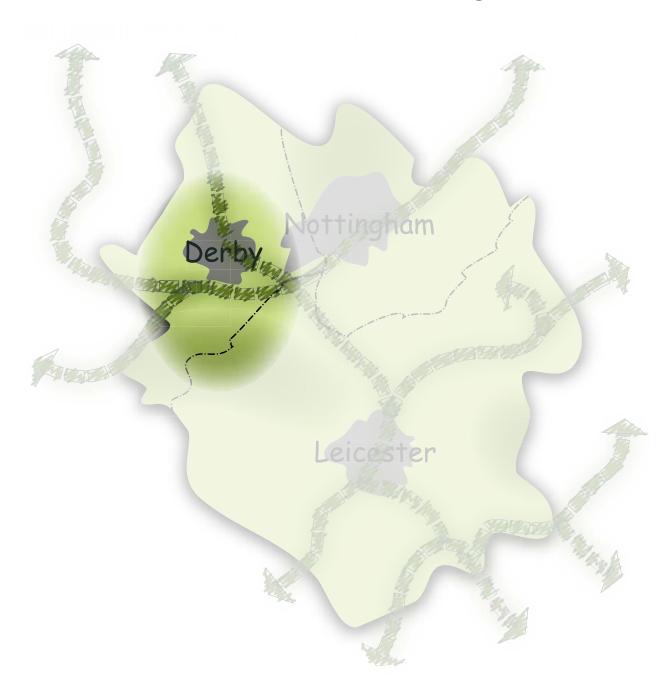


Green Infrastructure Strategy

Volume 4

Strategic GI Network for the Derby Principal Urban Area and Sub-Regional Centre



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FOREWORD

The East Midlands region faces an unprecedented scale of growth over the coming years, especially in the 6C's sub-region. In light of the scale and number of new houses that are planned, we recognised the need to develop a strategic approach to provision of Green Infrastructure (GI) as an environmental life support system for healthy communities and ecosystems. We wanted to maximise the potential of GI to bring about multifunctional holistic solutions to achieve wide ranging environmental, economic and social benefits, including climate change adaptation and mitigation.

The 6C's partnership have been working together with key players across the area for the last two years to produce this exciting and important Strategy. The challenge is now to deliver and manage GI along with the "grey infrastructure" needed to support sustainable communities in the sub-region. This Strategy represents a major step forward to achieve this by:

- Giving the strategic spatial framework needed to safeguard, manage, and extend networks of GI in local planning documents;
- Showing how the benefits of GI to economics, climate change, health, biodiversity and landscape can be realised;
- Significantly reducing the amount of data required to produce local policy documents; and
- Identifying funding sources and mechanisms for the delivery of GI and the priorities for investment.

I cannot commend enough the monumental achievement of the 6Cs Strategic GI Project Board, and also the overall 6Cs Partnership, in producing this subregional GI Strategy.

It provides a framework for all those working to plan and deliver sustainable development, and GI delivery in particular, within the sub-region and elsewhere around the East Midlands Region over the forthcoming years.

Alison Hepworth

Chair, 6Cs Strategic GI Project Board

STRATEGY STRUCTURE

STRATEGY Long-term vision for the strategic GI network across the 6Cs Sub-Region Technical reports providing the evidence base to inform the framework. **VOLUME 6** STRATEGIC GI NETWORK **NOTTINGHAM VOLUME 5** STRATEGIC GI NETWORK **LEICESTER VOLUME 4** STRATEGIC GI NETWORK **DERBY VOLUME 3 BASELINE REVIEW AND STRATEGIC GI AUDIT VOLUME 1 SUB-REGIONAL STRATEGIC FRAMEWORK VOLUME 2 ACTION PLAN Key actions required to deliver the** Projects and initiatives to deliver the Strategic Objectives: promotion, advocacy **Sub-Regional GI Network** and partnership working **DELIVERY**

Implementation of the Strategy to be reviewed regularly to reflect changing priorities and

emerging delivery opportunities

1.0 INTRODUCTION

1.1 Study Area and Context

- 1.1.1 **Figure 1.1** shows the Study Area for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote Strategic GI Network.
- 1.1.2 This report should be read in conjunction with:
 - Volume 1: The Sub-Regional Strategic Framework (particularly Section 3.0 The Shared Vision, Section 4.0 The Strategic Green Infrastructure Network, and Section 5.0 The Delivery Framework);
 - Volume 2: The Action Plan;
 - Volume 3: The Baseline Information Review and Strategic GI Audit for the Sub-Region;
 - Volume 5: The Strategic Green Infrastructure Network for the Leicester Principal Urban Area and the Sub-Regional Centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough, and Melton Mowbray; and
 - Volume 6: The Strategic Green Infrastructure Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston.
- 1.1.3 The locations of strategic growth within the Derby Housing Market Area (HMA) will have an impact on the prioritisation of resources and investment in the proposed GI Network. The current position with regards to the planning of strategic development sites within the HMA is summarised below as at April 2010¹.
- 1.1.4 The three Derby HMA Local Authorities Derby City, Amber Valley and South Derbyshire are currently consulting on strategic options for development. Consultation on this 'Options' stage ends in May 2010². The next stage will involve choosing and consulting on the preferred option, including strategic site allocations. Subject to acceptance by the Planning Inspectorate, it is anticipated that the aligned Core Strategies will be adopted during 2011. A Housing Market Area Sustainable Urban Extension Study is due to be completed in the summer 2010.

1.2 Scope

1.2.1 The Strategic GI Network report comprises the following:

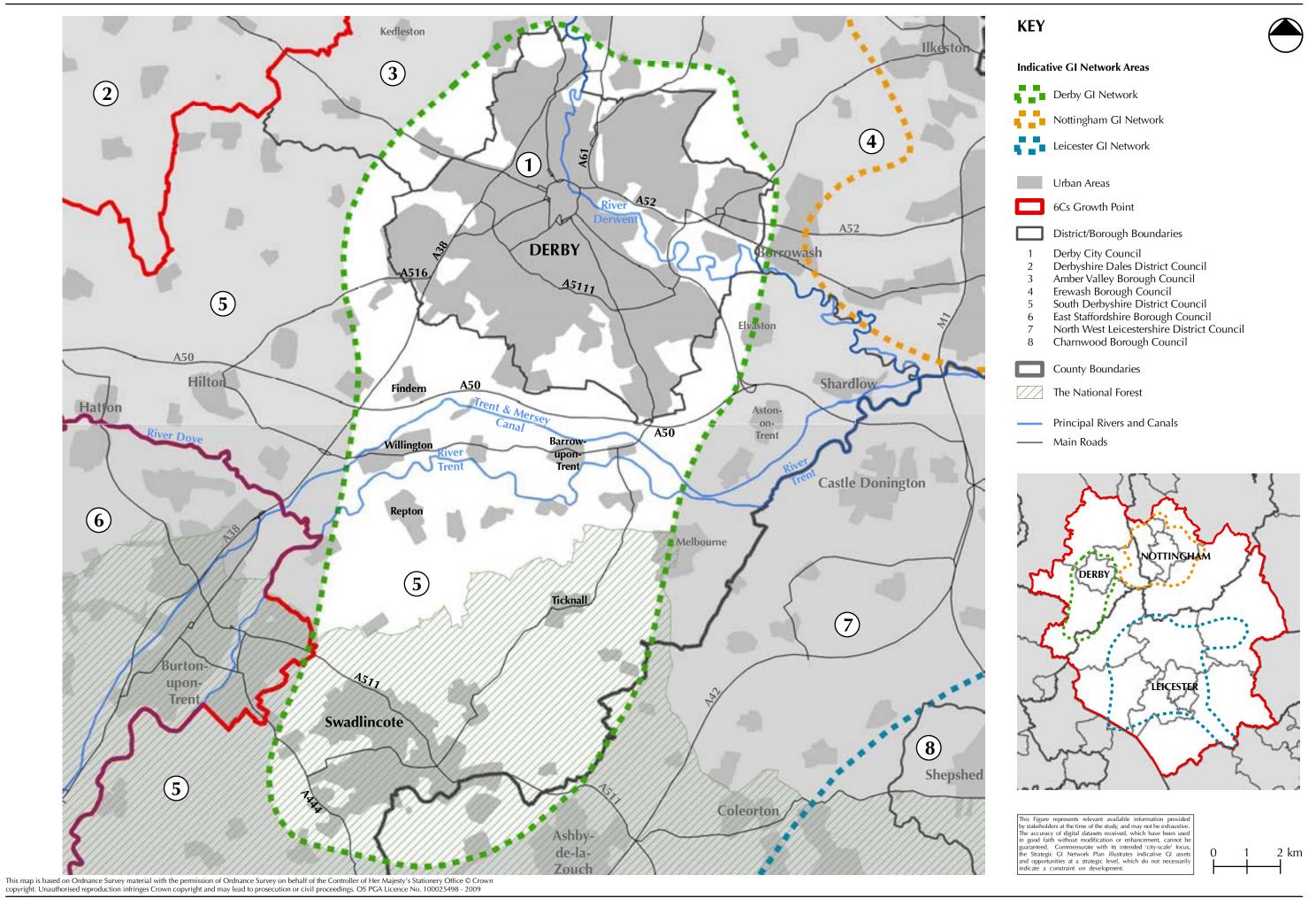
http://sddc.consultationsonline.co.uk/frontpage.aspx.

http://www.derby.gov.uk/Environment/Planning/LandUsePlanning/CoreStrategy OptionsPaper.htm.

http://www.ambervalley.gov.uk/services/environment/landandpremises/planningtownandcountry/structureplans/localdevelopmentplans/corestrategyissuesandoptionsconsultation.htm.

¹ See Section 1.3 of **Volume 2** for updated information.

² The aligned Core Strategy consultation Options documents can be found at:





- Assessment of Strategic GI Assets, Needs and Opportunities drawing on the Stage 1 GI audit, enhanced by selected relevant additional data as appropriate; and
- **Strategic GI Network** a 'key diagram' type plan, plus supporting explanatory text, identifying a proposed 'aspirational' multifunctional strategic GI network that connects communities and wildlife at the sub-regional and city scales. It is intended to help focus attention on land that needs to be safeguarded, managed or secured in positive ways to create a multifunctional network of greenspaces and assets for which investment can deliver the greatest range of benefits.

1.3 Key Documents

- 1.3.1 The key documents that have informed the development of the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote Strategic GI Network are:
 - Amber Valley Borough PPG 17 Open Space Study (2005)
 - Ashfield District Council Green Space Strategy date: 2008
 - Ashfield District Council Play Strategy date: 2007
 - Ashfield District Council Playing Pitch Strategy date: 2008
 - City of Derby Rights of Way Improvement Plan 2007-2012
 - Derbyshire Rights of Way Improvement Plan 2007-2012
 - East Derbyshire Greenway Strategy (1998, currently under review)
 - Erewash Borough Greenspace Strategy (Draft, 2007)
 - Erewash Borough PPG17 Open Space Study (2007)
 - Lowland Derbyshire Biodiversity Action Plan (Addendum 2001)
 - Lowland Derbyshire Biodiversity Action Plan, Delivery Plan 2008-2010 (2008)
 - North West Leicestershire District PPG17 Open Space Study (2008)
 - South Derbyshire District Greenway Strategy (2006)
 - South Derbyshire District PPG17 Open Space Study(2005)
 - The Landscape Character of Derbyshire (2003)
 - The National Forest Biodiversity Action Plan (2004)
 - The National Forest Delivery Plan 2009-2014
 - The National Forest Strategy 2004-2014
 - West Derbyshire and High Peak Greenway Strategy (2008)

2.0 STRATEGIC GREEN INFRASTRUCTURE ASSETS, NEEDS AND OPPORTUNITIES

2.1 Existing Strategic Green Infrastructure Assets

- 2.1.1 **Figures 2.1** to **2.5** show existing strategic GI assets that form the 'backbone' or underlying framework for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote Strategic GI Network. The mapping is based on the datasets used in the Stage 1 work, enhanced where appropriate by selected relevant additional datasets identified in consultation with local stakeholders³.
- 2.1.2 A key source of additional data used is the PPG17 Open Space datasets provided by the local authorities, where available⁴ (see **Figure 2.3**). **Appendix A3** provides details of the PPG17 datasets supplied, and the methodology for consolidating these into a consistent open space typology for the purposes of this study.
- 2.1.3 The distribution and extent of existing strategic GI assets in and around the Study Area is shown on **Figure 2.5**. These assets include:
 - Existing natural greenspace⁵;
 - Existing strategic accessible natural greenspace⁶;
 - Existing strategic countryside access routes⁷;
 - Existing open space⁸ and green wedges⁹;
 - Historic environment assets¹⁰;
 - Watercourses and waterbodies¹¹; and

6Cs GI Strategy

³ A record of stakeholder consultation is provided **Appendix A1**. Sources of GI asset mapping data used in the Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote are provided in **Appendix A2**.

⁴ Derby City Council is currently producing a PPG17 Open Space Study. In the absence of the later, a dataset of public open spaces was provided.

⁵ For the purposes of the mapping methodology presented in this report, 'natural greenspace' is defined as: land, water or geological features that have been colonised by plants and animals and are dominated by natural processes (as defined by English Nature in Accessible Natural Greenspace in Towns and Cities).

⁶ For the purposes of the mapping methodology presented in this report, 'strategic accessible natural greenspace' is defined as natural greenspace greater than 2ha in size that is normally available for public access on foot, providing opportunities for open access for informal recreational activities.

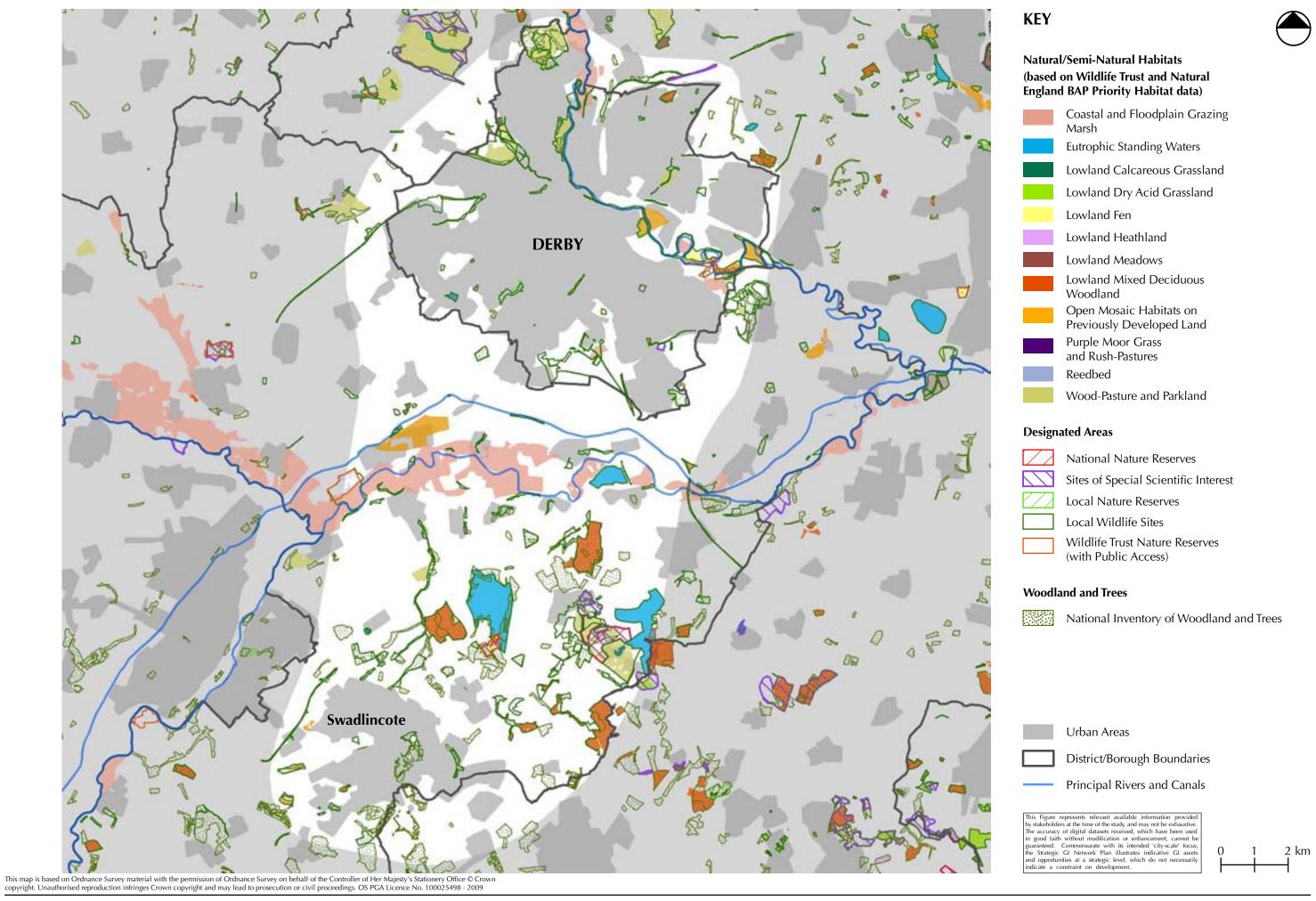
⁷ For the purposes of the mapping methodology presented in this report, 'strategic countryside access routes' are defined as: linear, generally off-road and car free routes, that are normally available for public access on foot, horseback or by cycle providing opportunities to access the countryside for informal recreation activities. It should be noted that Public Rights of Way have been considered to inform needs and opportunities. However, for presentational purposes they have not been mapped as part of the existing strategic GI assets.

⁸ For the purposes of the mapping methodology presented in this report, 'open space' is defined as: parks and gardens, amenity greenspaces, natural and semi-natural greenspaces, green corridors, cemeteries and churchyards, allotments, children's play space and outdoor sports facilities.

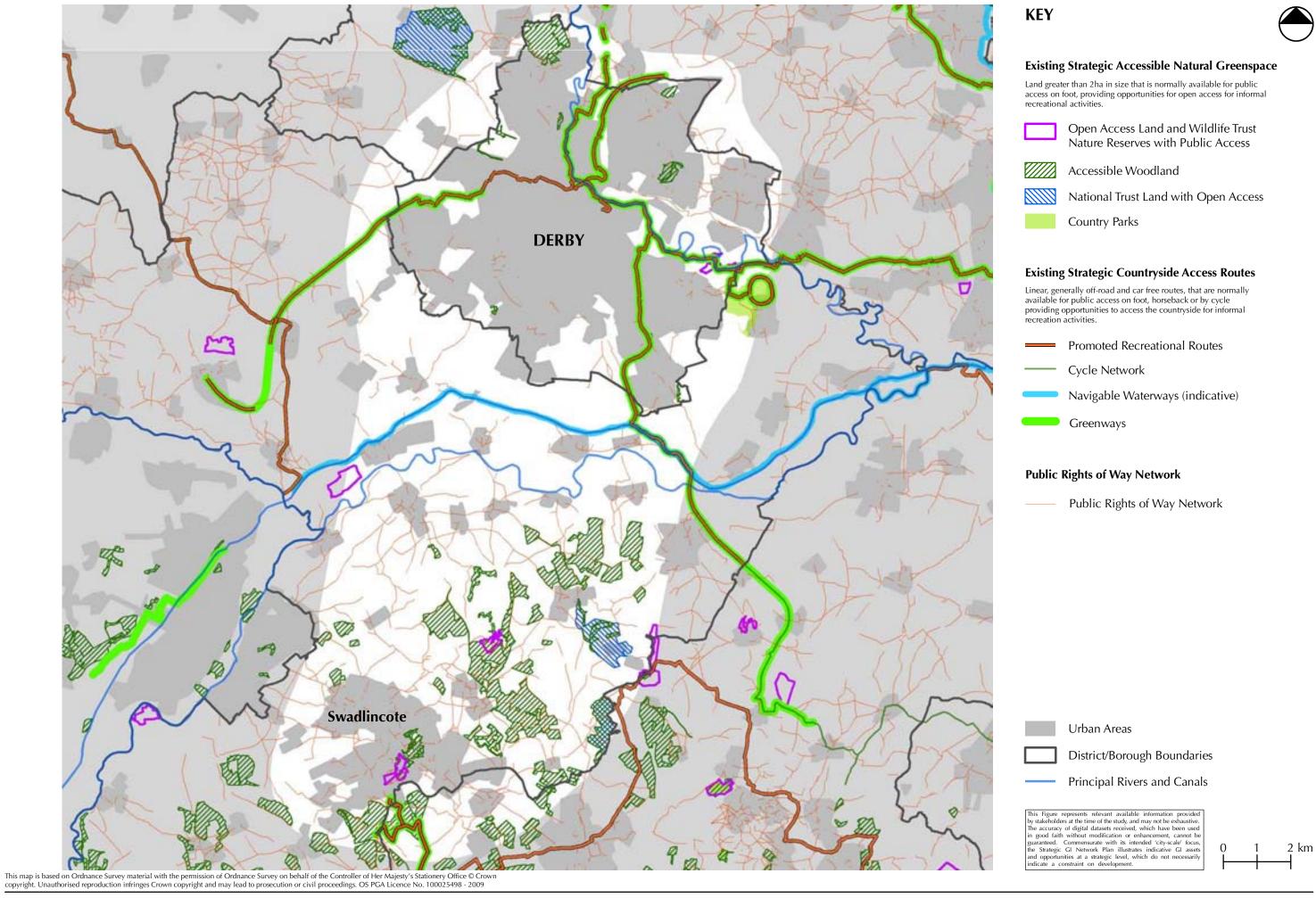
⁹ Green wedges are not necessarily covered by PPG17 Open Space datasets. However, following stakeholder consultation, they have been included (where available) on **Figure 2.3**. The Green Wedge areas deliver, or have the potential to deliver, a range of GI functions and benefits in close proximity to urban communities. Such benefits, either existing or potential, will vary from one area to another. It should be noted that the Regional Plan requires that Green Wedges be reviewed for their suitability. It should therefore not be assumed that all of the Green Wedges will be retained in their current form.

