansdyke Footpath SNCI	Ancient monument	Woden's Dyke. Mostly tall grasses with ruderals - Cow Parsley. Garden hedge. Several areas of slightly increased interest. Common Vicia spp. + Hedge Bedstraw	y
021	ST74426174	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest with Bramble, Elder. Field side track, Improved and Tall Ruderal - Cow Parsley	y
022	ST74546157	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest. Field side track, Improved and Tall Ruderal - Cow Parsley	y
023	ST74356164	07/05/2008		Significant tree / Dry stone wall - collapsed	Partial collapse, potential reptile interest. Field side track. Isolated tree (to keep) Sycamore.	y
024	ST72756113	07/05/2008		Not surveyed	Access and time constraint - Further survey needed. Scarp edge areas such as this are potentially of high conservation value and buffering may be desirable	y
025	ST74336138	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest. Mostly intact. Evidence of re-building. Ash, Elder and Holly.	y
026	ST74286154	07/05/2008		Dry stone wall - collapsed	Partial collapse, potential reptile interest. Low line of heaped stones, more intact towards Northern end. White Dead-nettle, Cow Parsley, Elder.	y

027	ST74176161	07/05/2008			Dry stone wall - collapsed	Partial collapse, potential reptile interest. Complete redundancy at eastern end. Overgrown with bramble at western end.	y
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Appendix 2. Phase 1 Codes

Code	Habitat classification	Code	Habitat classification	Code	Habitat classification
A	Cultivated/disturbed land, arable	F	Fence	RWD	Running water, dystrophic
AC	Natural inland cliff, acid / neutral	FB	Recently felled woodland: broad-leaved	RWE	Running water, eutrophic
ADH	Dry dwarf shrub heath, acid	FC	Recently felled woodland: coniferous	RWM	Running water, mesotrophic
AF	Acid / neutral flush / spring	FM	Recently felled woodland: mixed	RWO	Running water, oligotrophic
AG	Acid grassland unimproved	FPM	Flood plain fen	S	Artificial spoil
AM	Cultivated/disturbed land, amenity grassland	Ga	Intertidal green algal beds	SAG	Acid grassland semi-improved
AR	Other rock exposure, acid / neutral	H	Hedge, intact, native species poor	SB	Bracken scattered
AS	Natural scree, acid / neutral	H-	Defunct hedge, native species poor	SBW	Parkland / scattered trees, broad-leaved
B	Water, brackish (includes saline lagoons)	HC	Maritime hard cliff	SC	Maritime soft cliff
Ba	Intertidal brown algal beds	HT	Hedge and trees, native species poor	SCG	Calcareous grassland semi improved
BB	Blanket bog	I	Improved grassland	SCW	Parkland scattered trees: coniferous
BC	Natural inland cliff, basic	LH	Lichen / bryophyte heath	SD	Swamp, single species dominant
BDH	Dry dwarf shrub heath, basic	LP	Limestone pavement	SG+target note	Maritime coastal grassland
BF	Basic flush / spring	M	Water, mesotrophic	SH+target note	Maritime coastal heathland
BG	Bare ground	MG	Marsh / marshy grassland	shaded black	Built up area - buildings
BM	Basin mire	MH	Montane heath / dwarf herb	SI	Poor semi improved grassland
BP	Broadleaved parkland / scattered trees	MI	Artificial mine	SMG	Semi natural marshy grassland
BR	Other rock exposure, basic	MP	Mixed plantation	SMW	Parkland scattered trees: mixed
BS	Natural scree, basic	MV	Marginal / inundation, marginal	SNG	Neutral grassland semi improved
BW	Broadleaved woodland	MW	Mixed semi-natural	SP	Swamp
C	Water, marl / tufa	NG	Neutral grassland unimproved	SS	Scrub scattered
CA	Cave	NR	Other herb & fern, non-ruderal	SSM	Saltmarsh scattered plants
CB	Bracken, continuous	O	Water, oligotrophic	SW	Standing water
CG	Calcareous grassland unimproved	OD	Sand-dune, open dune	SWALL	Built up area - sea wall
CP	Parkland/scattered trees, coniferous	P	Bare peat	SWB	Standing water, brackish
CS	Built up area - caravan site	PBW	Broadleaved plantation	SWC	Standing water, marl
CW	Coniferous, semi-natural	PCW	Coniferous plantation	SWD	Standing water, dystrophic
D	Water, dystrophic	PH	Hedges intact or defunct, species poor	SWE	Standing water, eutrophic
DB	Dense bracken	PHT	Hedges with trees, species poor	SWM	Standing water, mesotrophic
DD	Dry ditch	PMW	Mixed plantation	SWO	Standing water, oligotrophic
DG	Sand-dune, dune grassland	Q	Artificial quarry	TR	Other herb & fern, tall ruderal
DGM	Dry heath / acid grassland mosaic	R	Artificial refuse-tip	TS	Tall swamp
DH	Sand-dune, dune heath	RB	Raised bog	VM	Valley mire
DS	Scrub dense / continuous	RH	Hedge, intact, native species rich	W	Wall
DSM	Saltmarsh dense / continuous	RH	Hedges intact or defunct, species rich	WB	Wet modified bog
DW	Sand-dune, dune slack	RH-	Defunct hedge, native species rich	WGM	Wet heath / acid grassland mosaic
DX	Sand-dune, dune scrub	RHT	Hedges with trees, species rich	WH	Wet dwarf shrub heath
E	Water, eutrophic	RHT	Hedge and trees, native species rich	X	Boundary removed
EB	Earth bank	RWB	Running water, brackish	Zo	Intertidal <i>Zostera</i> beds
ESP	Cultivated / disturbed land, ephemeral / short	RWC	Running water, marl		