¹⁰ For the purposes of the mapping methodology presented in this report, 'historic environment assets' are defined as: designated historic environment assets including scheduled monuments, historic battlefields, conservation areas, listed buildings, world heritage sites, and parks and gardens of historic interest.

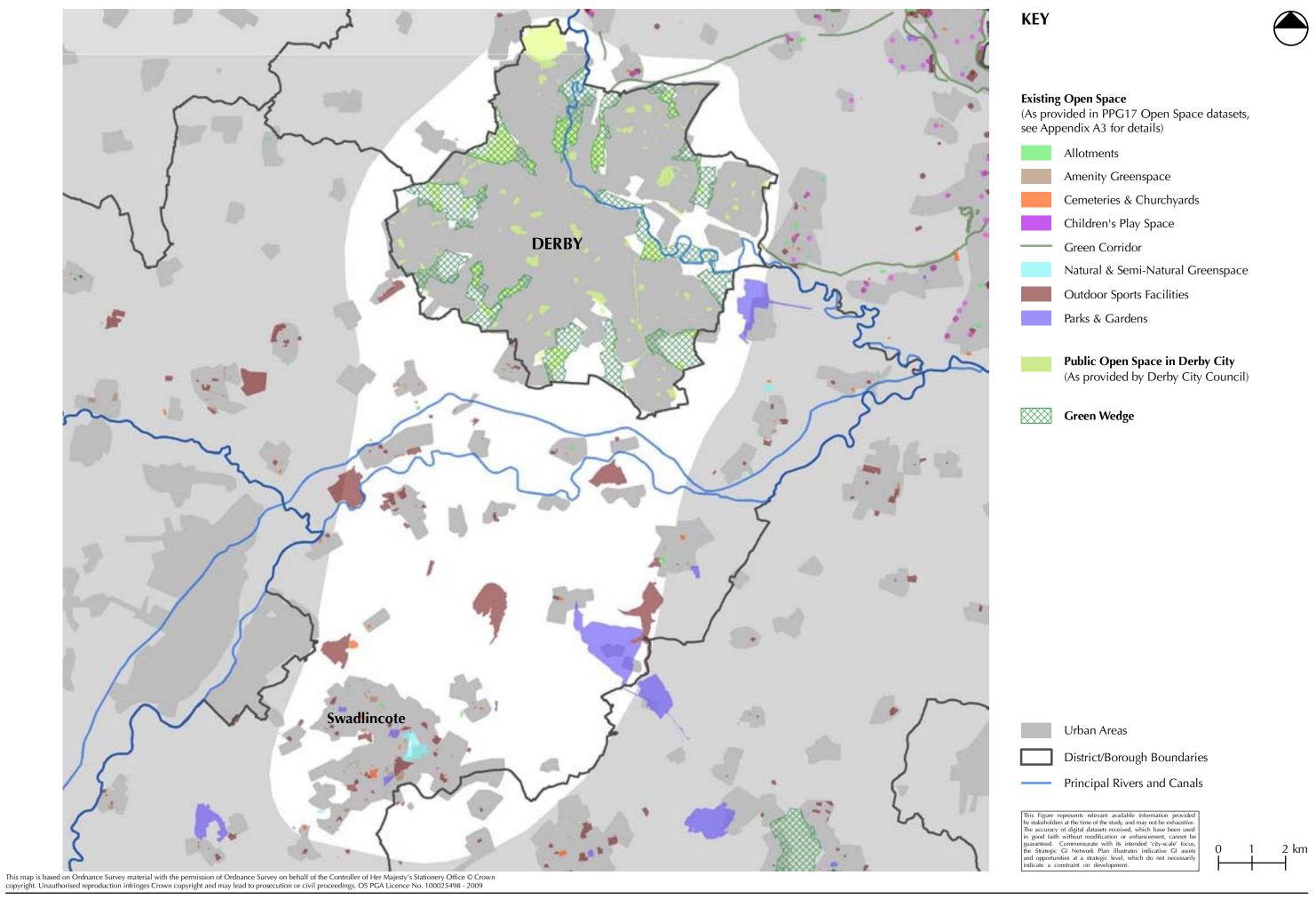
¹¹ For the purposes of the mapping methodology presented in this report, 'watercourses and waterbodies' are as defined by the meridian datasets for 'Lakes' and 'Rivers'.



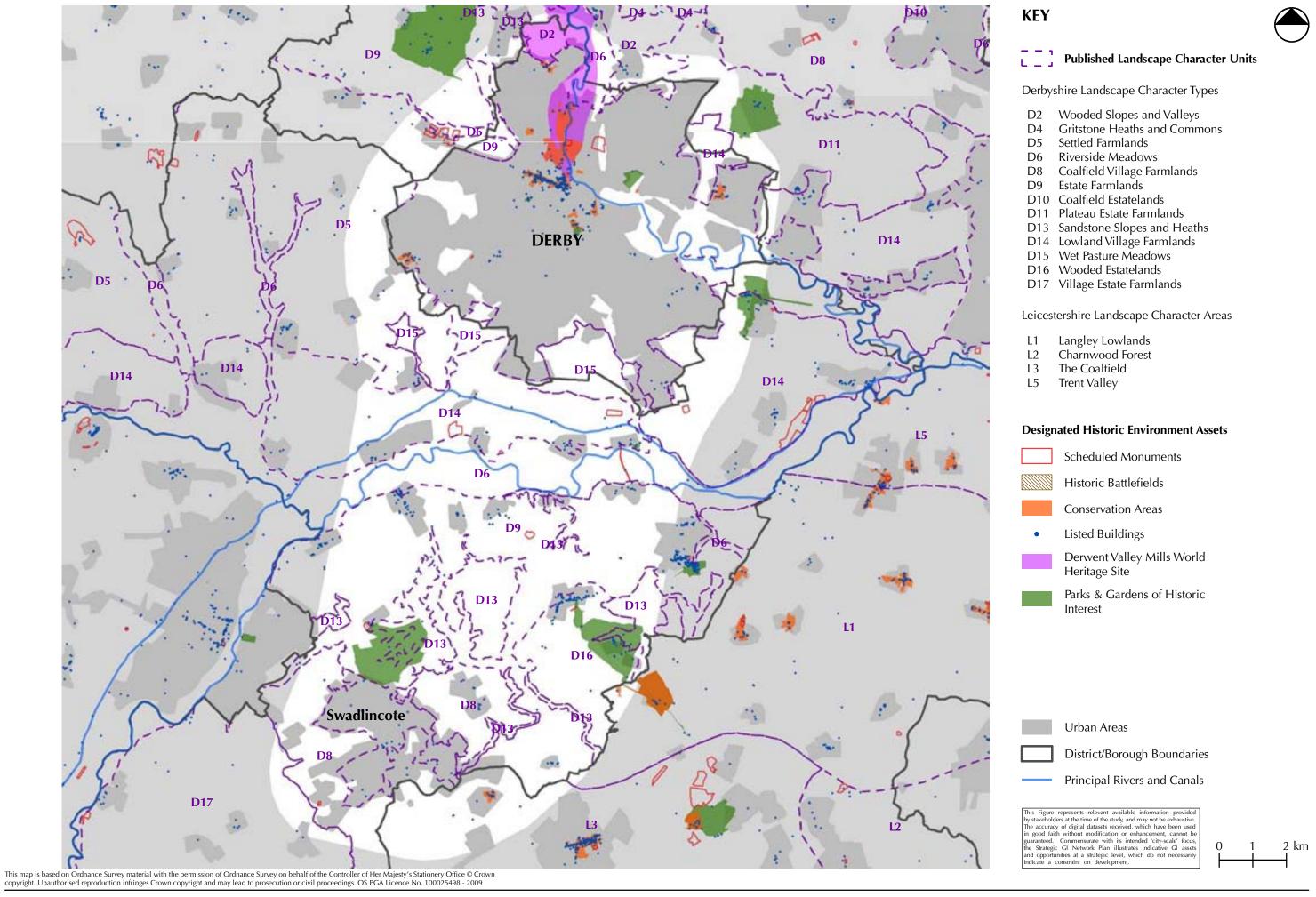






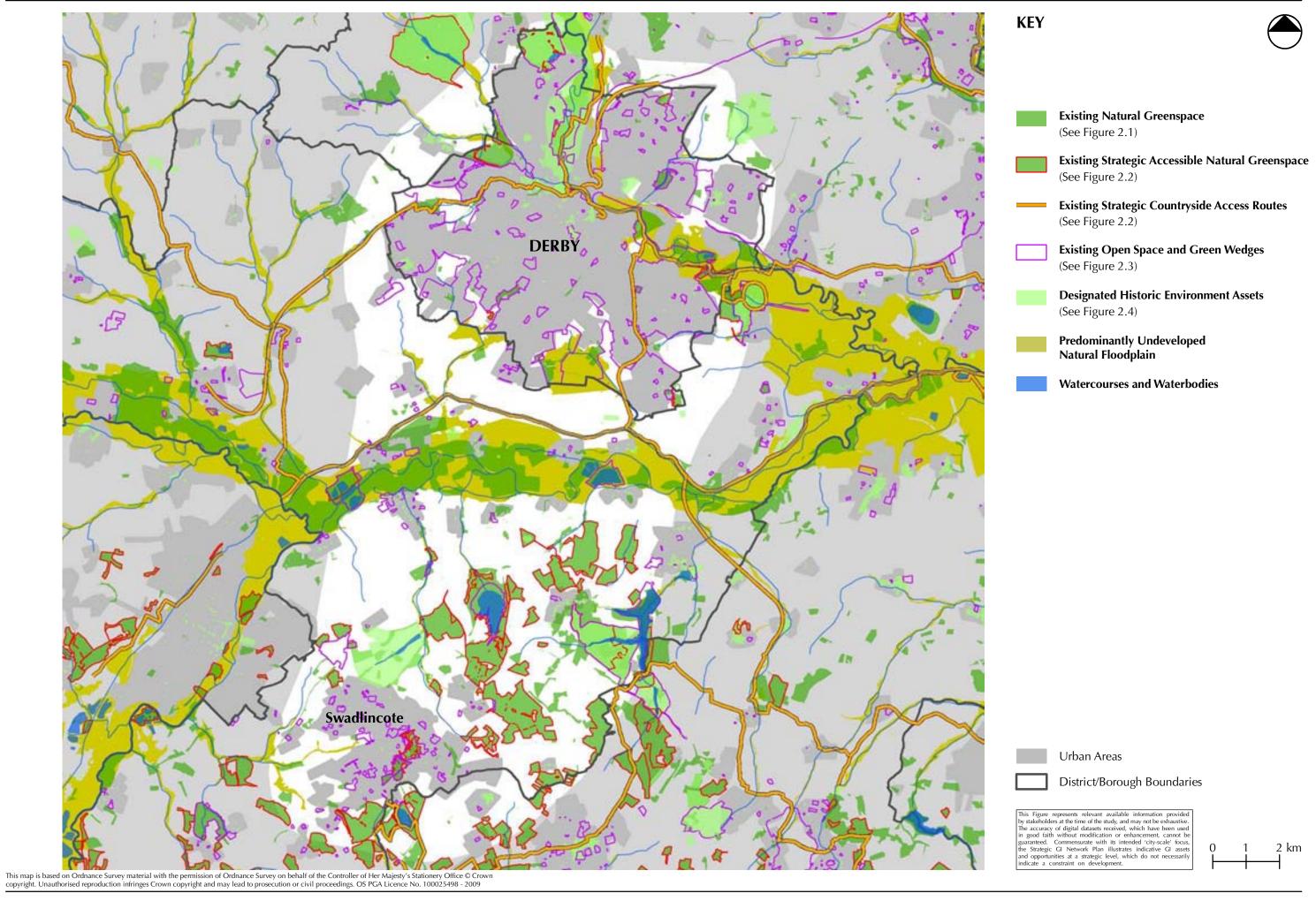








6Cs GREEN INFRASTRUCTURE STRATEGY





• Predominantly undeveloped natural floodplain¹².

2.2 Strategic Green Infrastructure Needs

Accessible Natural Greenspace Deficiencies

- 2.2.1 Based on the assessment of accessible natural greenspace provision undertaken in Stage 1, Figure 2.6 identifies the location and distribution of different sizes of strategic accessible natural greenspace sites¹³ and their respective catchments based on Natural England's Accessible Natural Greenspace Standard¹⁴ (ANGSt) model. Although designed primarily for use in the urban context, the ANGSt model can also be used to assess how accessible natural greenspace in the wider countryside contributes to levels of provision for both urban and rural communities. Applying the Standard enables a consistent comparison to be made between the levels of accessible natural greenspace available to people across the sub-region.
- 2.2.2 It is important to recognise the strategic role of accessible agricultural landscapes in the wider countryside beyond the specific sites of accessible natural greenspace considered in this report. Key areas with deficiencies of accessible natural greenspace within the Study Area are:

Derby

- Deficiency of sites over 2ha (within 300m of inhabitants) for most of Derby's population. Some isolated areas have access to sites;
- Deficiency of sites over 20ha (within 2km of inhabitants) for populations living in central, southern and most of western Derby;
- Deficiency of sites over 100ha (within 5km of inhabitants) for populations living in southwestern Derby;
- Deficiency of sites over 500ha (within 10km of inhabitants) for all of Derby's population.

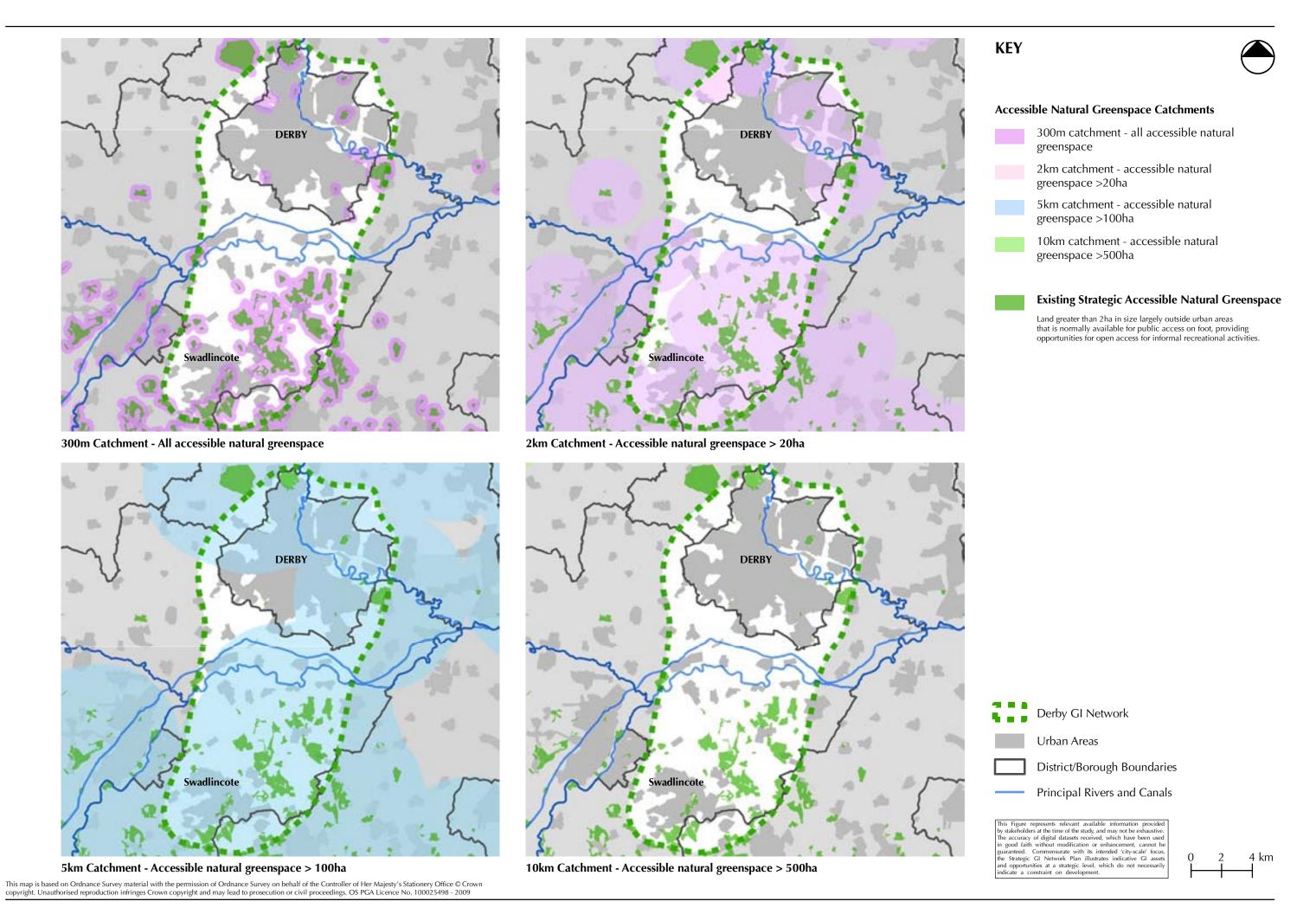
Swadlincote

- Deficiency of sites over 2ha (within 300m of inhabitants) for most of Swadlincote's population. Populations residing in the centre of Swadlincote and some southern parts have access to sites;
- Deficiency of sites over 20ha (within 2km of inhabitants) for populations living in parts of north-west Swadlincote;
- Deficiency of sites over 500ha (within 10km of inhabitants) for all of Swadlincote's population.

¹² For the purposes of this Study, the natural floodplain (the extent of the floodplain if there were no flood defences or certain other manmade structures and channel improvements) is shown only in predominantly undeveloped areas outside of the main settlements.

¹³ Strategic accessible natural greenspace sites shown on **Figure 2.6** represent available information provided by stakeholders at the time of the Study and may not be exhaustive.

¹⁴ Providing Accessible Natural Greenspaces in Towns and Cities: A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision (English Nature, 2003)





Other Settlements

- Deficiency of sites over 2ha (within 300m of inhabitants) for most other settlements' populations. Populations residing in Albert Village, south Blackfordby, Calke, east Hartshorne, east Moira, Smisby, and north and east Ticknall have access to sites;
- Deficiency of sites over 20ha (within 2km of inhabitants) for populations living in Barrowupon-Trent, Blackfordby, Findern, north-west Milton, Repton, Stenson, Swarkestone, Twyford, and Willington;
- Deficiency of sites over 100ha (within 5km of inhabitants) for populations living in Findern and a small area of Willington;
- Deficiency of sites over 500ha (within 10km of inhabitants) for all other settlements' populations.

Open Space Deficiencies

2.2.3 Relevant PPG17 Open Space studies have highlighted varying deficiencies in open space across the Study Area. Shortfalls in open space provision for areas within the Study Area, as described in individual PPG17 Open Space studies, are provided in the following table. Deficiencies related to Derby City Council are not included as their PPG17 Open Space Study is currently in preparation. The distribution of existing open spaces (using PPG17 open space datasets) is shown on **Figure 2.3**. In the absence of a PPG17 dataset for Derby City Council, open space has been mapped using the dataset 'public open spaces' provided by Derby City Council(see **Appendix A3** for details).

Open Space Type	South Derbyshire	Derby City Council
Parks & Gardens	Catchment mapping suggests that there are access deficiencies in provision within the following areas:	PPG17 Open Space Study in progress.
	*Willington and Findern *Stenson *Repton *Hartshorne and Ticknall (part of) *Melbourne (part of) *Church Gresley *Woodville *Midway (Part of) *Newhall and Stanton (part of) *Swadlincote	
Amenity Greenspace	Catchment mapping has highlighted deficiencies in access to provision in the following areas: *Willington and Findern *Repton *Hartshorne and Ticknall (part of) *Melbourne (part of) *Midway (Part of) *Newhall and Stanton (part of)	PPG17 Open Space Study in progress.
Children's Play Spaces	Wards deficient in provision are: *Willington and Findern (part of) *Stenson (part of) *Repton (part of)	PPG17 Open Space Study in progress.

Open Space Type	South Derbyshire	Derby City Council
	*Hartshorne and Ticknall (part of)	
	*Melbourne (part of)	
	*Woodville (part of)	
	*Midway (part of)	
	*Newhall and Stanton (part of)	
Allotments	Wards deficient in provision are:	PPG17 Open Space Study in
		progress.
	*Willington and Findern (part of)	1 0
	*Stenson (part of)	
	*Hartshorne and Ticknall (part of)	
	*Melbourne (part of)	
	*Woodville (part of)	
	*Midway (part of)	
	*Newhall and Stanton (part of)	
	*Church Gresley	
	*Swadlincote (part of)	
Cemeteries &	Wards deficient in provision are:	PPG17 Open Space Study in
Churchyards	·	progress.
	*Willington and Findern (part of)	
	*Repton (part of)	
	*Hartshorne and Ticknall (part of)	
	*Melbourne (part of)	
	*Midway (part of)	
	*Newhall and Stanton (part of)	
Natural & Semi-	Not specified	PPG17 Open Space Study in
Natural		progress.
Greenspaces		
Outdoor Sports Facilities	Required improvements to existing outdoor	PPG17 Open Space Study in
Facilities	sports facilities of 0.1ha per 1000 population.	progress.
	Required additional outdoor sports facilities of	
	0.05ha per 1000 population.	
Green Corridors		DDC17 Open Space Study in
Green Corridors	Not specified	PPG17 Open Space Study in
		progress.

Rights of Way Needs

2.2.4 Needs identified in Derby City and Derbyshire's Rights of Way Improvement Plans include the following:

Derby City Rights of Way Improvement Plan

- Improve the condition of the city's path network;
- Improve the accessibility of paths by upgrading surfaces and removing barriers;
- Create new link paths and upgrade existing routes that will improve connections between important locations for the public; and
- Create more circular and linear walks and other leisure routes with the aim of giving people easy access to areas of open space and the countryside.

Derbyshire Rights of Way Improvement Plan

- Improve the provision of routes for bridleway users;
- Improve the provision of circular or connected routes;
- Provide more easy access routes;
- Continue with the development of the greenway programme for the county;

- Improve the management of recreational motorised vehicles in the countryside;
- Promote routes identified as easy access paths; and
- Encourage the production of new promoted routes.
- 2.2.5 Greenway Strategies have been produced by Derbyshire County Council for East Derbyshire (1998), South Derbyshire District (2006) and West Derbyshire and High Peak Area (2008). The strategies provide a basis for the development of a network of greenways throughout the county, helping to meet the need for the development of the greenway programme identified in the Derbyshire Rights of Way Improvement Plan.
- 2.2.6 **Figure 2.2** highlights a deficiency of Rights of Way leading out of Derby, particularly in its southern urban countryside fringes.

Landscape Character Needs

- 2.2.7 Within the Study Area, the Derbyshire Landscape Character Assessment (2003) provides guidelines for: (i) maintaining and enhancing the overall quality and diversity of landscape character, the distinctive sense of place and individual identity of each particular area; (ii) supporting and complementing planning policies by helping to ensure that new development respects and where practicable contributes towards enhancing the local character and sense of place of the landscape; and (iii) supporting and complementing the aims of the Biodiversity Action Plans for Derbyshire, enriching biological diversity throughout the wider countryside and encouraging the sustainable management of Derbyshire's landscapes.
- 2.2.8 The following Derbyshire landscape character types (see Figure 2.4) fall within the Study Area.
 - Wooded Slopes and Valleys (D2)
 - Settled Farmlands (D5)
 - Riverside Meadows (D6)
 - Coalfield Village Farmlands (D8)
 - Estate Farmlands (D9)
 - Plateau Estate Farmlands (D11)
 - Sandstone Slopes and heaths (D13)
 - Lowland Village Farmlands (D14)
 - Wet Pasture Meadows (D15)
 - Wooded Estatelands (D16)
 - Village Estate Farmlands (D17)
- 2.2.9 Planting and Management Guidelines Strategies for these landscape character types can be found in **Appendix A4**. Further guidance on strategies for individual landscape character types can be found in the Derbyshire Landscape Character Assessment (Derbyshire County Council,

Principal Urban Area and Sub-Regional Centre

2003)¹⁵ and Appendix A4 of the Baseline Information Review and Strategic GI Audit Report (**Volume 3** of the 6Cs GI Strategy).

- 2.2.10 Derbyshire County Council has developed an approach for identifying strategic opportunities for GI based on analysis of historic landscape character and biodiversity assets. Historic landscape and strategic GI opportunity areas identified by Derbyshire County Council within the Study Area are set out in **Appendix A5**.
- 2.2.11 Two Leicestershire landscape character areas fall within the Study Area, namely Langley Lowlands (L1) and The Coalfield (L3). Guidelines for these can be found in The Leicester, Leicestershire and Rutland Landscape and Woodland Strategy (Leicestershire County Council, 2001, Addendum 2006) and Appendix A4 of the Baseline Information Review and Strategic GI Audit Report (Volume 3 of the 6Cs GI Strategy).

Biodiversity Needs

2.2.12 The relevant Biodiversity Action Plans (BAPs) provide targets and actions in response to identified needs for enhancing and extending habitats and species of nature conservation value within the Study Area. See Section 2.4 below for further details.

2.3 Strategic Public Benefits of Green Infrastructure Provision

- 2.3.1 It is increasingly recognised that investment in GI such as accessible greenspace networks and other 'green assets' can provide a wide range of multiple public benefits for both rural and urban communities. The East Midlands Public Benefit Mapping Project¹⁶ gathered evidence from 27 different sectors, all relevant to the East Midlands Integrated Regional Strategy's objectives, in order to map where:
 - There is the greatest need for the public benefits GI brings;
 - There is the greatest opportunity for GI to support sustainable economic growth;
 - Such needs and opportunities can be met in parallel; and
 - Greatest multiple public benefit in terms of social, environmental, economic and multiples outcomes exist.
- 2.3.2 The maps are presented, each with a narrative, outlining areas of particular priority for GI, together with a short discussion on the limitations of the data. Inevitably there are limitations imposed by the geographic focus of the data, and in some cases, time has passed since data

Principal Urban Area and Sub-Regional Centre

¹⁵ The Derbyshire Landscape Character Assessment (Derbyshire County Council, 2003) is available to download from: http://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/default.asp.

¹⁶ Green Infrastructure for the East Midlands – A Public Benefit Mapping Project (East Midlands Regional Assembly, 2006).

was collected. Significant areas for future development are discussed in relation to each map; and are summarised at the end of this study.

- 2.3.3 The East Midland's public benefit maps provide a strategic overview of where investment in GI is most likely to deliver greatest public benefit in the region. It should be noted that these maps should be considered in the context of the East Midlands Public Benefit Mapping Project as a whole, in particular in relation to the Project's constraints and limitations¹⁷. The public benefits mapping can help target actions in relation to:
 - Provision of new or enhanced GI for areas of present and future deficit;
 - Management of existing GI resources to increase their usefulness (multifunctionality);
 - Conservation of key GI resources which contribute to the region's environmental infrastructure; and
 - Improving connectivity of existing GI resources where they are presently fragmented.
- 2.3.4 The areas with greatest potential to provide combined multiple public benefits (emphasising top 30% environmental benefits) from investment in GI provision within the Study Area are shown on **Figure 2.7**¹⁸. Key areas include:
 - A substantial corridor running through Derby City;
 - Discrete areas surrounding Swadlincote; and
 - A series of areas along the Trent Valley.

2.4 Strategic Green Infrastructure Opportunities

Strategic Opportunities for Enhancing Connectivity of the Greenspace Network for Biodiversity

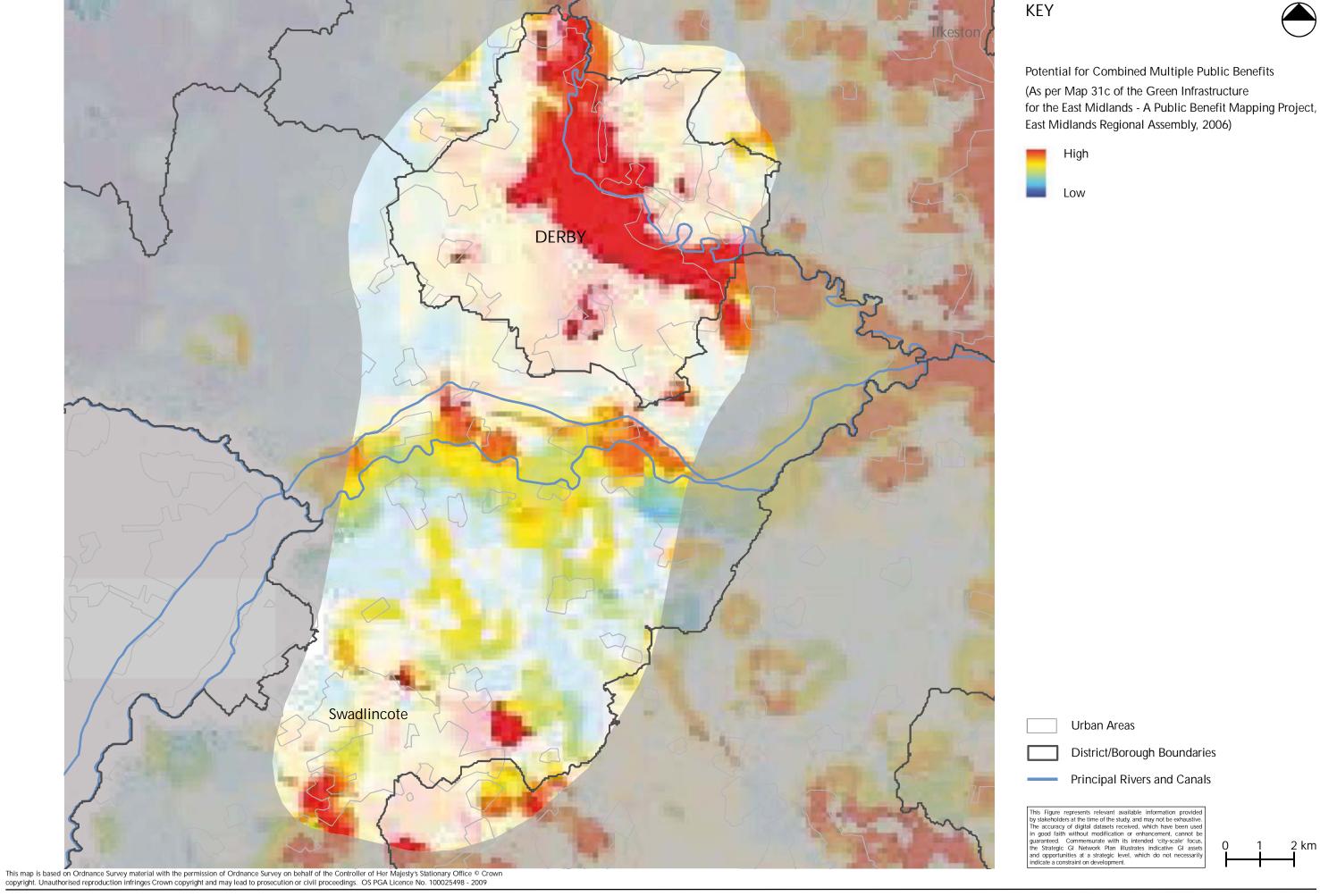
- 2.4.1 Opportunities for enhancing connectivity of the greenspace network for biodiversity have been identified based on the mapping exercises undertaken for the Stage 1 Strategic GI Audit and subsequent consultation exercises.
- 2.4.2 Opportunities for habitat creation, restoration, extension and enhancement have been identified with reference to targets and actions set out in the Lowland Derbyshire¹⁹ and National Forest²⁰ Local Biodiversity Action Plans (LBAPs). The targets and actions set out in the LBAPs are a response to identified needs for maintaining, enhancing and extending the geographical range of habitats considered important for their biodiversity value. The

¹⁷ Green Infrastructure for the East Midlands – A Public Benefit Mapping Project (East Midlands Regional Assembly, 2006) can be downloaded from http://www.emra.gov.uk/publications/housing-planning-and-transport/environment/green-infrastructure-in-the-east-midlands-a-public-benefit-mapping-project

¹⁸ Map 31C 'Combined Multiple Public Benefit Emphasising Top 30% Environmental Benefits' has been taken from the Green Infrastructure for the East Midlands – A Public Benefit Mapping Project (East Midlands Regional Assembly, 2006). Reproduced with the permission of the East Midland Regional Assembly.

¹⁹ Lowland Derbyshire Biodiversity Action Plan: Delivery Plan 2008-2010 (Lowland Derbyshire Biodiversity Partnership, 2008).

²⁰ The National Forest Biodiversity Action Plan, 2nd Edition (The National Forest, 2004).





opportunities described below are, therefore, intended to help meet the needs identified in the LBAPs by providing a focus for where habitat creation, restoration, extension or enhancement could be targeted and delivered through practical action.

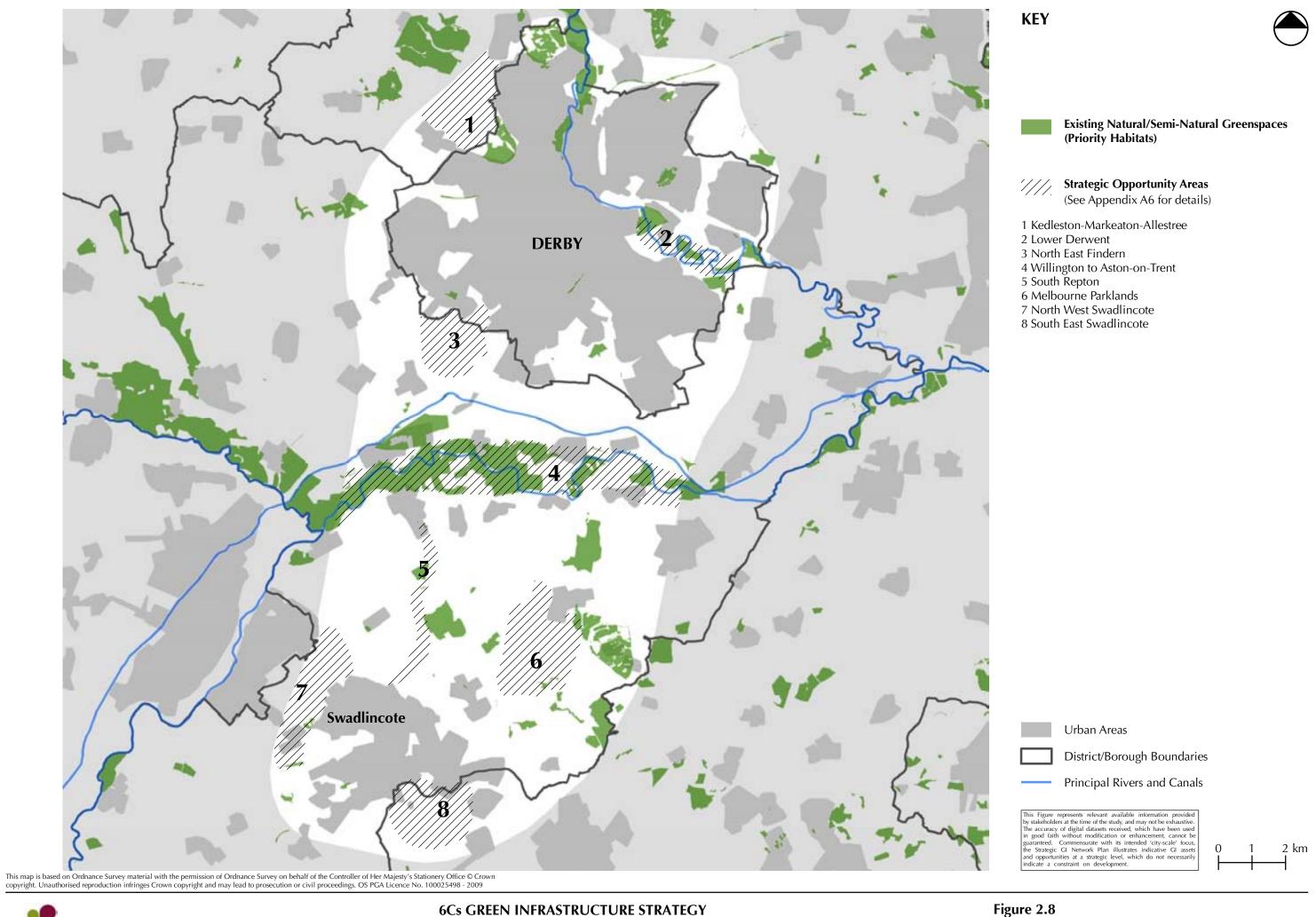
- 2.4.3 It is recognised that these LBAPs cover areas that are geographically larger than the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote Strategic GI Network area, and therefore the opportunities set out below are not intended to deliver all the targets and actions assigned to each habitat type within each LBAP. Nevertheless, the majority of some habitat types, for example; woodlands, rivers and streams and open standing water, fall within the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote Strategic GI Network Area and therefore opportunities for these habitat types could deliver a correspondingly large proportion of the biodiversity action plan targets. Conversely, habitats such as heathland and acid grasslands may not be so significantly represented in the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote Strategic GI Network Area, and therefore opportunities for extending and enhancing these habitats may be correspondingly smaller.
- 2.4.4 The time period for the current delivery plan for the lowland Derbyshire LBAP is due to complete in 2010²¹. It is anticipated that the opportunities identified could provide a focus for future lowland Derbyshire LBAP targets and actions, to ensure an integrated approach to future biodiversity action planning for this area of south Derbyshire.
- 2.4.5 Figure 2.8 provides an overview of the strategic opportunities for enhancing connectivity of greenspace for wildlife in relation to broad habitat types. The figure illustrates the distribution of existing habitats and identifies strategic opportunities based on site suitability for the creation of new, or restoration of existing, areas of habitat. Opportunities for biodiversity enhancement were selected on the basis of two criteria: i) where fragmented areas of existing semi-natural habitat could be linked by the extension or creation of new areas of habitat, thus forming larger, more stable habitat mosaics, or ii) where there were no areas of existing semi-natural habitat (e.g. south west Derby) but the creation of new habitats would help to bridge gaps in the current resource and provide linkages between and around urban fringes and the wider countryside.
- 2.4.6 Opportunities for enhancing connectivity of the greenspace network in the Study Area are set out by broad habitat type in **Appendix A6**. These include:
 - · Woodland;

2010

• Wood pasture and parkland;

10

²¹ The Lowland Derbyshire Local Biodiversity Action Plan is due to be reviewed during 2010 and launched in early 2011.





- Grasslands and heathland;
- Fen, marsh, swamp, and reedbeds;
- Rivers and streams
- Standing open waters; and
- Hedgerows, field margins, buffer strips and arable field margins.

Strategic Opportunities for Enhancing Accessibility of the Greenspace Network for People

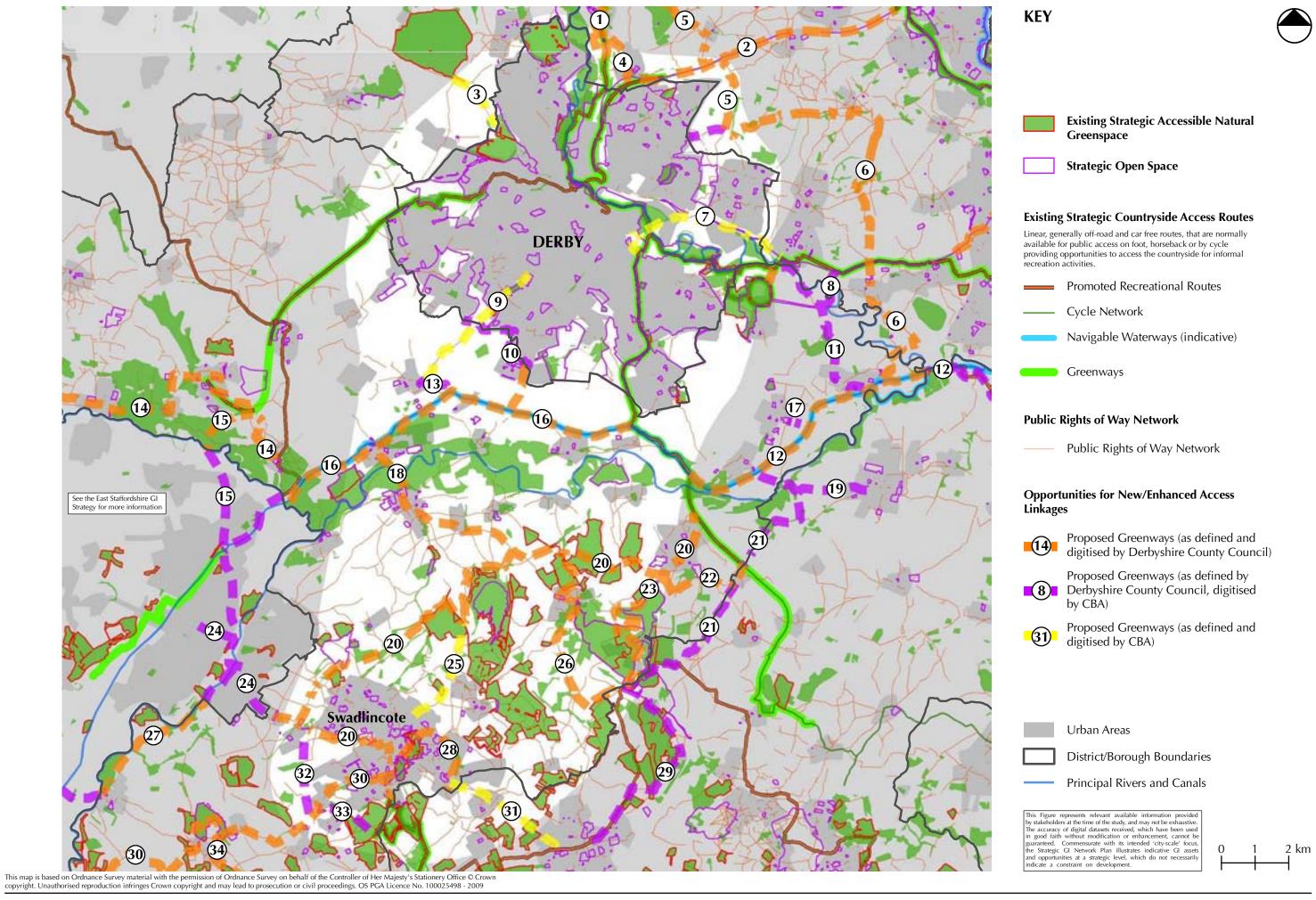
- 2.4.7 Strategic opportunities for enhancing the connectivity of the Greenspace network for people are illustrated in Figure 2.9. Opportunities for new/enhanced access linkages in the form of strategic multi-user Greenways are identified. Greenways do not have any status in law. They can be defined as 'largely off-highway routes for shared use by people of all abilities on foot, bike or horseback, for commuting, play or leisure; connecting people to facilities and open spaces in and around towns, cities and the countryside'22. Greenways are especially valuable for wheelchair users, battery powered scooters, and buggies. In many cases they utilise existing bridleways or restricted byways with full legal rights for such usage. In other cases, Greenways can be permissive routes, owned and managed by a local authority or voluntary organisation such as Sustrans, which the public have permission to use in appropriate ways.
- 2.4.8 Because of their nature as broad through routes, Greenways can include street furniture, sculpture, interpretive panels, and act as havens for wildlife along the verges, with overhanging shrubs or trees. They also have significant potential to replace many local car journeys, both as green walking and cycling routes. The proposed Greenway network provides key access routes from Derby and Swadlincote linking with surrounding villages and further beyond to recreational sites in the wider countryside. They can be designed as integral parts of sustainable urban extensions. Natural England has published a best practice Greenway Handbook²³ aimed at helping practitioners plan, design and create off-road routes to meet the needs of walkers, cyclists²⁴ and/or horse riders for informal recreation and commuting purposes. Proposals for new greenways should complement improvements to the existing rights of way network. A best practice example for greenways is included in the GI Guide for the East Midlands²⁵.
- 2.4.9 Derbyshire County Council's greenway strategies outline proposals for the development of a strategic network of greenways. This network links directly into settlements and to the public transport interchanges, continues through communities to join other routes, and provides a linear transport route from settlements into the wider countryside or to demand destinations. The underlying objectives of Derbyshire County Council's proposed greenway networks correspond with the aspirations for the 6Cs GI Strategy and the Derby Principal Urban Area

²² As defined by Natural England: http://www.countryside.gov.uk/LAR/Recreation/Greenways/index.asp (accessed June 2009).