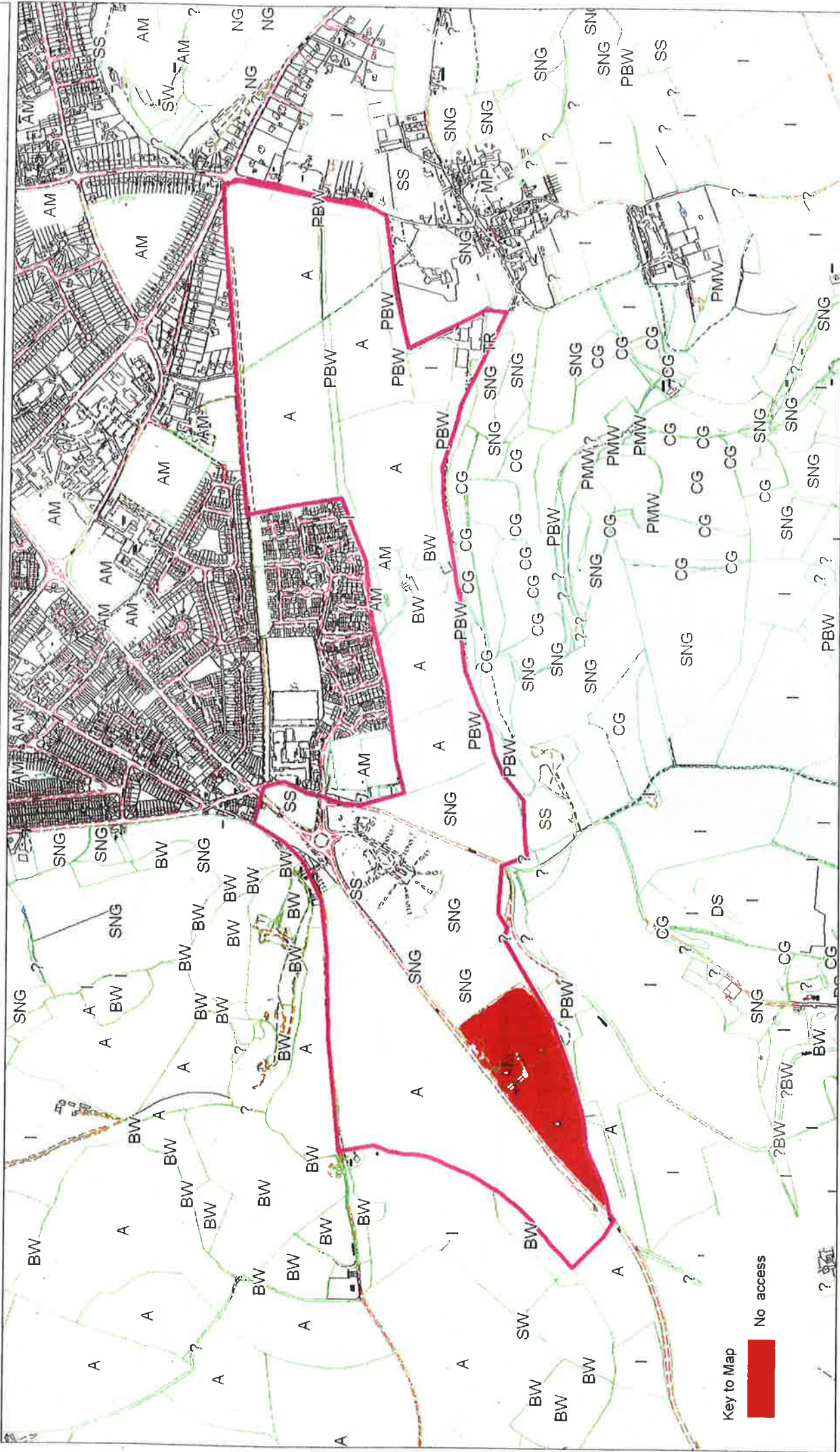
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