²³ Natural England's Best Practice Greenway Handbook is available to download from the following website: http://www.countryside.gov.uk/LAR/Recreation/Greenways/index.asp (accessed May 2009)

²⁴ For the purposes of this study, Greenways are not intended to be used for meeting demands for provision of formal competitive off-road cycling.

²⁵ GI Guide for the East Midlands (EMGIN, 2008): Case Study 12 – Trent Valley Greenway, Long Eaton, Derbyshire.





and the Sub-Regional Centre of Swadlincote Strategic GI Network Plan. In agreement with Derbyshire County Council, their proposed network of greenways has been included in Figure **2.9** alongside other identified opportunities for new multi-user greenways.

- Opportunities for new multi-user greenway routes as proposed by Derbyshire County Council²⁶ 2.4.10 include:
 - 1 North Derby towards Ripley
 - 2 Breadsall to llkeston
 - 4 Breadsall to Little Eaton
 - 5 North east Derby to Morley
 - 6 Trent & Mersey Canal to Draycott and Chaddesden²⁷
 - 8 Ambaston Grange to north west Draycott
 - 10 Trent & Mersey Canal to Stenson Fields & Heatherton
 - 11 Shardlow to Ambaston, south Borrowash, and Elvaston Castle Country Park²⁸
 - 12 Weston-on-Trent towards southern Long Eaton²⁹
 - 13 Findern Link
 - 14 Eggington Junction towards Sudbury³⁰
 - 15 Burton-upon-Trent to Hilton
 - 16 Burton-upon-Trent to Trent & Mersey Canal, Willington, Stenson, Barrow-upon-Trent & north Swarkestone
 - 17 Trent & Mersey Canal to Aston-on-Trent
 - 18 Willington to Southern Foremark³¹
 - 19 Castle Donington to Weston-on-Trent
 - 20 Swadlincote to Melbourne
 - 21 Donington Hall to Wilson and Calke
 - 22 Wilson to Melbourne
 - 23 Calke Village to Melbourne
 - 24 Stanton to Stapenhill and Burton-on-Trent
 - 26 Heath End to Ticknall & Dale Cottage
 - 27 Barton-under-Needwood to Stapenhill
 - 28 Woodville to Swadlincote
 - 29 Ashby-de-la-Zouch to Lount & Staunton Harold
 - 30 -Central Swadlincote to Linton, Caldwell, Rosliston, & towards the National Memorial Arboretum at Alrewas32
 - 32 Stanton to Linton
 - 33 Castle Gresley to Conkers
 - 34 Rosliston towards Netherseal

²⁶Greenways proposed in the South Derbyshire District, East Derbyshire and West Derbyshire and High Peak Greenway Strategies, where appropriate to the Derby Strategic GI Network Study Area (some greenways were identified outside Derbyshire County, showing aspirations to create greenways linking with adjoining Counties). Individual greenways were named in the South Derbyshire District Greenway Strategy only. Names given to individual greenways in this report differ in places to those given in the South Derbyshire District Greenway Strategy, which show some routes broken into further sections in order to itemise specific

 $^{^{\}dot{27}}$ Includes part of route 8 of the South Derbyshire District Greenway Strategy and part of a greenway proposed in the East Derbyshire Greenway Strategy.

²⁸ Route number 9 and 10 of the South Derbyshire District Greenway Strategy.

²⁹ Route number 7 of the South Derbyshire District Greenway Strategy, named altered.

³⁰Routes number 1 and 2 of the South Derbyshire District Greenway Strategy have been combined along with part of a greenway proposed in the West Derbyshire & High Peak Greenway Strategy.

31 Part of route number 14 of the South Derbyshire District Greenway Strategy, name altered.

³² Route number 20 and 23 of the South Derbyshire District Greenway Strategy.

- 2.4.11 Other opportunities for new multi-user greenway routes include:
 - 3 Markeaton to Kedleston Hall
 - 7 River Derwent to Borrowash, Spondon, and Derby (part of the Derby to Sandiacre aspirational greenway)
 - 9 Findern to Normanton
 - 25 North Swadlincote to Hartshorne and Repton Shrubs
 - 31 Ashby-de-la-Zouch to Woodville
- 2.4.12 The proposed multi-user greenway number 2 (West Hinckley to Market Bosworth, Ravenstone, Whitwick, Osgathorpe and Loughborough), identified on **Figure 2.9** of **Volume 5** of the 6Cs GI Strategy, will link the existing greenway that currently stops north of Osgathorpe to settlements including Shepshed and Whitwick.

3.0 STRATEGIC GREEN INFRASTRUCTURE NETWORK

3.1 General

- 3.1.1 This section brings together and integrates the analysis of GI assets, opportunities and needs within the Study Area set out in Section 2.0 to identify a proposed 'aspirational' multifunctional Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote.
- 3.1.2 The purpose of the Strategic GI Network is to provide the conceptual perspective or 'bigger picture' for the delivery of large-scale GI within the Study Area that connects communities and wildlife at the sub-regional and city scales. It is intended to help focus attention or priority on land that needs to be safeguarded, managed or secured in positive ways to create a multifunctional network of greenspaces and assets for which investment can deliver the greatest range of benefits. It is not a rigid approach; the Strategic GI Network is intended to be flexible and responsive to opportunities such as changing land ownership, community aspirations, access to funding, development opportunities, policy considerations etc that may change priorities for investment over time.
- 3.1.3 The intention is to ensure that the integrity of the overall Strategic GI Network is not compromised by inappropriate development and land management. This means that there needs to be flexibility, and in cases where there is an unavoidable need to trade off existing GI assets to meet social and economic needs, this should be offset by mitigation and compensation measures to enhance the functionality of other GI assets elsewhere within the Strategic GI Network. However, some semi-natural habitats, such as ancient woodlands, are irreplaceable and need protection. Where development is planned within or in close proximity to a GI corridor, it should become an integral feature to the design and 'identity' of the development site to ensure that the connectivity of the network for both public benefit and biodiversity is retained and enhanced.
- 3.1.4 The proposed Strategic GI Network provides a spatial context for the delivery of the overall Vision for GI in the 6Cs sub-region related to the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote.

Setting Priorities for Green Infrastructure Investment

3.1.5 The GI concept applies across the whole of the Study Area, and it can occur at any scale.

However, the proposed Derby Principal Urban Area and the Sub-Regional Centre of
Swadlincote Strategic GI Network identifies locations where targeting investment in GI is most

likely to deliver multiple benefits across a range of key environmental, social and economic policy areas.

3.1.6 The main priorities are considered to be:

- To focus investment on GI provision and management to address current deficits of provision/needs;
- To meet the GI needs of communities in and around the 6Cs sub-region who are likely to experience major growth-related pressures in the period to 2026;
- To protect, enhance and manage existing valuable GI assets that are under current or future pressure, in particular accessible natural greenspaces, biodiversity sites and river valleys/wetlands.
- 3.1.7 In response to the above, the proposed overall Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote shown on **Figure 3.1c** identifies broadly defined corridors and zones, within which it is recommended that investment in new and enhanced GI provision be prioritised and delivered over the next 15-20 years. These corridors and zones reflect the identified opportunities and needs for enhancing the connectivity and accessibility of the greenspace network for biodiversity and public benefit at the sub-regional and city scales. They provide the context for development of GI initiatives and projects that would provide, in many cases, multiple functions and benefits to meet a range of social, economic and environmental needs. GI related proposals within and adjacent to the corridors and zones would focus on the enhancement and restoration of existing GI assets, as well as the creation of new resources.
- 3.1.8 Existing strategic GI assets which form the backbone of the proposed overall Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote are shown combined on Figure 3.1a. Following stakeholder consultation, examples of existing GI Destinations³³ have been included on Figure 3.1a.

3.2 Sub-Regional Green Infrastructure

2010

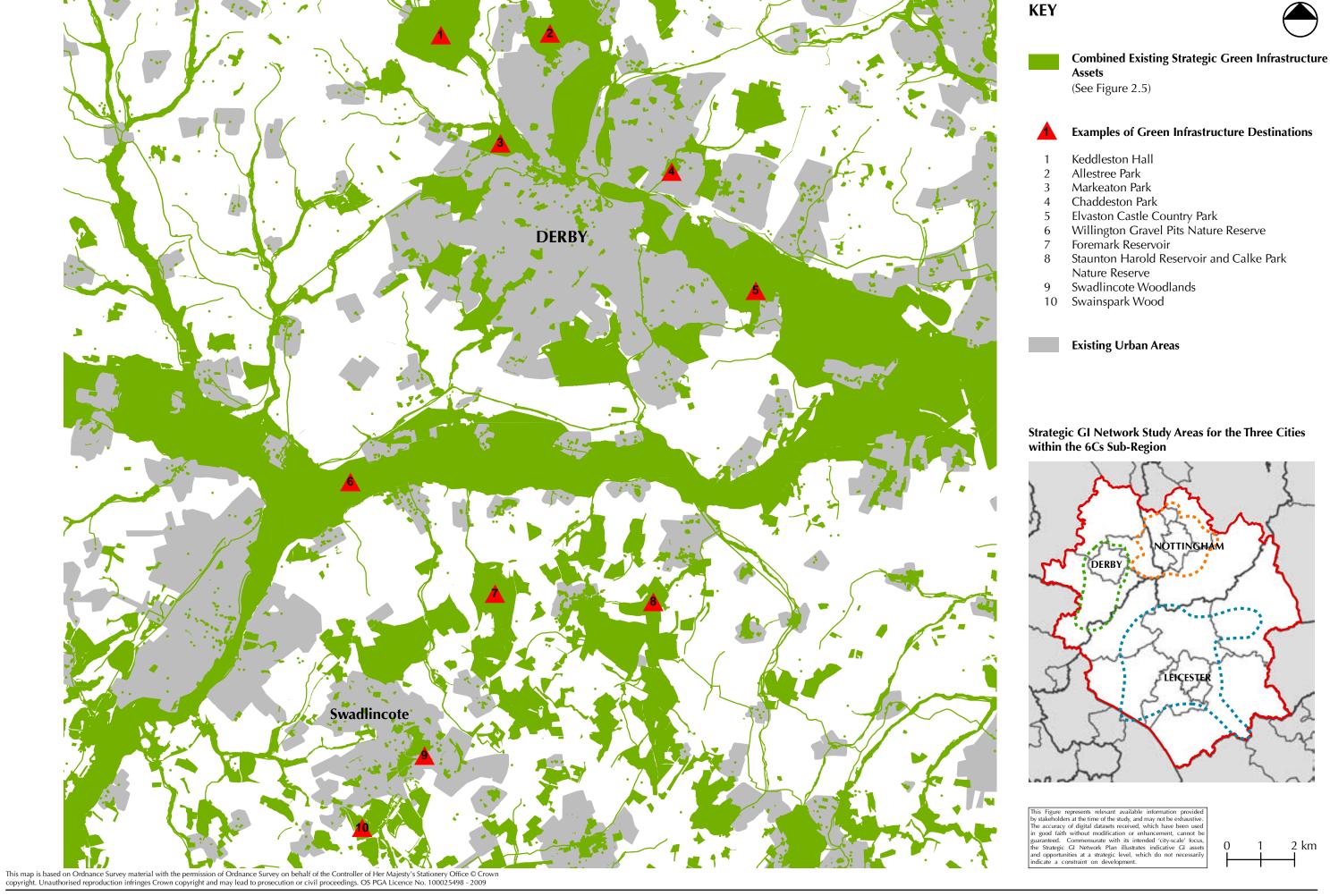
Sub-Regional Green Infrastructure Corridors

3.2.1 The Sub-Regional Corridors identified on Figure 3.1b generally reflect significant wildlife habitat corridors/areas that link with strategic GI in surrounding areas at the sub-regional level, and have an important role to play in maintaining the overall integrity of the 6Cs GI Network in the long term. They comprise a mosaic of land uses, natural, built heritage and archaeological resources and settlements, and are intended to become fully multifunctional zones with the ability or potential to deliver the following key GI 'functions':

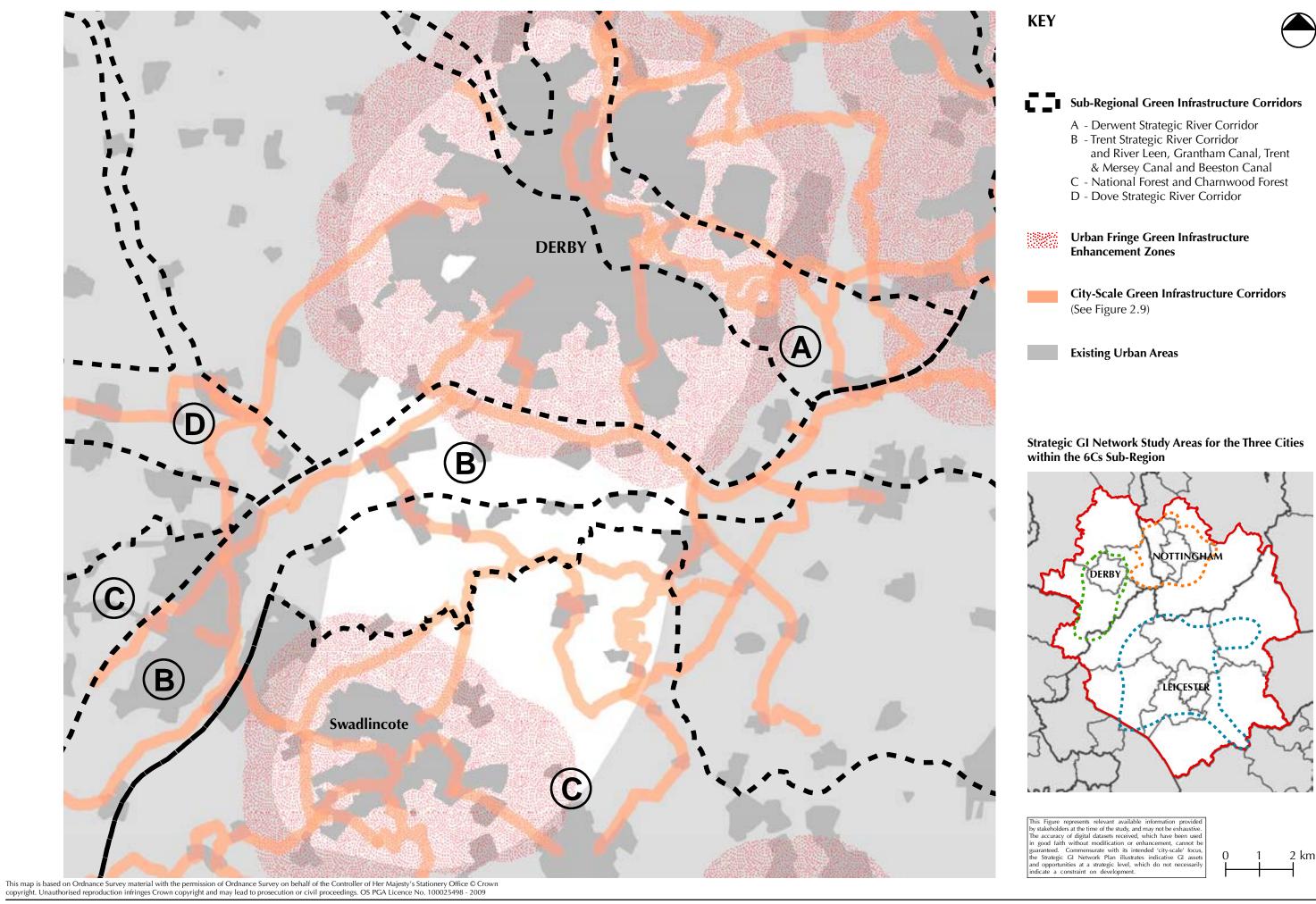
15

6Cs GI Strategy

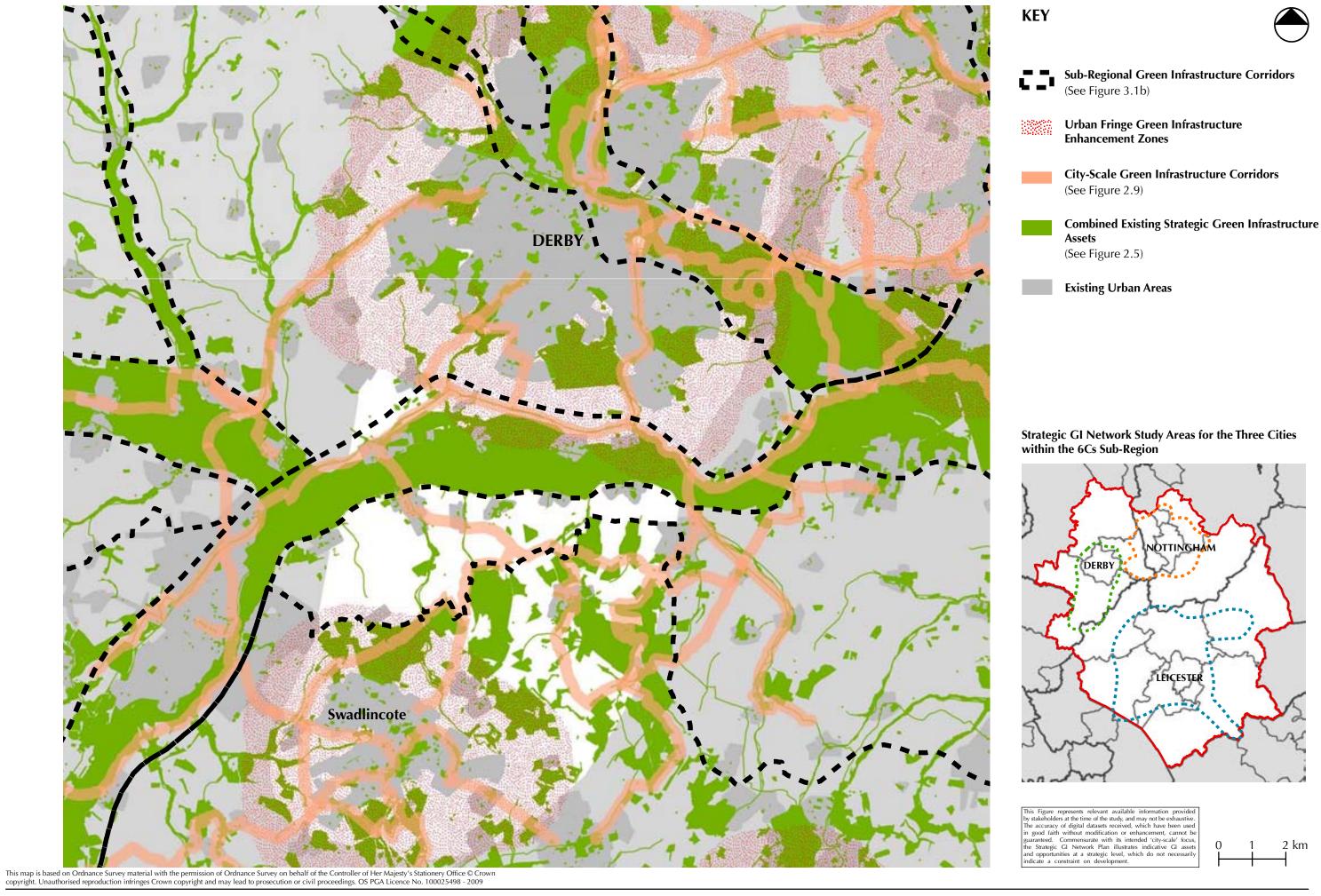
³³ The GI Destinations included on Figure 3.1a were chosen based on them being well known GI sites/visitor destinations.













- Access and Movement linking settlements to their hinterland, destinations and the wider strategic access network. The corridors provide sustainable links through attractive green routes with clear way marking and other relevant facilities. They also provide opportunities to enhance the management, presentation, accessibility and interpretation of greenspace;
- Biodiversity providing a focus for the enhancement and linkage of the biodiversity resource:
- Mitigation of flood risk, enhancement of water management and other natural process roles;
- Enhancement and promotion of landscape and urban character to celebrate the distinctiveness of these different corridors;
- Enhancement and promotion of heritage and cultural assets; and
- Enhancement and promotion of recreation and leisure, providing connections between communities, accessible greenspace and other destinations.
- 3.2.2 The Sub-Regional GI Corridors form the backbone of the 6Cs GI Network and provide the core of the proposed Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote. They are:

A – Derwent Strategic River Corridor

Key Landscape and Biodiversity Characteristics³⁴

• Landscape character types within the National Character Area – Trent Valley Washlands:

Lowland Village Farmlands:

"This is a large scale, open, gently rolling lowland landscape associated with the lower slopes and terraces of broad floodplains. A mixed farming landscape defined by medium to large regular fields with thorn hedges, punctuated by villages".

- Gently rolling, almost flat lowland with river terraces
- Low slopes and summits give a sense of elevation over a broad floodplain
- Mixed farming with arable cropping and improved pasture
- Thinly scattered hedgerow trees including some willow pollards
- Scattered, locally dense, watercourse trees
- Medium to large regular fields with thorn hedgerows
- Discrete red brick villages with farms and cottages
- Large red brick outlying farms
- Primary habitats: cereal field margins and neutral grassland
- Secondary habitats: ancient & semi-ancient broadleaved woodland, wet woodland, veteran trees, ancient and species rich hedgerows, standing open waters and canals, and rivers and stream (river corridors)

Riverside Meadows:

"Broad flat floodplains, containing meandering rivers and streams with scattered trees along riverbanks. A pastoral landscape of generally large hedged fields with trees scattered along boundaries".

- Flat floodplains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Intensive permanent pasture
- Localised patches of rushes in damp hollows
- Dense watercourse trees, mainly alder with some localised willow
- Scattered trees along hedgerows and ditches
- Regular shaped fields bounded by hawthorn hedges
- Lanes alongside or crossing floodplain
- Generally uninhabited with sparsely scattered, isolated farmsteads

³⁴ Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).

- Primary habitats: wet woodlands, floodplain grazing marsh, rush pasture, reedbeds, lowland fen meadows, neutral grassland, standing open waters and canals, and rivers and streams (river corridors)
- Landscape character types within the National Character Area Derbyshire Peak Fringe and Lower Derwent:

Wooded Slopes and Valleys:

"This is a landscape of small pastoral fields on undulating, rising ground. Woodlands on steeper slopes, hedgerow and streamline trees contribute to a strongly wooded character".

- Upland, undulating ground rising up to moorland
- Slopes are moderate to steep, and steepen along stream valleys
- Poorly draining soils over bands of mudstone and harder sandstone
- Permanent pasture for sheep and dairy cattle
- Widespread bracken and localised gorse, found particularly on the thinner soils of steeper slopes
- Densely scattered small to medium ancient woodlands and some secondary woodland, mostly on steeper slopes and along streams
- Densely scattered hedgerow trees
- Irregular field pattern bounded by mixed species hedgerows
- Dry-stone walls are also widespread, usually defining a more regular field pattern
- Network of winding lanes, often sunken on steeper slopes, with rocky banks
- Dispersed sandstone farmsteads with stone slate roofs with localised clusters
- Primary habitats: ancient & semi-ancient broadleaved woodland, wet woodland, veteran trees, ancient and species rich hedgerows, rush pasture, neutral grassland, and rivers and streams (river corridors)
- Secondary habitats: reedbeds, lowland fen meadows, lowland dry acid grassland and standing open waters and canals

Riverside Meadows:

"Broad, flat floodplains, holding meandering rivers, with scattered trees along the riverbank. Scattered boundary trees and transport routes punctuate the pastoral landscape".

- Flat, broad flood plains containing meandering rivers
- Seasonally waterlogged soils over alluvium
- Low intensity permanent pasture
- Localised patches of rushes in damp hollows
- Scattered, locally dense trees along watercourses, widespread alder and localised willow
- Scattered trees along field boundaries
- Regular shaped fields, bounded by hawthorn hedges
- Lanes along edges or crossing flood plains with gritstone bridges over the rivers
- Active and disused railway lines with secondary woodland along embankments
- Historic textile mills
- Primary habitats: wet woodland, floodplain grazing marsh, rush pasture, reedbeds, lowland fen meadows, neutral grassland, standing open waters and canals, and river and streams (river corridors)
- Landscape character types within the National Character Area Needwood and South Derbyshire Claylands:

Riverside Meadows:

"Flat floodplains, containing meandering rivers and streams with dense trees along riverbanks. A pastoral landscape of generally large hedged fields with trees scattered along boundaries".

- Flat floodplains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Permanent pasture
- Localised patches of rushes in damp hollows
- Scattered locally dense trees along watercourses; widespread alder and localised willow
- Scattered trees along boundaries
- Regular shaped fields bounded by hawthorn hedges
- Lanes alongside or crossing the floodplain
- Active and disused railway lines with secondary woodland along embankments
- Primary habitats: wet woodland, floodplain grazing marsh, rush pasture, lowland fen meadows, neutral grassland, standing open waters and canals, and river and streams (river corridors)

- Locally significant habitat containing rare species: reedbeds

Estate Farmlands

"This is a broad, gently rolling lowland mixed farming landscape with estates. Woodland is well represented throughout with small estate woodlands, dense watercourse trees, scattered hedgerow trees and localised parkland trees. There are occasional red brick villages and scattered estate farmsteads and country houses".

- Gently rolling lowland dissected by minor river valleys
- Seasonally waterlogged fine loamy soils over Permo-Triassic mudstones, siltstones and sandstones
- Mixed farming with intensive arable cropping and improved permanent pasture
- Prominent estate woodlands with broadleaf and coniferous species
- Scattered oak and ash trees along hedgerows
- Dense lines of trees along streams
- Small to medium size semi-regular and regular fields enclosed by hedgerows
- Small villages constructed of red brick with clay tiled roofs
- Scattered red brick estate farmsteads and the occasional country house
- Primary habitats: lowland parkland, veteran trees, and cereal field margins
- Secondary habitats: ancient & semi-ancient broadleaved woodland, wet woodland, ancient and species rich hedgerows, rush pasture, neutral grassland, lowland dry acid grassland, lowland heaths, and rivers and stream (river corridors)

Key Designated Heritage Features and Settlements

- Designated heritage features Derwent Valley Mills World Heritage Site, Conservation Areas in a number of settlements including north central Derby, Historic Parks & Gardens including Nottingham Road Cemetery and Elvaston Castle;
- Settlements Kedleston, Little Eaton, Derby, Elvaston, north Shardlow.

Key Opportunities for Delivering GI Benefits

- Access and movement potential to establish traffic free multi-user greenways e.g. linking the communities of Derby and Long Eaton to one another and to GI assets such as Elvaston Country Park;
- Biodiversity opportunities for management, creation, restoration and/or extension of primary habitats e.g. floodplain grazing marsh and rush pasture through the centre of Derby to south of Borrowash; and wet woodland and lowland fen meadows in and around Markeaton Brook.
- Natural processes opportunities to manage flood risk through appropriate land management e.g. flood management works on the river Derwent through Derby;
- Cultural heritage opportunities to enhance the management, presentation, accessibility
 and interpretation of historic environment assets, e.g. throughout the Derwent Valley Mills
 World Heritage Site;
- Landscape opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. encourage the continuing practice of pollarding to maintain the traditional riparian character of the Riverside Meadows landscape.

B - Trent Strategic River Corridor and River Leen, Grantham Canal, Trent & Mersey Canal, and Beeston Canal

Key Landscape and Biodiversity Characteristics³⁵

• Landscape character types within the National Character Area – Trent Valley Washlands:

³⁵ Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).

Riverside Meadows:

"Broad flat floodplains, containing meandering rivers and streams with scattered trees along riverbanks. A pastoral landscape of generally large hedged fields with trees scattered along boundaries".

- Flat floodplains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Intensive permanent pasture
- Localised patches of rushes in damp hollows
- Dense watercourse trees, mainly alder with some localised willow
- Scattered trees along hedgerows and ditches
- Regular shaped fields bounded by hawthorn hedges
- Lanes alongside or crossing floodplain
- Generally uninhabited with sparsely scattered, isolated farmsteads
- Primary habitats: wet woodlands, floodplain grazing marsh, rush pasture, reedbeds, lowland fen meadows, neutral grassland, standing open waters and canals, and rivers and streams (river corridors)

Lowland Village Farmlands:

"This is a large scale, open, gently rolling lowland landscape associated with the lower slopes and terraces of broad floodplains. A mixed farming landscape defined by medium to large regular fields with thorn hedges, punctuated by villages."

- Gently rolling, almost flat lowland with river terraces
- Low slopes and summits give a sense of elevation over a broad floodplain
- Mixed farming with arable cropping and improved pasture
- Thinly scattered hedgerow trees including some willow pollards
- Scattered, locally dense, watercourse trees
- Medium to large regular fields with thorn hedgerows
- Discrete red brick villages with farms and cottages
- Large red brick outlying farms
- Primary habitats: cereal field margins and neutral grassland
- Secondary habitats: ancient & semi-ancient broadleaved woodland, wet woodland, veteran trees, ancient and species rich hedgerows, standing open waters and canals, and rivers and streams (river corridors)

Key Designated Heritage Features and Settlements

- Cultural heritage features a number of scheduled monuments, conservation areas in a number of settlements including Castle Donington, Bretby Hall Historic Park and Garden; Repton, and Newton Solney historic villages;
- Settlement Burton-upon-Trent, Willington, Twyford, Stenson, Barrow-upon-Trent, Swarkestone, south Shardlow, north Castle Donington.

Key Opportunities for Delivering GI Benefits

- Access and movement potential to establish traffic free multi-user greenways e.g. linking the communities of Burton-upon-Trent, Willington and Shardlow to one another and to the River Trent and Trent & Mersey Canal;
- Biodiversity opportunities for management, creation, restoration and/or extension of primary habitats e.g. lowland fen meadows, reedbeds, floodplain grazing marsh and rivers and streams (river corridors) along the River Trent.
- Natural processes opportunities to manage flood risk through appropriate land management e.g. flood management works on the river Trent around Willington;
- Designated Cultural heritage opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets, e.g. Castle Donington's historic core.
- Landscape opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. conserve the rural character and settlement pattern.

C – National Forest and Charnwood Forest

Key Landscape and Biodiversity Characteristics³⁶

• Landscape character types within the National Character Area – Melbourne Parkland³⁷:

Sandstone Slopes and Heaths

"A landscape of moderate to steep sandstone slopes with prominent rounded undulations and hillocks forming the upper slopes. Predominantly a pastoral landscape. Small linear woodlands and scattered hedgerow trees give the sense of a well-wooded landscape."

- Prominent landform of moderate to steeply sloping sandstone valleys and slopes with rounded undulations along the slopes
- Well drained sandy soils
- A pastoral land-use on steeper slopes with mixed farming on gentler gradients
- Heathy associations with patches of gorse on steeper slopes and bracken along some hedgerows
- Prominent woodland with small linear woodlands, scattered hedgerow trees, scrub and occasional parkland trees
- Medium to large size regular and sub-regular fields with mixed species hedgerows
- Sparsely settled landscape with the very occasional red brick and clay tile farmstead and estate cottage
- Primary habitats: ancient and semi natural broadleaved woodland, ancient and species rich hedgerows, lowland heaths, lowland dry acid grassland
- Secondary habitats: veteran trees, standing open waters and canals, and rivers and streams (river corridors)

Estate Farmlands

"A broad gently rolling lowland, mixed farming landscape with estates. Trees and woodland are well represented throughout and there are occasional red brick villages, scattered estate farmsteads and country houses."

- Gently rolling lowland sandstone plateau dissected by minor river valleys
- Seasonally waterlogged fine loamy soils over Permo-Triassic mudstones, siltstones and sandstones
- Mixed farming with intensive arable cropping and improved permanent pasture
- Estate woodlands with broadleaf and coniferous species
- Scattered oak and ash trees along hedgerows
- Dense lines of trees along streams
- Predominantly medium size semi-regular and regular fields enclosed by hedgerows
- Settlements constructed of red brick with red clay tiled roofs
- Scattered red brick estate farmsteads and the occasional country house
- Open views from elevated areas, some long distance, over surrounding lower lying landscapes
- Primary habitats: ancient and semi natural broadleaved woodland, lowland parkland, veteran trees, lowland dry acid grassland, lowland heath, and cereal field margins
- Secondary habitats: wet woodland, ancient and species rich hedgerows, neutral grassland, standing open waters and canals, and rivers and streams (river corridors)

Wooded Estatelands

"A large scale, gently undulating, estate landscape defined by extensive tree cover comprising interlocking plantation woodlands, densely scattered hedgerow trees, dense watercourse trees and localised parkland trees. There are large, red brick estate farms scattered throughout and the occasional country house."

- Underlying geology of sandstone, mudstone and coal measures giving rise to a large scale, gently undulating landform
- Mixed farming with occasional areas of unimproved pasture
- Medium size interlocking plantation woodlands of mixed species composition
- Densely scattered hedgerow trees and dense lines of watercourse trees
- Extensive parkland trees including ornamental specimens, tree groups and avenues
- Medium size regular shaped fields with hawthorn hedgerows

³⁶ Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).

³⁷ Whilst the Derbyshire County Council Landscape character work has sub-divided this National Character Area into more detailed landscape character types it is acknowledged that these landscapes are fundamentally changing with extensive woodland planting. The National Forest has a specific Forest strategy and guidance.

- Well wooded landscape with views restricted by tree cover
- Primary habitats: ancient and semi natural broadleaved woodland, lowland parkland, wet woodland, veteran trees, neutral grassland, lowland dry acid grassland, standing open waters and canals, and rivers and streams (river corridors)
- Secondary habitats: ancient and species rich hedgerows, cereal field margins, rush pasture, lowland fen meadows,
- Landscape character type within the National Character Area Leicestershire and South Derbyshire Coalfield³⁸:

Coalfield Village Farmlands

"This is a broad, undulating, industrial landscape with many red brick mining settlements. A mixed farming landscape punctuated by sparsely scattered hedgerow trees, watercourses and the occasional small woodland."

- Heavy, poorly draining soils over mudstone with patches of free draining soils on sandstone ridges
- Rolling plateau of sandstone and mudstone beds with coal seams
- Pastoral farming with localised arable farming on better drained soils
- Patches of semi natural woodland
- Scattered hedgerow trees and locally dense trees along streamlines
- Scrub and secondary woodland on derelict ground and along rail and road embankments
- Several areas of relict parkland, and also common land, now enclosed and farmed
- Network of small irregular lanes between larger urban roads
- Red brick buildings with clay tile roofs
- Expansion of villages with red brick terraces, ribbon development and housing estates
- Widespread legacy of coal extraction, including spoil heaps, opencast sites and pit railways
- Primary habitats: wet woodland, veteran trees, ancient and species rich hedgerows, neutral grassland, standing open waters and canals, and rivers and streams (river corridors)
- Secondary habitats ancient and semi-natural broadleaved woodland, lowland parkland, cereal field margins, rush pasture, reedbeds, and lowland dry acid grassland
- Landscape character type within the National Character Area Mease Sence Lowlands³⁹:

Village Estate Farmlands

"This is a well ordered, gently rolling agricultural landscape punctuated by discrete villages, scattered estate farmsteads and country houses. There are small game coverts and dense lines of trees along watercourses."

- Broad scale gently rolling lowland landscape
- Seasonally waterlogged fine loamy soils over Permo-Triassic mudstone
- Mixed farming with intensive cropping and improved permanent pasture
- Small discrete broadleaf plantations and game coverts
- Tree lined, pastoral stream corridors
- Medium to large regular and sub regular fields with mainly hawthorn hedgerows
- Winding country lanes with wide grass verges
- Small hilltop villages often with prominent church spire
- Primary habitats: wet woodland ancient and species rich hedgerows, cereal field margins, neutral grassland, and rivers and streams (river corridors)
- Secondary habitats: ancient and semi natural broadleaved woodland, lowland parkland, veteran trees, lowland heaths, and standing open waters and canals

Key Designated Heritage Features and Settlements

 Designated cultural heritage features – Bretby Hall, Calke Abbey, Staunton Harold and Coleorton Hall Historic Parks and Gardens; conservation areas in a number of settlements including Staunton Harold and west Coleorton villages; a number of scheduled monuments; historic core in Burton-upon-Trent and Ticknall;

³⁸ Whilst the Derbyshire County Council Landscape character work has sub-divided this National Character Area into more detailed landscape character types it is acknowledged that these landscapes are fundamentally changing with extensive woodland planting. The National Forest has a specific Forest strategy and guidance.

³⁹ Whilst the Derbyshire County Council Landscape character work has sub-divided this National Character Area into more detailed landscape character types it is acknowledged that these landscapes are fundamentally changing with extensive woodland planting. The National Forest has a specific Forest strategy and guidance.

Settlement – Anslow, Rough Hay, Tatenhill, Burton-upon-Trent, Stapenhill, Walton-on-Trent, Newton Solney, Ticknall, Calke Abbey, Calke, east Melbourne, Staunton Harold, Lount, Coleorton, Swannington, Whitwick, Ashby-de-la-Zouch, Smisby, Hartshorrne, Bretby, Swadlincote, Stanton, Caldwell, Linton, Rosliston, Blackfordby, Albert Village and Moira.

Key Opportunities for Delivering GI Benefits

- Access and movement potential to establish traffic free multi-user greenways that link key
 GI assets with local communities. New open access through woodland creation and a
 National Forest long distance trail will be developed as part of The National Forest's
 Delivery Plan;
- Biodiversity opportunities for management, creation, restoration and/or extension of primary habitats e.g. neutral grassland and veteran trees, and secondary habitats e.g. rush pasture. From its original 6% woodland cover, The National Forest's eventual wooded area will spread over about a third of the area. The National Forest planting strategy is to create 16,500ha of new woodland and a minimum of 1,000ha of other habitats within The National Forest's boundary.
- Natural processes opportunities for water management through appropriate land management e.g. nitrate management work on National Forest farms;
- Cultural heritage opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets, e.g. Staunton Harold Hall Historic Park and Garden.
- Landscape opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. conserve the rural character and conserve and renew ornamental plantations and individual parkland trees; strengthen the rural character of the countryside gap between Burton-upon-Trent and Swadlincote.

D - Dove Strategic River Corridor

Key Landscape and Biodiversity Characteristics⁴⁰

Landscape character type within the National Character Area – Trent Valley Washlands:

Lowland Village Farmlands:

"This is a large scale, open, gently rolling lowland landscape associated with the lower slopes and terraces of broad floodplains. A mixed farming landscape defined by medium to large regular fields with thorn hedges, punctuated by villages."

- Gently rolling, almost flat lowland with river terraces
- Low slopes and summits give a sense of elevation over a broad floodplain
- Mixed farming with arable cropping and improved pasture
- Thinly scattered hedgerow trees including some willow pollards
- Scattered, locally dense, watercourse trees
- Medium to large regular fields with thorn hedgerows
- Discrete red brick villages with farms and cottages
- Large red brick outlying farms
- Primary habitats: cereal field margins and neutral grassland
- Secondary habitats: ancient & semi-ancient broadleaved woodland, wet woodland, veteran trees, ancient and species rich hedgerows, standing open waters and canals, and rivers and stream (river corridors)

Riverside Meadows:

"Broad flat floodplains, containing meandering rivers and streams with scattered trees along riverbanks. A pastoral landscape of generally large hedged fields with trees scattered along boundaries".

⁴⁰ Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).

- Flat floodplains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Intensive permanent pasture
- Localised patches of rushes in damp hollows
- Dense watercourse trees, mainly alder with some localised willow
- Scattered trees along hedgerows and ditches
- Regular shaped fields bounded by hawthorn hedges
- Lanes alongside or crossing floodplain
- Generally uninhabited with sparsely scattered, isolated farmsteads
- Primary habitats: wet woodlands, floodplain grazing marsh, rush pasture, reedbeds, lowland fen meadows, neutral grassland, standing open waters and canals, and rivers and streams (river corridors)
- Landscape character type within the National Character Area Needwood and South Derbyshire Claylands:

Riverside Meadows:

"Flat floodplains, containing meandering rivers and streams with dense trees along riverbanks. A pastoral landscape of generally large hedged fields with trees scattered along boundaries".

- Flat floodplains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Permanent pasture
- Localised patches of rushes in damp hollows
- Scattered locally dense trees along watercourses; widespread alder and localised willow
- Scattered trees along boundaries
- Regular shaped fields bounded by hawthorn hedges
- Lanes alongside or crossing the floodplain
- Active and disused railway lines with secondary woodland along embankments
- Primary habitats: wet woodland, floodplain grazing marsh, rush pasture, lowland fen meadows, neutral grassland, standing open waters and canals, and river and streams (river corridors)

Key Designated Heritage Features and Settlements

- Designated cultural heritage features a number of scheduled monuments; Rolleston historic core adjacent;
- Settlement Eggington, Hilton, Marston-on-Dove, Hatton, and Longford.

Key Opportunities for Delivering GI Benefits

- Access and movement potential to establish traffic free multi-user greenways e.g. linking the communities of Hatton, Hilton and Eggington to one another and to the River Trent Corridor;
- Biodiversity opportunities for management, creation, restoration and/or extension of primary habitats e.g. floodplain grazing marsh and lowland fen meadows;
- Natural processes opportunities to manage flood risk through appropriate land management e.g. flood management works on the river Dove around Hatton;
- Cultural heritage opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets, e.g. scheduled monuments.
- Landscape opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. conserve pastoral character and promote measures for enhancing the ecological diversity of alluvial grasslands.

Urban Fringe Green Infrastructure Enhancement Zones

3.2.3 Taking into account the 6Cs sub-region's existing demographic patterns, and the spatial pattern of changes in population arising from the future growth proposed under the Government's

Sustainable Communities Plan and the East Midlands Regional Plan, the countryside in and around Derby and Swadlincote has greatest demand, and therefore need, for enhanced provision of existing and new GI. These broad zones include areas of land that represent a significant resource for urban communities in the sub-region, comprising dynamic and complex mosaics of land uses and habitats. They are the immediate landscape setting for principal urban areas and Sub-Regional Centres, and have a critical role to play in linking town and country, and will experience major planned growth. By their definition, Sustainable Urban Extensions are likely to be located within these areas. Existing GI resources in such areas are already experiencing urban edge issues, and are therefore likely to come under increasing pressure in the future.