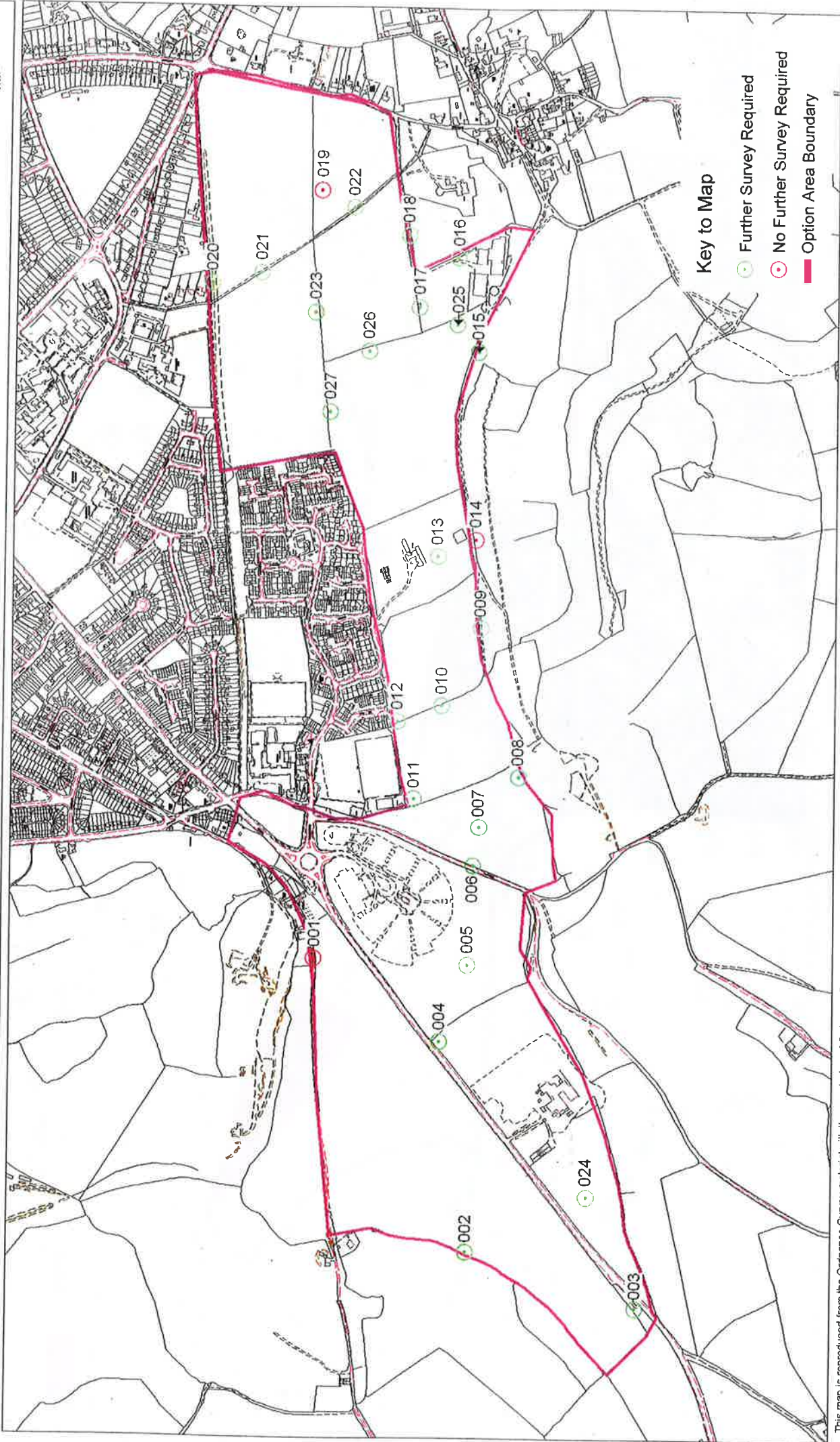
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Figure 2. Target Notes Map