- 3.2.4 In recognition of their strategic importance for delivery of GI from a sub-regional perspective, the countryside in and around Derby and Swadlincote has been defined as **Urban Fringe Green Infrastructure Enhancement Zones** (see **Figure 3.1b**): The indicative extent of the Zones defined on **Figure 3.1b** is generic, and is simply intended to schematically illustrate the transition between urban and rural land uses around the principal urban areas and Sub-Regional Centres.
- 3.2.5 Through investment in GI provision, the Urban Fringe Green Infrastructure Enhancement Zones have the ability or potential to deliver a range of economic, environmental and social benefits related to the following GI themes or functions⁴¹:
 - A bridge to the country linking housing, schools, health centres and hospitals, bus and train stations in urban centres to the existing/enhanced access network to connect with accessible greenspaces in the wider countryside;
 - A gateway to cities and towns providing an improved image, experience and sense of
 place through investment in an improved environmental quality for public rights of way and
 spaces;
 - A health centre contributing to health improvements and well-being through schools, hospitals and health centres promoting opportunities to access greenspaces for exercise as part of health programmes;
 - **An outdoor classroom** opportunities to provide environmental education through parks, nature reserves and farm-based activities;
 - A recycling and renewable energy centre helping address climate change through sustainable management of waste, water and pollution, production of energy crops and creation of woodland to act as carbon sinks;
 - A productive landscape recognising the role of urban fringe farmland in food production, processing of local produce and retail (farm shops) for urban areas;
 - A cultural legacy increasing awareness of historic features in the urban fringe landscape and how they contribute to sense of place for local communities;
 - A place for sustainable living ensuring that future development links with the urban area and addresses issues such as fly-tipping, indistinct boundaries, poor accessibility, fragmented landscapes, etc;

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⁴¹ Key functions as described in Countryside Agency's vision for the Countryside in and around Towns (2005)

- An engine for regeneration providing quality of life benefits through opportunities for community involvement through volunteering or gaining new skills in environmental improvement work, particularly within areas of multiple deprivation; and
- A nature reserve strengthening biodiversity, geological and geomorphological conservation management for sites in and around urban areas.
- 3.2.6 Within the Urban Fringe Green Infrastructure Enhancement Zones, land is widely used by urban communities as a resource for informal, and often unauthorised, recreation leading to conflicts with other land uses. Additionally, the poor permeability of some built up areas can be a barrier to accessing the surrounding countryside. These Zones would benefit from the adoption of a strategic and co-ordinated approach to managing access for urban communities into the surrounding countryside. It is envisaged that the Urban Fringe Green Infrastructure Enhancement Zones would encompass a network of interlinked and multifunctional greenspaces that connect with city/town centres, public transport nodes, and major employment and residential areas, including new sustainable urban extensions. A careful balance will need to be struck between creation of new GI and the need to safeguard existing natural and cultural features that contribute to the character and value of the wider agricultural landscape.
- 3.2.7 Urban Fringe GI Enhancement Zones have an important role to play in relation to improving linkages and connectivity between Principal Urban Areas/Sub-Regional Centres and the wider GI network of Sub-Regional and City-Scale GI Corridors. In particular, Sustainable Urban Extensions will need to protect the integrity of the wider GI network, and support existing urban areas, by maintaining and enhancing GI within the Urban Fringe GI Enhancement Zones. Further work is required at the local level to identify specific opportunities for integrating GI provision into local development and delivery plans within individual Zones.

3.3 City-Scale Green Infrastructure

3.3.1 A network of **City-Scale GI Corridors** is proposed (see **Figure 3.1b**) linking up settlements, strategic GI assets, and Sub-Regional Corridors. In many cases, the City-Scale GI Corridors extend into the urban areas, providing key elements of the Urban Fringe GI Enhancement Zones. While these corridors are indicative, they demonstrate the priority that should be given to achieving a connected network of green access links within and between urban areas. Typically, the City-Scale GI Corridors follow existing and proposed Greenways and are key to enabling doorstep to countryside connections within the overall Strategic GI Network. They comprise a mosaic of land uses, natural and built heritage resources and settlements and have the primary aim of providing access and movement linkages for people. With investment, these GI Corridors are intended to deliver one or more of the 'functions' of a Sub-Regional Corridor as described above in paragraph 3.2.1.

3.3.2 Within the context of the Sub-Regional and City-Scale GI Corridors and Urban Fringe Green Infrastructure Enhancement Zones, are opportunity areas for new and enhanced localised GI. Examples of opportunity areas are provided in **Appendix A7** (it should be noted that the list of examples provided is not exhaustive). The opportunity areas are intended to be multifunctional and help towards delivering a range of public benefits. They focus on opportunities for the enhancement and restoration of existing GI assets, as well as the creation of new resources (the latter could include one or a combination of appropriate greenspaces, e.g. parks, allotments, semi-natural greenspaces, and/or children's play areas).

3.4 Delivering the Green Infrastructure Network

3.4.1 This report sets out a proposed strategic network for guiding the delivery of GI provision for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote within the context of the proposed vision and delivery framework set out in the Strategic Framework.

APPENDIX A1 RECORD OF STAKEHOLDER CONSULTATION

RECORD OF STAKEHOLDER CONSULTATION

Targeted stakeholder meeting held on the 18th August 2009, 10am - 1.00pm at Glenfield Parish Council to review Volume 4: Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote.

Attendees

Name	Job Title	Organisation
Kevin Exley	Planning Policy Officer	South Derbyshire District Council
Malcolm Marshall	Countryside Funding Officer	Derbyshire County Council
Sarah Banks	HMA Co-ordinator	Derby HMA
Dave Slinger	Environment Team Leader	Derby City Council
Nicky Goodyear	Senior Planning Officer	Derby City Council
Glynis Foster	Senior Landscape Architect	Derbyshire County Council
Caroline Harrison	Planning & Conservation Advisor	Natural England

Apologies

Name	Job Title	Organisation
Debbie Alston	Biodiversity Project Officer	Derbyshire Lowlands Biodiversity
		Partnership
Kieron Huston	Senior Local Wildlife	Derbyshire Wildlife Trust
	Sites Officer	
Simon Evans	Chief Landuse Officer	National Forest

Key Messages

- More 'local colour' needed to be added to the corridor descriptions so that the document sounded less generic and more 6Cs specific – the suggestion was that this could be based on landscape character information.
- There needed to be a clear separation between 'evidence' and 'strategy' in the way the document was structured so that the link between the evidence base and the recommendations being made could be logically followed.
- A number of people felt that the inclusion of the Biodiversity Opportunity Maps in the Stage 2 reports was confusing and they could not see how the links between Stage 1 (that did not include these Bio Opportunity Maps) and Stage 2 had been made. The suggestion was to remove these Biodiversity Opportunity Maps from Stage 2.
- There should be flexibility between the level of information and detail contained within each Strategic GI Network report so that local information and work could inform the Stage 2 Reports and be incorporated where appropriate. This will result in subtle differences between the 3 sections opposed to the guiding principle of Stage 1 being that data and information needed to be of a consistent nature across the sub-region as a whole. But we still need to be clear that this is a strategic document.
- Opportunity Areas to be removed from Figure 3.1 but descriptions to remain within the Report text.
- Within each Strategic GI Network report, the spatial relationship between the study area and the whole of the sub-region and between each Study Area needs to be shown.
- Green wedges for Leicestershire and Derby need to be included. HMA contacts will provide this information as GIS shape file.
- Urban fringe areas were identified as key but people found it hard to find the corresponding section within the report that made reference to them.
- The term 'local' corridors and opportunity areas needed to be amended.
- There needs to be a clear message that the proposed network and opportunity areas are not intended to be restrictive in any way and allows flexibility in terms of delivery. This 'message' will be made clearer if the 'local' corridors identified on the figure 2.9 are broadened and 'smoothed out'.
- The extent of the floodplain (defined by the EA indicative floodplain dataset) shown on Figure 2.5 needs to be amended. It was suggested that this dataset is switched on first and the urban area dataset switched on top.

•	Figure 3.1 is to be complemented by 2 additional maps; one to show the existing GI assets, one to show just the conceptual GI network and Fig 3.1 will remain to show the two combined.

APPENDIX A2 SOURCES OF GI ASSET MAPPING DATA USED FOR VOLUME 4

SOURCES OF GI ASSET MAPPING DATA USED FOR VOLUME 4 Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote

Datasets used in the preparation of the Stage 2 Strategic GI Networks for the Three Cities are subject to licence arrangements with the individual suppliers and are subject to copyright. Requests for data should be addressed to the appropriate suppliers.

Dataset	Owner	Data Source/Supplier
BASE MAPPING		
6Cs sub-region boundary	6Cs Strategic GI Board	Sharon Jefferies, 6Cs Growth Point GI Development Co-ordinator Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
GI Network Boundaries	Indicative boundaries created by Chris Blandford Associates	Chris Blandford Associates
Meridian data - A Roads - County Council Region - District Council Region - Dula region (settlements) - Lake Region - Motorways - Rail Lines - Riverse	Ordnance Survey	Richard Venables Forestry Commission Operational Support Mapping and Geographic Information Unit Silvan House 231 Corstorphine Road Edinburgh EH12 7AT
BIODIVERSITY NETWORK MAPPING		
Sites of Special Scientific Interest (SSSIs)	Natural England	Brian Crumley Natural England Data Services Science Services Team Northminster House Peterborough PE1 1UA
National Nature Reserves	Natural England	See above
National Biodiversity Action Plan Priority Habitats	Natural England/Derbyshire Wildlife Trust	See above
Local Nature Reserves	Natural England	See above
Derbyshire Local Wildlife Sites (LWS)	Derbyshire Wildlife Trust	Derbyshire Wildlife Trust East Mill Bridgefoot Belper Derbyshire DE4 5EH
Nottinghamshire Local Wildlife Sites (LWS)	Nottinghamshire Biological Record Centre	Rob Johnson Natural History Museum Wollaton Park Nottingham Nottinghamshire NG8 2AE
Leicestershire Local Wildlife Sites (LWS)	Leicestershire Wildlife Trust	Leicestershire Environmental Resources Centre (LERC) Holly Hayes

Dataset	Owner	Data Source/Supplier
		216 Birstall Road Birstall Leicestershire LE4 4DG
Derbyshire Wildlife Trust Nature Reserves	Derbyshire Wildlife Trust	Ann Hall Conservation Technical Assistant Derbyshire Wildlife Trust East Mill Bridgefoot Belper Derbyshire DE56 1XH
Leicestershire Wildlife Trust Nature Reserves	Leicestershire and Rutland Wildlife Trust	Andy Lear Conservation Officer Leicestershire and Rutland Wildlife Trust Brocks Hill Environment Centre Washbrook Lane Oadby, LE2 5JJ
Nottinghamshire Wildlife Trust Nature Reserves	Nottinghamshire Wildlife Trust	Gary Craggs Conservation Administrator Conservation Policy and Planning Nottinghamshire Wildlife Trust The Old Ragged School Brook Street Nottingham, NG1 1EA
ACCESS PROVISION NETWORK MAPPING		
Access Land (includes Registered Common Land)	Natural England	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Derbyshire Rights of Way	Derbyshire County Council	Kerry Turner Derbyshire County Council
Derbyshire Promoted Routes	Derbyshire County Council	Wayne Bexton Greenways & Countryside Officer Derbyshire Countryside Service Derbyshire County Council County Hall Matlock DE4 3AG
Built and proposed Greenways in Derbyshire	Derbyshire County Council	Anna Chapman Derbyshire Countryside Service Derbyshire County Council County Hall Matlock DE4 3AG
Built Greenways in Derbyshire	Greenways shown as built but which are currently Sustrans routes and not built greenways, masked by Chris Blandford Associates	Chris Blandford Associates
Built Greenways outside of Derbyshire	Indicative Greenways digitised by Chris Blandford Associates	Chris Blandford Associates
Proposed Greenways (in and outside of Derbyshire)	Indicative Greenways digitised by Chris Blandford Associates	Chris Blandford Associates
Leicester City Rights of Way	Leicestershire County Council	Paul Standley Leicester City Council New Walk Centre, Welford Place Leicester LE1 6ZG

Dataset	Owner	Data Source/Supplier
Leicestershire Rights of Way	Leicestershire County Council	Edwin McWilliam Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
Leicestershire Long Distance Promoted Paths	Leicestershire County Council	Edwin McWilliam Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
Nottingham City Rights of Way	Nottingham City Council	Kieran Fitzsimmons GIS Analyst Geographical Information Services Environment and Regeneration Nottingham City Council Exchange Buildings Smithy Row Nottingham NG1 2BS
Nottinghamshire Rights of Way	Nottinghamshire County Council	See above
Nottinghamshire Promoted Routes	Nottinghamshire County Council	See above
The National Forest access map, woodland layer and boundary	The National Forest Company	Annette McGrath Research & Monitoring Officer National Forest Company Enterprise Glade Bath Yard, Moira, Swadlincote, DE12 6BA
Leicestershire Country Parks	Leicestershire County Council	Bill Carter Countryside Manager Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
Derbyshire Country Parks	Derbyshire County Council	Kerry Turner Derbyshire Countryside Service Derbyshire County Council County Hall Matlock DE4 3AG
Nottingham Green Estates	Nottinghamshire County Council	Gareth Austin Nottinghamshire County Council Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ
National Trust Land - 24 hr Open Access and Limited Access Land Datasets	National Trust	Mike Renow-Clarke The National Trust Heelis Kemble Drive Swindon SN2 2NA
Forestry Commission Woodland	Forestry Commission	Graham Bull Woodland Surveys Unit Biometrics, Surveys and Statistics Division Forest Research Northern Research Station Roslin Midlothian

Dataset	Owner	Data Source/Supplier
		EH25 9SY
		Scotland
National Inventory of	Forestry Commission	Forest Research
Woodland and Trees		Northern Research Station
(NIWT)		Roslin
		Midlothian
147 H 17 + 4	100	EH25 9SY
Woodland Trust Access	Woodland Trust	The Woodland Trust
Land		Autumn Park
		Dysart Road Grantham
		Lincolnshire
		NG31 6LL
Leicestershire National	Leicestershire County Council	Edwin McWilliam
Cycleway Network	zereestersime eeunty eeunen	Leicestershire County Council
, ,		County Hall (room 500)
		Glenfield
		LE3 8TE
Leicester City Cycle	Leicester City Council	Paul Standley
Routes		Leicester City Council
		New Walk Centre,
		Welford Place
N. d. I. C.		Leicester LE1 6ZG
Nottinghamshire Sustrans	Nottinghamshire County Council	Nottinghamshire County Council
		Trent Bridge House Fox Road
		West Bridgford
		Nottingham
		NG2 6BJ
Derbyshire Cycle Routes	Derbyshire County Council	Derbyshire County Council
Zerzystine dyele ridutes	Delayanine edunity edunen	County Hall
		Matlock
		DE4 3AG
Extent of Navigable River	British Waterways	British Waterways
ENVIRONMENTAL CHAR	ACTER AND LOCAL	
DISTINCTIVENESS MAPPI	NG	
Parks and Gardens of	English Heritage	Multi-Agency Geographic Information for
Historic Interest		the Countryside (www.magic.gov.uk)
Parks and Gardens of	North West Leicestershire District	Alison Booth
Historic Interest - North	Council	North West Leicestershire District Council
West Leicestershire		Council Offices,
PPG17 Open Space,		Coalville,
Sport and Recreation		LE67 3FJ.
Facilities Assessment		
Scheduled Monuments	English Heritage	See above
Derwent Valley Mills	English Heritage	Multi-Agency Geographic Information for
World Heritage Site		the Countryside (www.magic.gov.uk)
Listed Buildings	English Heritage	Multi-Agency Geographic Information for
D :: 1 C 11		the Countryside (www.magic.gov.uk)
Battlefields	English Heritage	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Conservation Areas -	Nottinghamshire County Council	Nottinghamshire County Council
Nottinghamshire	Nothing mainstille County Council	Trent Bridge House
1 Totalignamente		Fox Road
		West Bridgford
		Nottingham
		i Nouinghain

Dataset	Owner	Data Source/Supplier
Conservation Areas - Leicestershire	Leicestershire County Council	Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
Conservation Areas - Derbyshire	Derbyshire County Council	Derbyshire County Council County Hall Matlock DE4 3AG
High Level Environmental Stewardship Target Areas (indicative)	Natural England	Graham Murray Regional GIS Team Natural England East Midlands Block 6 & 7 Government Buildings Chalfont Drive Nottingham NG8 3SN
Derbyshire CC Landscape Character Types	Derbyshire County Council	Derbyshire County Council County Hall Matlock DE4 3AG
Nottinghamshire CC Landscape Character Types	Nottinghamshire County Council	Nottinghamshire County Council Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ
Leicestershire CC Landscape Character Areas	Leicestershire County Council	Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
ENVIRONMENTAL SYSTEM	AS AND NATURAL RESOURCES MAPPI	
Indicative Floodplain	Environment Agency	Environment Agency Sapphire East 550 Steetsbrook Road Solihull B91 1QT
PPG17 OPEN SPACE, SPO	RT & RECREATION AND GREEN WEDC	GES MAPPING
Amber Valley PPG17 Study – Assessing Needs and Opportunities	Amber Valley Borough Council	Sharon Thomas Amber Valley Borough Council Town Hall Market Place Ripley DE5 3BT
Derby City Council Public Open Spaces	Derby City Council	Nicky Goodyear Senior Planning Officer Regeneration and Community Department Derby City Council Roman House Friar Gate Derby DE1 1XB
Erewash Borough Council PPG17 Study	Erewash Borough Council	Adam Reddish Erewash Borough Council Policy and Development Section Directorate of Regeneration & Community Town Hall Ilkeston DE7 5RP

Dataset	Owner	Data Source/Supplier
North West Leicestershire	North West Leicestershire District	Alison Booth
PPG17 Open Space,	Council	North West Leicestershire District Council
Sport and Recreation		Council Offices,
Facilities Assessment		Coalville,
		LE67 3FJ.
South Derbyshire PPG17	South Derbyshire District Council	Duncan Fisher
Open Space, Sport and		South Derbyshire District Council
Recreation Assessment		Civic Offices
		Civic Way
		Swadlincote
		Derbyshire
		DE11 0AH
Derby City Council	Derby City Council	Nicky Goodyear
Green Wedges	, ,	Senior Planning Officer
		Regeneration and Community Department
		Derby City Council
		Roman House
		Friar Gate
		Derby
		DE1 1XB

APPENDIX A3

PPG17 OPEN SPACE DATASETS & OVERARCHING TYPOLOGY METHODOLOGY

PPG17 OPEN SPACE DATASETS AND OVERARCHING TYPOLOGY METHODOLOGY

It was agreed that the Stage 1 GI audit would be enhanced at Stage 2, using selected relevant additional data as appropriate. PPG17 Open Space studies, which categorise open space sites by type (such as allotments, parks and gardens and children's play spaces) were identified as key to providing datasets to enhance the Stage 1 work. **Figure 2.3** has been enhanced using relevant datasets/GIS shapefiles, where available, from such studies.

With regards to the Strategic GI Network for Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote, PPG17 Open Space studies and their datasets/GIS shapefiles were requested from the following local authorities:

- Amber Valley Borough Council;
- Derby City Council;
- Erewash Borough Council;
- · North West Leicestershire District Council; and
- South Derbyshire District Council.

Types chosen by individual local authorities to categorise their open space sites vary and are not all relevant to enhancing the GI networks for the Three Cities. It was thus necessary to define an overarching set of types, appropriate to enhancing the Stage 1 GI audit, in which to organise open space types provided. The Green Infrastructure Guide for the East Midlands⁴² describes green infrastructure assets as 'consisting of public and private assets, with and without public access in urban and rural locations, including:

- Allotments
- Amenity space, including communal green spaces within housing areas
- Green corridors and hedgerows, ditches, disused railways, verges
- Brownfield and Greenfield sites
- Urban parks and gardens
- · Registered commons and village town greens
- Children's play space
- Natural and semi-natural habitat for wildlife
- Playing fields
- Cemeteries
- Pocket parks
- Country parks
- Woodland
- Historic parks and gardens and historic landscapes
- Nature reserves
- Sites of Special Scientific Interest and Scheduled Monuments
- Locally designated heritage sites, including county wildlife sites
- Waterways and water bodies, including flooded quarries
- Development sites with potential for open space links
- · Land in agri-environment management
- Public rights of way, cycleways and other recreational routes'.

Based on the above and the GI typology proposed in Natural England's Green Infrastructure Guidance (2009), the following typology was used to categorise open space sites provided by individual local authorities. Definitions for individual open space types vary between PPG17 Open Space studies. The definition provided below for each open space type thus takes into account all definitions provided for the type in individual PPG17 Open Space studies (as shown in the following tables).

• Parks and Gardens – including urban parks, country parks, and formal gardens

-

⁴² The Green Infrastructure Guide for the East Midlands (East Midlands Green Infrastructure Network, 2008)

- Amenity greenspaces (most commonly but not exclusively in housing areas) including informal recreation spaces, housing green spaces, village greens, urban commons, green roofs, and other incidental space
- Natural and semi-natural greenspaces including woodland and scrub, grassland (e.g. downland and meadow), heath and moor, wetlands, open and running water, wasteland and disturbed ground, bare rock habitats (e.g. cliffs and quarries)
- **Green Corridors** including rivers and canal banks, road and rail corridors, cycling routes, pedestrian paths, and rights of way
- Cemeteries and Churchyards
- Allotments
- Children's Play Space including play and youth facility areas such as equipped playgrounds, youth shelters, BMX and skateboard parks, ball courts, Multi-Use Games Areas, and other more informal areas
- Outdoor Sports Facilities including natural and artificial surfaces used for sports and recreation. Examples include recreational grounds, sports pitches, school and other institutional playing fields athletic tracks, bowling greens, tennis courts, golf courses, and other outdoor sports area.

PARKS AND GARDENS	Definition – as described in individual PPG17 Open Space Studies
Amber Valley	Accessible, high quality opportunities for informal recreation and community events - including urban parks, country parks and formal gardens.
Ashfield	Town parks - Large areas of urban green space designed and managed for public enjoyment, providing a range of landscape elements, recreational opportunities and facilities. Main focal green spaces for towns or large neighbourhoods.
	Formal gardens - Areas of historic designed green space combining a variety of landscape and horticultural elements. Usually associated with historic buildings or estates rather than urban residential environments. May have restricted access.
Blaby	For the purpose of this study all sites including recreation grounds, parks, and formal gardens have been placed under a single classification called Parks, Gardens and Recreation Grounds. They take on many forms, and may embrace a wide range of functions, including:
	Informal recreation and outdoor sport.
	Play space of many kinds (including for sport and children's play).
	Providing attractive walks to work.
	Offering landscape and amenity features.
	Areas of formal planting.
	Providing areas for 'events'.
	Providing habitats for wildlife.
Broxtowe	Accessible, high quality opportunities for informal recreation and community events - including urban parks, country parks and
	formal gardens.
Charnwood	PPG17 in progress
Derby City	PPG17 in progress
Erewash	Parks are essentially local provision to be accessed fairly spontaneously, and on foot, so there is an expectation that they should be sufficiently local to allow this.
Gedling	Accessible, high quality opportunities for informal recreation and community events - including urban parks, country parks and formal gardens.
Harborough	This type of open space includes urban parks, formal gardens and country parks that provide opportunities for various informal recreation and community events.
Hinckley and Bosworth	Accessible, high quality opportunities for informal recreation and community events - including urban parks, country parks and formal gardens.
Leicester City	Public parks and gardens take on many forms, and may embrace a wide range of functions, including:
	Informal recreation and outdoor sport

	Play space of many kinds (including for sport and children's play)	
	Providing attractive walks to work	
	Offering landscape and amenity features	
	Providing areas for 'events'	
	Providing habitats for wildlife.	
	Parks are more than simply recreational space- they are a composition of features the combined value of which might be seen as greater than that of the constituent parts.	
Melton	Accessible, high quality opportunities for informal recreation and community events - including urban parks, country parks and formal gardens.	
North West Leicestershire	The decision where to place parks and open spaces is based on factors such as the scale of the site, its function, its location and the facilities that are available.	
Nottingham City	Accessible, high quality opportunities for informal recreation and community events.	
Oadby and Wigston	For the purpose of this study all sites including recreation grounds, parks, and formal gardens have been placed under a single classification called Parks and Recreation Grounds. They take on many forms, and may embrace a wide range of functions, including:	
	• Informal recreation and outdoor sport.	
	Play space of many kinds (including for sport and children's play).	
	Providing attractive walks to work.	
	Offering landscape and amenity features.	
	Areas of formal planting.	
	• Providing areas for 'events'.	
	Providing habitats for wildlife.	
Rushcliffe	No definition in the part of the report which we hold.	
South Derbyshire	Accessible, high quality opportunities for informal recreation and community events - including urban parks, country parks and formal gardens.	

AMENITY GREEN SPACE	Definition
Amber Valley	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
·	(most commonly, but not exclusively in housing areas) including informal recreation spaces, greenspaces in and around housing,
	domestic gardens and village greens.
Ashfield (neighbourhood	Recreation Grounds - spaces providing some formal recreational opportunities (a football pitch and sometimes a playground) and
greenspaces)	limited landscape elements.

	Local small green spaces- small green spaces providing opportunities for informal or passive recreation close to home or work. Semi-private space - spaces which are publicly accessible, but physically associated with adjacent buildings. Includes green space around flats.
	Incidental green space - green space providing limited recreational opportunities due to size or lack of facilities, but offering a visual break in a built up area. Includes, for example, large verges.
Blaby (informal open space)	The category is considered to include those spaces open to free and spontaneous use by the public, but neither laid out nor managed for a specific function such as a park, public playing field or recreation ground; nor managed as a natural or seminatural habitat. These areas of open space will be of varied size, but are likely to share the following characteristics:
	Unlikely to be physically demarcated by walls or fences.
	Predominantly lain down to (mown) grass.
	Unlikely to have identifiable entrance points (unlike parks).
	• Unlikely to have planted flower beds or other formal planted layouts, although they may have shrub and tree planting.
	• Generally no other recreational facilities and fixtures (such as play equipment or ball courts), although there may be items such as litter bins and benches.
	Examples might include both small and larger informal grassed areas in housing estates and general recreation spaces. They can serve a variety of functions dependent on their size, shape, location and topography. Some may be used for informal recreation activities, whilst others by themselves, or else collectively, contribute to the overall visual amenity of an area.
Broxtowe	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas. Including amenity spaces, verges and roundabouts.
Charnwood	PPG17 in progress.
Derby City	PPG17 in progress.
Erewash	This is informal space in urban areas, normally in or around housing developments, that can help to create a more attractive townscape and that is often used for play and other recreation.
Gedling	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
	(most commonly, but not exclusively in housing areas) including informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens.
Harborough	This type of open space is most commonly found in housing areas. It includes informal recreation spaces and greenspaces in and around housing with its primary purpose to provide opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
Hinckley and Bosworth	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
Timesicy and boswords	(most commonly, but not exclusively in housing areas) including informal recreation spaces, greenspaces in and around housing,

	domestic gardens and village greens.
Leicester City	It is quite difficult to offer a practical definition of Informal Green Space/Amenity green space compared with other types of open space covered by this study. The category is considered to include those spaces open to free and spontaneous use by the public, but neither laid out and or managed for a specific function such as a park, public playing field or recreation ground; nor managed as a natural or semi-natural habitat. These areas of open space will be of varied size, but are likely to share the following characteristics:
	Unlikely to be physically demarcated by walls or fences.
	Predominantly laid out to mown grass.
	Unlikely to have identifiable entrance points (unlike parks).
	 Unlikely to have planted flower beds or other formal planted layouts, although they may have shrub and tree planting. Generally no other recreational facilities and fixtures (such as play equipment or ball courts), although there may be items such as litter bins and benches.
	Examples might include both small and larger informal grassed areas in housing estates and general recreation spaces. They can serve a variety of functions dependent on their size, shape, location and topography. Some may be used for informal recreation activities, whilst others by themselves, or else collectively, contribute to the overall visual amenity of an area. However, as a general rule such spaces will not include highway verges and other incidental open space that does not fall within the definition of recreational open space contained within Section 1. The exception to this the above 'working' definition of Informal Green Space is through the inclusion of churchyards within this heading which, apart from their primary purpose, do serve an important visual and amenity function.
Melton	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
	(most commonly, but not exclusively in housing areas) including informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens.
North West Leicestershire	Not included.
Nottingham City	Supplementary open greenspace that enhances the appearance of the City
Oadby and Wigston	The category is considered to include those spaces open to free and spontaneous use by the public, but neither laid out nor managed for a specific function such as a park, public playing field or recreation ground; nor managed as a natural or seminatural habitat. These areas of open space will be of varied size, but are likely to share the following characteristics:
	Unlikely to be physically demarcated by walls or fences.
	• Predominantly lain down to (mown) grass.
	Unlikely to have identifiable entrance points (unlike parks).
	 Unlikely to have planted flower beds or other formal planted layouts, although they may have shrub and tree planting. Generally no other recreational facilities and fixtures (such as play equipment or ball courts), although there may be items such

	as litter bins and benches.
	Examples might include both small and larger informal grassed areas in housing estates and general recreation spaces. They can serve a variety of functions dependent on their size, shape, location and topography. Some may be used for informal recreation activities, whilst others by themselves, or else collectively, contribute to the overall visual amenity of an area
Rushcliffe	No definition in the part of the report which we hold.
South Derbyshire	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
	(most commonly, but not exclusively in housing areas) including informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens.

NATURAL/SEMI-NATURAL	Definition				
Amber Valley	Natural and semi natural greenspaces, including urban woodland.				
Ashfield (sub groups shown separately)	Country parks - Areas of managed semi-natural green space which combine ecological habitats with opportunities for passive recreation and a range of public facilities (such as visitor centres, cafes and toilets)				
	Informal woodland - Areas of accessible woodland with opportunities for passive recreation but limited or no facilities.				
	Other natural and semi natural spaces - Areas of green space with a predominantly natural characteristic and incorporating a variety of potential ecological habitats. Includes areas of grassland and wetland. Provide opportunities for passive recreation but limited facilities.				
	Restored landscapes - Areas of formerly industrial land being restored to a semi-natural state. Commonly take the form of planted spoil heaps creating a distinctive landscape feature defined by the relief of the land. As sites mature, they will tend to become informal woodland or country parks.				
	Reservoirs - Spaces dominated by large water bodies, but providing accessible semi-natural green space at its margins.				
Blaby	For the purpose of this study (Accessible) Natural Green Space covers a variety of spaces including meadows, river floodplain, woodland and copse all of which share a trait of having natural characteristics and wildlife value, but which are also open to public use and enjoyment.				
	Some sites will have statutory rights or permissive codes allowing the public to wander in these sites. Others may have defined Rights of Way or permissive routes running through them. For the remainder of sites there may be some access on a managed basis. Although many natural spaces may not be 'accessible' in the sense that they cannot be entered and used by the general				

	community, they can be appreciated from a distance, and contribute to visual amenity. Natural Greenspace with limited public
	access (e.g. RSPB reserves) have been mapped where known.
Broxtowe	Wildlife conservation, bio-diversity and environmental education and awareness. Includes:
	• Grassland
	Tree Planted Areas
	• Woodlands
	• Wetlands
	• Scrubland
	Rivers, Canals and Waterways
	• Green Corridors
Charnwood	PPG17 in progress.
Derby City	PPG17 in progress.
Erewash	The study is confined to those spaces that are accessible to the public. They serve not only as habitats for plants and animals but can also provide leisure and play opportunities. Several of these spaces are protected by formal designation.
Gedling	Wildlife conservation, biodiversity and environmental education and awareness - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
Harborough	This type of open space includes woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons, meadows), wetlands, open and running water, nature reserves and wastelands with a primary purpose of wildlife conservation and bio-diversity.
Hinckley and Bosworth	Wildlife conservation, biodiversity and environmental education and awareness - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
Leicester City (ANG)	For the purpose of this study Accessible Natural Green Space covers a variety of spaces including meadows, river floodplain, woodland, copse all of which share a trait of being managed primarily for wildlife value but which are also open to public use and enjoyment.
	Many of the Natural Green Spaces are within parks, cemeteries, or other types of open space, and in these cases Natural Green Space is listed as a secondary type in the tables within the ward profiles.
Melton	Wildlife conservation, biodiversity and environmental education and awareness - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
North West Leicestershire	Not included.
Nottingham City	Sites for wildlife conservation, biodiversity, environmental education and awareness
Oadby and Wigston	For the purpose of this study (Accessible) Natural Green Space covers a variety of spaces including meadows, river floodplain, woodland and copse all of which share a trait of having natural characteristics and wildlife value, but which are also open to

	public use and enjoyment.				
	Some sites will have statutory rights or permissive codes allowing the public to wander in these sites. Others may have defined Rights of Way or permissive routes running through them. For the remainder of sites there may be some access on a managed basis. Although many natural spaces may not be 'accessible' in the sense that they cannot be entered and used by the general community, they can be appreciated from a distance, and contribute to visual amenity. Natural Greenspace with limited public access (e.g. RSPB reserves) have been mapped where known.				
Rushcliffe	No definition in the part of the report which we hold.				
South Derbyshire	Previous studies have assessed green corridors and semi natural greenspaces. These typologies have, therefore, not been covered				
	in this report.				

GREEN CORRIDORS	Definition
Amber Valley	Walking, cycling or horse riding, whether for leisure purposes or travel - including river and canal banks, cycleways, and rights of way
Ashfield (green routes)	Walking or cycling routes - linear green spaces providing surfaced paths for walking and/or cycling, but limited open space for other activities.
	River corridors - Linear green spaces forming the margins of a river or canal.
Blaby	Not included.
Broxtowe	Not included.
Charnwood	PPG17 in progress.
Derby City	PPG17 in progress.
Erewash	Not included.
Gedling	Walking, cycling or horse riding, whether for leisure purposes or travel - including river and canal banks, cycleways, and rights of way.
Harborough	This open space type includes towpaths along canals and riverbanks, cycleways, rights of way and disused railway lines with the primary purpose to provide opportunities for walking, cycling and horse riding whether for leisure purposes or travel and opportunities for wildlife migration.
Hinckley and Bosworth	Walking, cycling or horse riding, whether for leisure purposes or travel - including river and canal banks, cycleways, and rights of way.
Leicester City	The main links are essentially a combination of open space identified as Natural and Semi Natural Green Space, and Parks. Walking and cycling are continually identified by national surveys as major recreation activities in their own right, but are also endemic to everyday 'healthy living' (such as walking or cycling to work, the shops, or school). As activities they should be encouraged as a means of making both recreation and utility trips. Green recreational corridors will also include:

	The local public Rights of Way network					
	Promoted long distance footpaths and cycleways					
	• Permissive routes.					
	It is also recognised that some of these routes (especially in urban areas) will also serve as utility routes and can also be of significant ecological value. Links between City and countryside are important for accessing the wider rights of way network and quiet lanes, and can help to reduce car usage.					
Melton	Walking, cycling or horse riding, whether for leisure purposes or travel - including river and canal banks, cycleways, and rights of					
	way.					
North West Leicestershire	Not included					
Nottingham City	Not included.					
Oadby and Wigston	Not included.					
Rushcliffe	No definition in the part of the report which we hold.					
South Derbyshire	Previous studies have assessed green corridors and semi natural greenspaces. These typologies have, therefore, not been covered					
	in this report.					

Allotments - This includes all forms of allotments with a primary purpose to provide opportunities for people to grow their own produce as part of the long-term promotion of sustainability, health and social inclusion. This type of open space may also include urban farms and community gardens.

Cemeteries and Churchyards - Cemeteries, disused churchyards and other burial grounds.

Children's Play Space – including play and youth facility areas such as equipped playgrounds, youth shelters, BMX and skateboard parks, ball courts, Multi-Use Games Areas, and other more informal areas.

Outdoor Sports Facilities – including natural and artificial surfaces used for sports and recreation. Examples include recreational grounds, sports pitches, school and other institutional playing fields athletic tracks, bowling greens, tennis courts, golf courses, and other outdoor sports area.

Datasets/GIS shapefiles received from individual local authorities are provided in the following tables. Information is also provided regarding whether the data was used, if not the reason for not using it, and the type it was categorised into within the overarching typology.

As Derby City Council's PPG17 Open Space Study is currently being developed, a dataset/GIS Shapefiles named Public Open Spaces was provided by Derby City Council to represent their open space provision.

Amber Valley Borough Council				
Data received	Used/Not used	Justification	Туре	
Cemetery Churchyard	Used	N/A	Cemeteries and churchyards	
Highways Verge DCC	Used	N/A	Amenity Greenspace	
Highways Verge S42	Used	N/A	Amenity Greenspace	
Play Sports Facility Private	Used	N/A	Outdoor Sports Facilities	
RIGS	Used	N/A	Natural & Semi-Natural greenspaces	
Wild406	Not used	Could not be used as drawn as lines and not polygons	N/A	
It is unclear what the following shapefiles contain: LEISFAC!LC4, Informal POS_AVBC	Not used	N/A	N/A	

Derbyshire City Council			
Data received	Used/Not used	Justification for not using it	Туре
Public Open Spaces	Used	N/A	Shown separately on Figure 2.3 under Public Open Spaces in Derby City

Erewash Borough Council			
Data received	Used/Not used	Justification	Туре
Bowling	Used	N/A	Outdoor Sports Facilities
Gold Clubs	Used	N/A	Outdoor Sports Facilities
MUGAs	Used	N/A	Children's' Play Space
Play Area	Used	N/A	Children's' Play Space
Synthetic Pitches	Not Used	Not included because of its artificial surface	N/A
Tennis	Used	N/A	Outdoor Sports Facilities
Green Corridor	Used	N/A	Green corridors
Allotment Asoc Managed	Used	N/A	Allotment
Allotment Council Owned	Used	N/A	Allotment
Cemeteries	Used	N/A	Cemeteries and Churchyards
Parks	Used	N/A	Parks and Gardens
Pitches	Used	N/A	Outdoor Sports Facilities
Wild406	Not Used	Could not be used as drawn as lines and not polygons	N/A

North West Leicestershire District Council				
Data received	Used/Not used	Justification	Туре	
Wild406	Not used	Could not be used as	N/A	

		drawn as lines and not		
		polygons		
Green Wedge	Used	N/A	Green Wedge	
Historic Gardens	Used	N/A	Parks and Gardens	
Allotments and Cemeteries	Used	N/A	Cemeteries and	
			Churchyards (attributes	
			show that all sites in this	
			category are cemeteries)	
Children's Play Area	Used	N/A	Children's' Play Space	
Common	Not used	Attributes show that this	N/A	
		site is not part of the		
		typology of GI assets		
District Park	Used	N/A	Parks and Gardens	
Informal Countryside	2 Sites Used	Lack of attributes for	Parks and Gardens	
		some sites do not allow		
		us to categorise them		
Local Open Space	Some sites	Lack of attributes for	2 sites - Parks and	
	used	some sites do not allow us to categorise them	Gardens	
		3	16 sites - Outdoor Sports	
			Facilities	
			4 sites - Children's Play	
			Space	
Recreation Ground	Used	N/A	Outdoor Sports Facilities	
Schools	Used	N/A	Outdoor Sports Facilities	
The following shapefiles are	Not used	N/A	N/A	
not the right format: Area C				
Coalville-Ravenstone,				
l14_bo~4				

South Derbyshire District Council					
Data received	Used/Not used	Justification for not using it	Туре		
Wild406	Not used	Could not be used as drawn as lines and not polygons	N/A		
Allotments	Used	N/A	Allotment		
Amenity Greenspace	Used	N/A	Amenity Greenspace		
Cemeteries	Used	N/A	Cemeteries and churchyards		
Children's Play Areas	Used	N/A	Children's' Play Space		
Civic Spaces	Not used	Not part of the typology N/A of GI assets			
Outdoor Sports Facilities	Used	N/A	Outdoor Sports Facilities		
Parks and Gardens	Used	N/A	Parks and Gardens		
Semi/Natural Greenspaces	Used	N/A	Natural & Semi-Natural greenspaces		

APPENDIX A4 DERBYSHIRE LANDSCAPE CHARACTER GUIDANCE WITHIN THE STUDY AREA

DERBYSHIRE LANDSCAPE CHARACTER GUIDANCE WITHIN THE STUDY AREA

Landscape is a fundamental GI asset and the landscape character types defined by the Derbyshire Landscape Character Type descriptions form strategic baseline information for the Study Area. The planting and management guidelines below can be used to inform the delivery of GI by the conservation enhancement, and management of existing landscape and habitat assets or the creation of new ones. It should be noted that woodland and tree cover is just one aspect of landscape character.

Below is a summary table of the National Character Areas which fall within the Study Area (see Figure 1) and their relative subdivisions into County Landscape Character Types by Derbyshire County Council. Reference numbers can be cross-referenced to Figure 2.4 within the main report. Full strategies for each landscape character type are presented in "The Landscape Character of Derbyshire" published by Derbyshire County Council (2003). This report can be downloaded on:

http://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/default.asp.

National Character Area	Reference	County Landscape Types
Notts, Derbys and Yorks Coalfield	D11	Plateau Estate Farmlands
Melbourne Parklands	D13	Sandstone Slopes & Heaths
	D9	Estate Farmlands
	D16	Wooded Estatelands
Mease Sence Lowlands	D17	Village Estatelands
Derbys Peak Fringe & Lower Derwent	D6	Riverside Meadows
	D2	Wooded Slopes & Valleys
Leicestershire & S Derbys Coalfield	D8	Coalfield Village Farmlands
Trent Valley Washlands	D14	Lowland Village Farmlands
	D15	Wet Pasture Meadows
	D6	Riverside Meadows
Needwood & S Derbys Claylands	D13	Sandstone Slopes & Heaths
	D5	Settled Farmlands
	D9	Estate Farmlands
	D6	Riverside Meadows

Planting and Management Guidelines for Landscape Character Types within the Study Area.

Below are planting and management guidelines extracts for each landscape character type which falls within the Study Area, taken from "The Landscape Character of Derbyshire" published by Derbyshire County Council (2003).

These provide baseline information on tree and woodland character at a strategic level but also provide guidance for more detailed GI work, such as management or new planting, and can be read in tandem with the BAP woodland targets (see **Appendix A6**). It should be noted that specific site conditions and requirements will apply to any detailed GI work.

Nottingham, South Derbyshire & Yorkshire Coalfield Plateau Estate Farmlands D11

An upstanding plateau of thinly scattered small plantations and coverts with scattered hedgerow and watercourse trees, and localised amenity trees.