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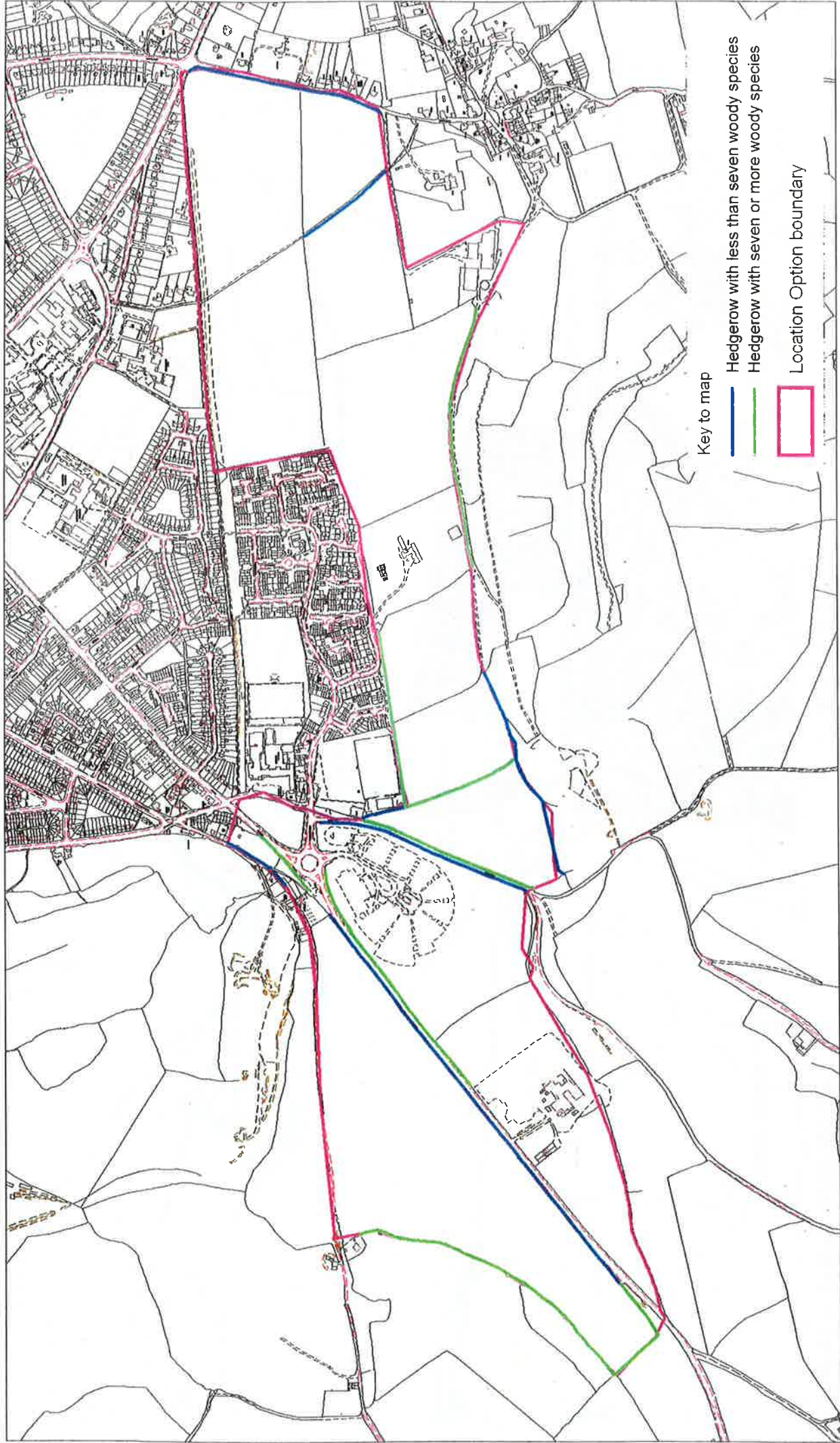
Bath Urban Extension Location Option 3 - Odd Down / South Stoke

Figure 3. Hedgerow Condition




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Key to map

-  Hedgerow with less than seven woody species
-  Hedgerow with seven or more woody species
-  Location Option boundary

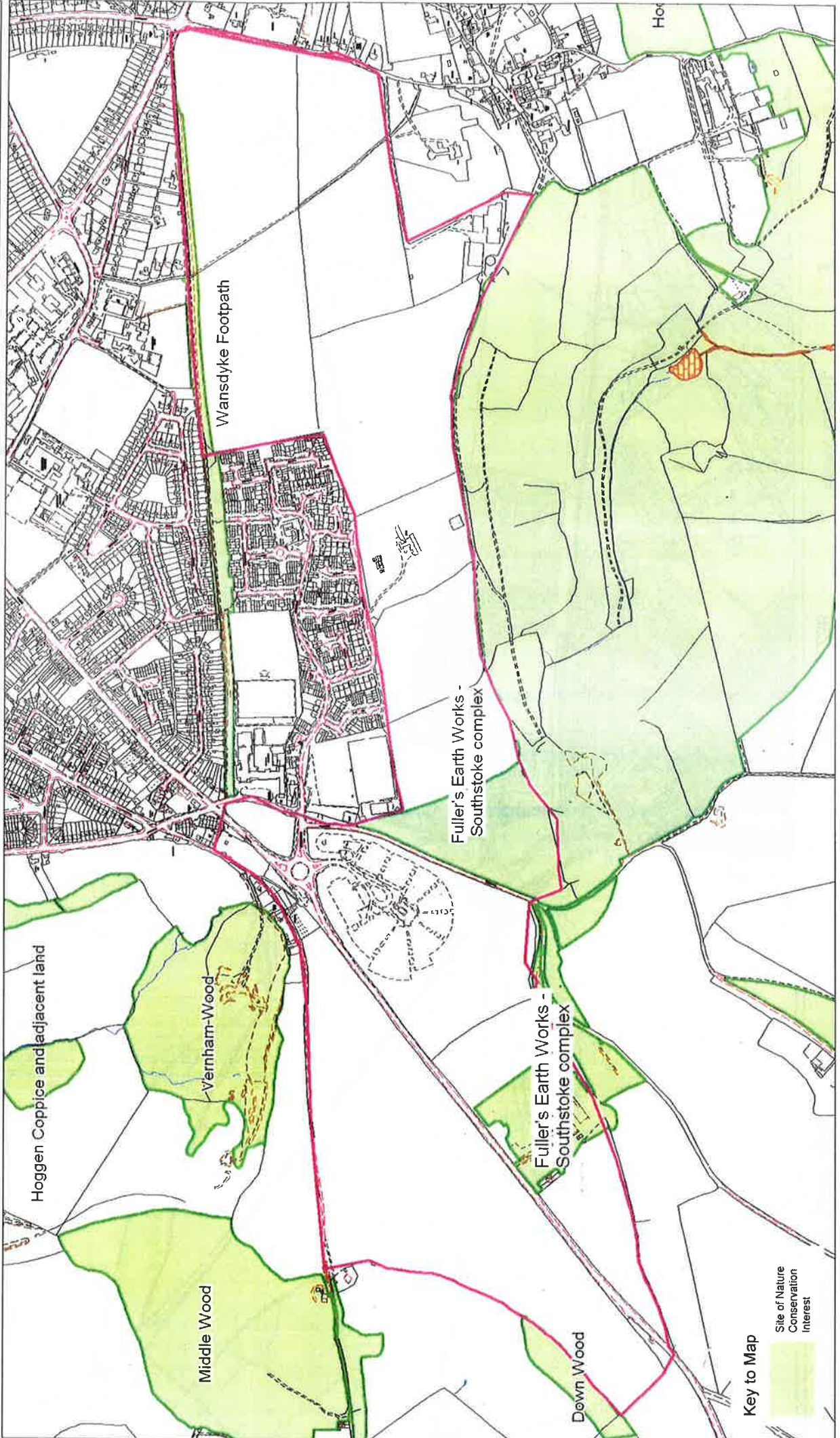


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Figure 4. Designated Sites

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Figure 5. Recommended Retention Features

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