Primary woodland character: Thinly scattered small plantations

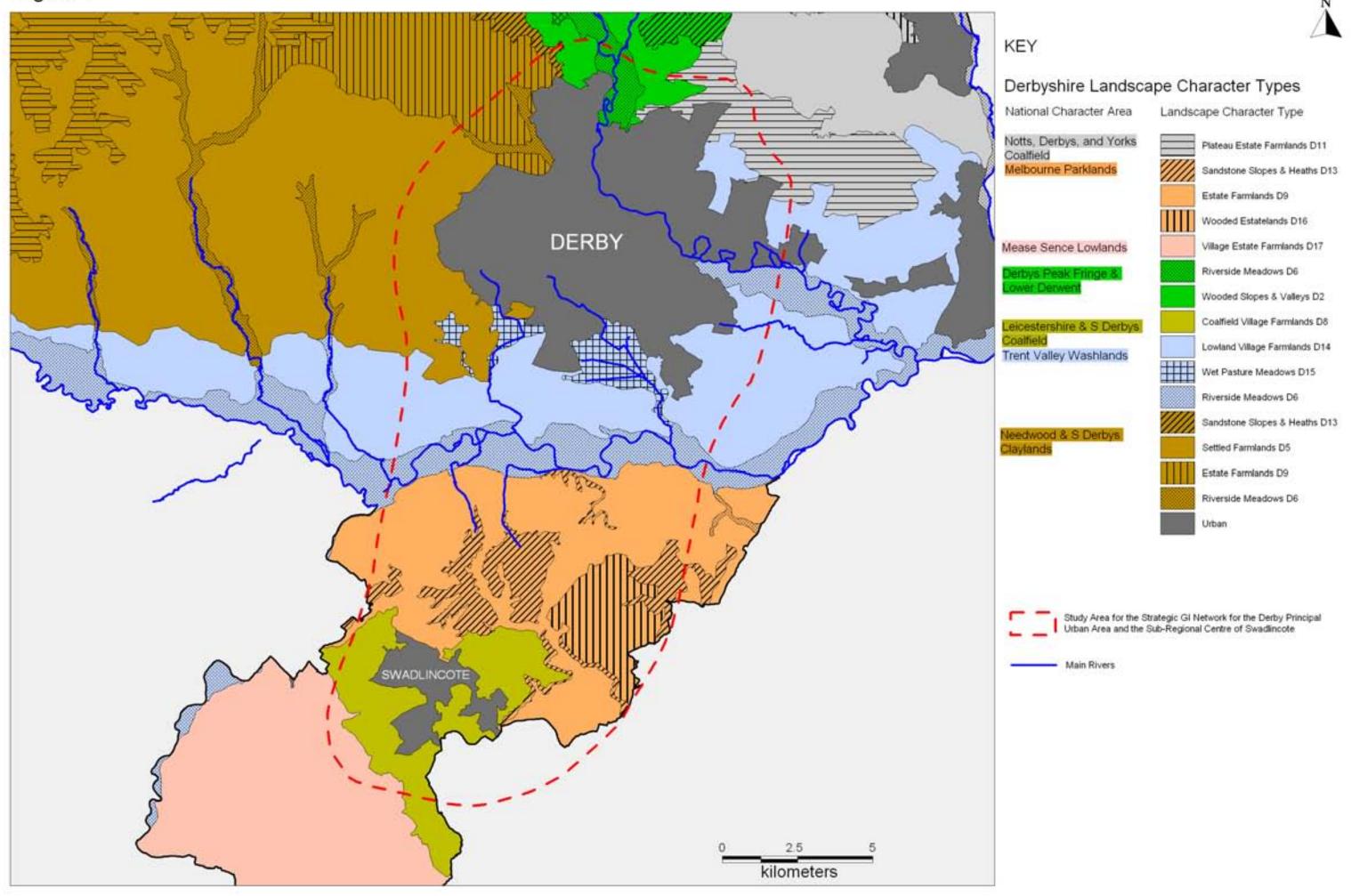
Primary tree character: Thinly scattered hedgerow trees, scattered watercourse trees and localised amenity tree groups.

Woodland vision: Thinly scattered small plantations

Tree vision: Thinly scattered hedgerow trees, scattered watercourse trees and localised amenity tree groups.

Typical woodland size range: 0.5 - 5 ha small **Woodland pattern:** Regular plantations

Figure 1



- Small scale woodland planting
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees through selection and natural regeneration, or by planting.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Conserve and renew ornamental plantations and individual parkland trees. Ensure the conservation and management of mature/veteran trees within hedgerows

Melbourne Parklands

Sandstone Slopes and Heaths D13

Moderate to steeply sloping pastoral landscape with scattered linear plantations and hedgerow trees.

Part of this landscape character type lies within The National Forest.

Primary woodland character: Densely scattered small woodlands

Primary tree character: Thinly scattered hedgerow trees and dense watercourse trees.

Woodland vision

(Outside The National Forest): Densely scattered small woodlands.

Note approximately 75% of this area is within The National Forest. Where appropriate refer to The National Forest Strategy and Guidance.

Tree vision: Thinly scattered hedgerow and dense watercourse trees.

Typical woodland size range: 0.5 - 10 ha small

Woodland pattern: Organic / linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- National Forest Strategy and Guidance applies for the area within The National Forest.

Melbourne Parklands

Estate Farmlands D9

Gently rolling, lowland, mixed farming landscape with scattered small estate plantations, scattered hedgerow trees and dense watercourse trees.

Part of this landscape character type lies within The National Forest.

Primary woodland character: Thinly scattered small plantations

Primary tree character: Thinly scattered hedgerow trees, dense watercourse trees and localised amenity tree groups.

Woodland vision

(Outside The National Forest): Thinly scattered small plantations. Note 40% of this area is within The National Forest. Where appropriate refer to The National Forest Strategy and Guidance.

Tree vision: Thinly scattered hedgerow trees, dense watercourse trees and localised amenity tree groups.

Typical woodland size range: 0.5 - 10 ha small

Woodland pattern: Regular plantations

- Small scale woodland planting
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Conserve and renew ornamental plantations and individual parkland trees.
- National Forest Guidelines apply for the area within The National Forest.

Melbourne Parklands

Wooded Estatelands D16

A well wooded estate landscape of densely scattered small plantations with dense hedgerow and watercourse trees, and localised amenity tree groups including parkland trees.

All of this landscape character type lies within The National Forest.

Primary woodland character: Densely scattered small plantations.

Primary tree character: Densely scattered hedgerow and dense watercourse trees and localised amenity tree groups.

Woodland vision: Refer to The National Forest Strategy and Guidance.

Tree vision: Densely scattered hedgerow and dense watercourse trees and localised amenity tree groups.

Typical woodland size range: Refer to The National Forest Strategy and Guidance

Woodland pattern: Refer to The National Forest Strategy and Guidance

- Conserve and restore all ancient woodland sites and restock with locally occurring native species.
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees through selection and natural regeneration, or by planting.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Conserve and renew ornamental plantations and individual parkland trees.
- Ensure the conservation and management of mature/veteran trees within hedgerows.
- Refer to National Forest Strategy and Guidance

Mease Sence Lowlands

Village Estate Farmlands D17

Gently rolling agricultural landscape punctuated by thinly scattered small plantations with dense watercourse trees.

All of this landscape character type is within The National Forest.

Primary woodland character: Thinly scattered small plantations

Primary tree character: Thinly scattered hedgerow and dense watercourse trees

Woodland vision: Refer to The National Forest Strategy and Guidance **Tree vision:** Thinly scattered hedgerow and dense watercourse trees

Typical woodland size range: Refer to The National Forest Strategy and Guidance

Woodland pattern: Refer to The National Forest Strategy and Guidance

- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Conserve and renew ornamental plantations and individual parkland trees.
- Refer to National Forest Strategy and Guidance

Derbyshire Peak Fringe & Lower Derwent

Wooded Slopes and Valleys D2

A rising, undulating landscape with many semi-natural woodlands, some of ancient origin, along steep slopes and valley sides with densely scattered hedgerow and watercourse trees.

Primary woodland character: Densely scattered small-medium woodlands.

Primary tree character: Densely scattered hedgerow and dense watercourse trees.

Woodland vision: Widespread small-medium woodlands

Tree vision: Densely scattered hedgerow and dense watercourse trees.

Typical woodland size range: 0.5 - 15 ha small-medium

Woodland pattern: Organic

- Small-medium scale woodland planting
- Conserve and restore all ancient woodland sites and restock with locally occurring native species.
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees through selection and natural regeneration, or by planting.
- Encourage the management of scrub and secondary woodland to link with existing habitats and woodland.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Where opportunities arise the removal of coniferous plantation woodland should be encouraged.
- Ensure the conservation and management of mature/veteran trees within hedgerows.

Derbyshire Peak Fringe & Lower Derwent Riverside Meadows D6

An open floodplain with dense watercourse trees.

Primary woodland character: Unwooded

Primary tree character: Thinly scattered hedgerow and dense watercourse trees.

Woodland vision: Occasional small wet woodlands

Tree vision: Thinly scattered hedgerow and dense watercourse trees.

Typical woodland size range: 0.5 - 5ha small

Woodland pattern: Organic/ linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.

Leicestershire & South Derbyshire Coalfield Coalfield Village Farmlands D8

An urbanised landscape punctuated by the very occasional small organic woodland with thinly scattered hedgerow and watercourse trees.

All of this landscape character type is within The National Forest.

Primary woodland character: Thinly scattered small woodlands

Primary tree character: Thinly scattered hedgerow and dense watercourse trees.

Woodland vision: Refer to National Forest Strategy and Guidance **Tree vision:** Densely scattered hedgerow and dense watercourse trees

Typical woodland size range: Refer to National Forest Strategy and Guidance

Woodland pattern: Refer to National Forest Strategy and Guidance

- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees through selection and natural regeneration, or by planting.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Ensure the conservation and management of mature/veteran trees within hedgerows.
- Refer to National Forest Strategy and Guidance.

Trent Valley Washlands

Lowland Village Farmlands D14

Open, mixed farming landscape with thinly scattered plantations and hedgerow trees.

Primary woodland character: Thinly scattered small plantations

Primary tree character: Thinly scattered hedgerow trees **Woodland vision:** Thinly scattered small plantations **Tree vision:** Thinly scattered hedgerow trees

Typical woodland size range: 0.5 - 10ha small **Woodland pattern:** Regular plantations

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.
- Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.

Trent Valley Washlands

Wet Pasture Meadows D15

Low lying, almost flat, mixed farming landscape with thinly scattered hedgerow and watercourse trees but no woodland.

Primary woodland character: Unwooded

Primary tree character: Thinly scattered hedgerow trees and scattered watercourse trees.

Woodland vision: Occasional small wet woodlands

Tree vision: Thinly scattered hedgerow trees and scattered watercourse trees.

Typical woodland size range: 0.5 - 10 ha small

Woodland pattern: Regular

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.

Trent Valley Washlands

Riverside Meadows D15

A broad, open floodplain with scattered hedgerow and watercourse trees.

Primary woodland character: Unwooded

Primary tree character: Thinly scattered hedgerow trees and dense watercourse trees.

Woodland vision: Occasional wet woodlands.

Tree vision: Thinly scattered hedgerow trees and dense watercourse trees.

Typical woodland size range: 0.5 - 5 ha small

Woodland pattern: Organic / linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.

• Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.

Needwood and South Derbyshire Claylands Sandstone Slopes and Heaths D13

Moderate to steeply undulating pastoral landscape with thinly scattered plantations and hedgerow trees

Primary woodland character: Thinly scattered small broadleaved plantations.

Primary tree character: Thinly scattered hedgerow trees.

Woodland vision: Thinly scattered small broadleaved plantations.

Tree vision: Thinly scattered hedgerow trees. **Typical woodland size range:** 0.5 - 10 ha small

Woodland pattern: Regular plantations

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value

Needwood and South Derbyshire Claylands

Estate Farmlands D9

A gently rolling mixed farming landscape with densely scattered small estate plantations, hedgerow trees and watercourse trees.

Primary woodland character: Densely scattered small mainly broadleaved plantations. **Primary tree character:** Densely scattered hedgerow and dense watercourse trees. **Woodland vision:** Densely scattered small mainly broadleaved plantations.

Tree vision: Densely scattered hedgerow and dense watercourse trees.

Typical woodland size range: 0.5 - 10ha small

Woodland pattern: Regular plantations

- Small-medium scale woodland planting
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.

Needwood and South Derbyshire Claylands

Riverside Meadows D6

2010

An open floodplain with dense watercourse trees.

Primary woodland character: Unwooded

Primary tree character: Dense watercourse trees **Woodland vision:** Occasional small wet woodlands

Tree vision: Dense watercourse trees **Typical woodland size range:** 0.5 - 5 ha **Woodland pattern:** Organic / linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character.

APPENDIX A5 DERBYSHIRE HISTORIC LANDSCAPE & STRATEGIC GI OPPORTUNITY AREAS

DERBYSHIRE HISTORIC LANDSCAPE & STRATEGIC GI OPPORTUNITY AREAS

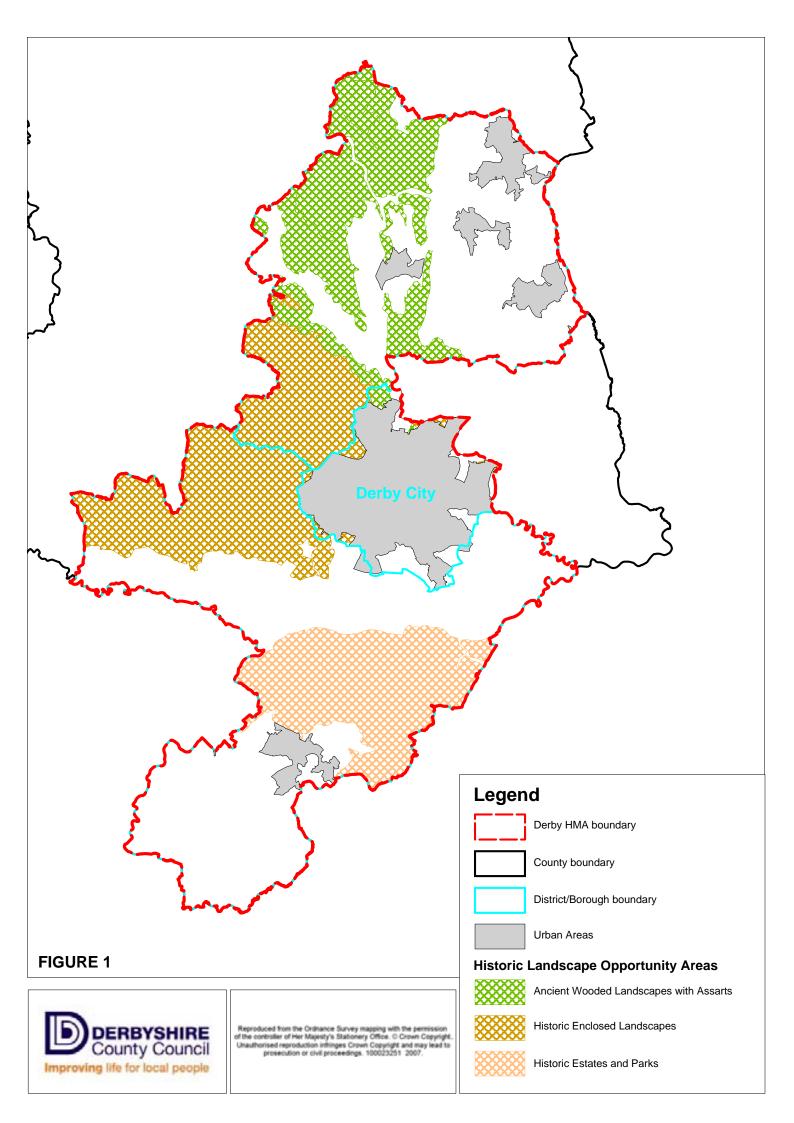
Derbyshire County Council has developed an approach for identifying strategic opportunities for GI based on analysis of historic landscape character and biodiversity assets.

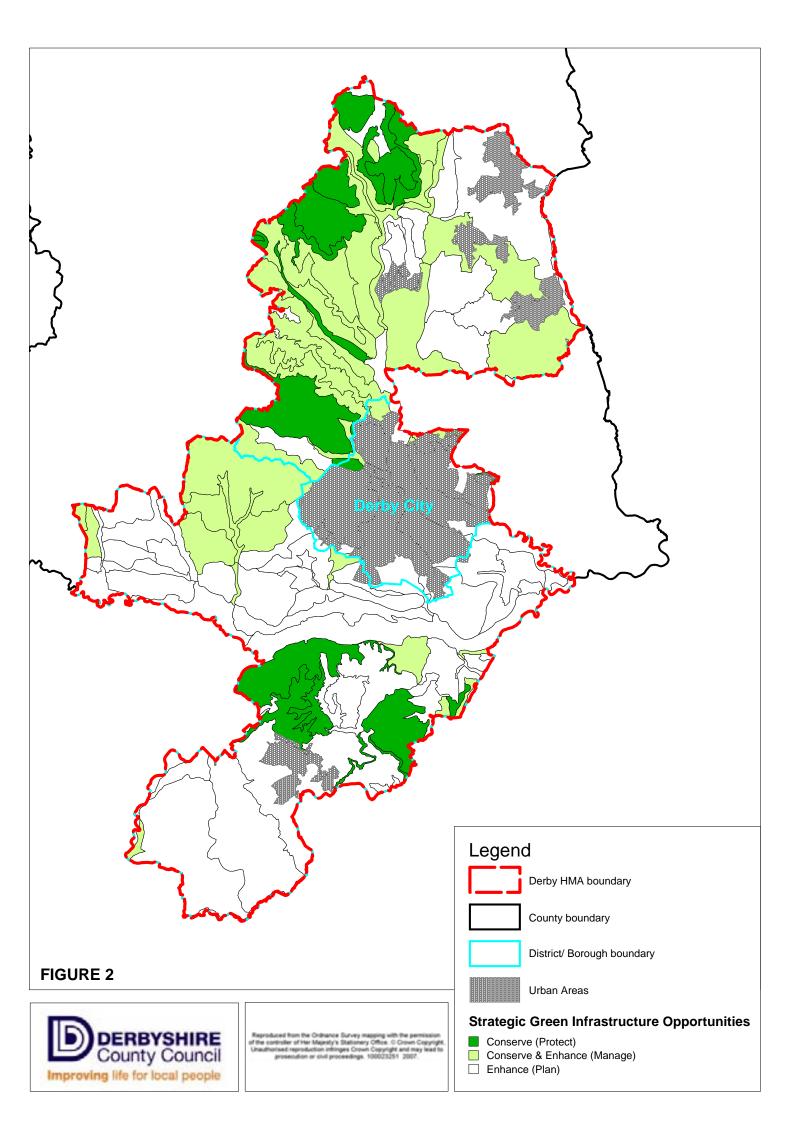
The following figures provided by Derbyshire County Council have:

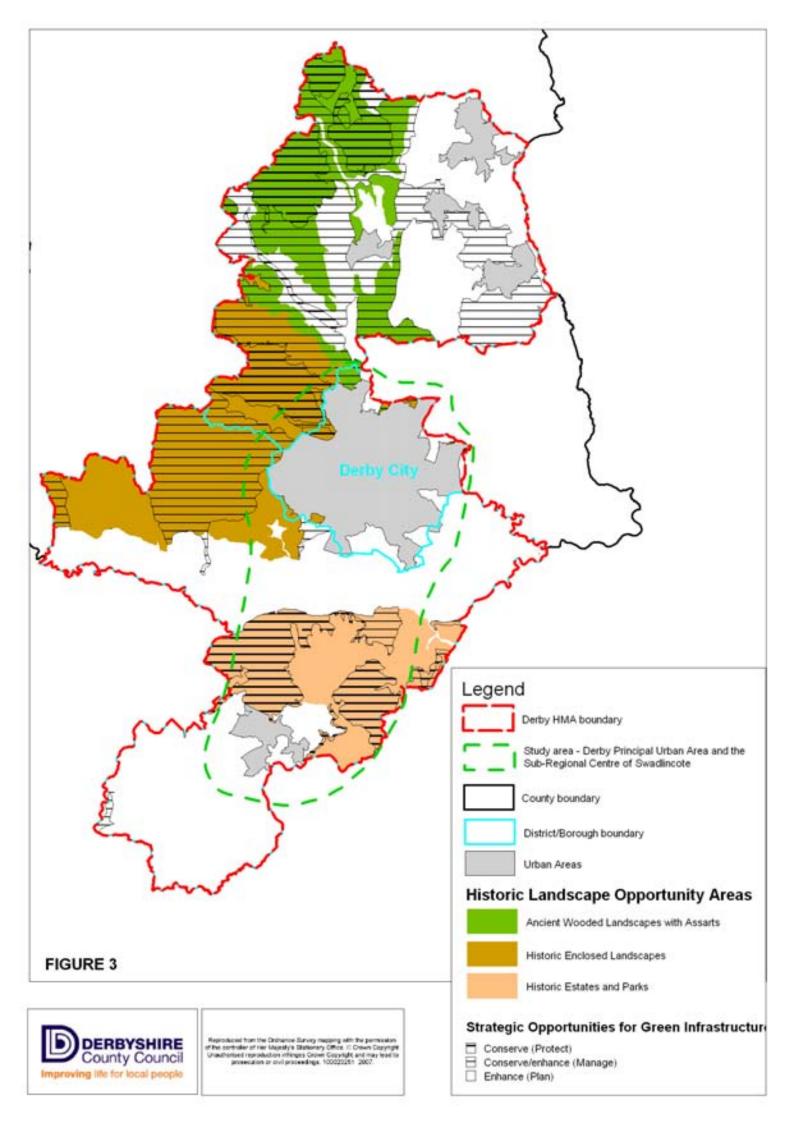
- Evaluated historic landscape character data, which has identified distinct historic landscape areas by landscape character type (Figure 1). Within the Study Area, this shows a broad swathe of countryside between Derby City and Swadlincote historically identified with historic estates and parks; historic enclosed landscapes to the west and north-west of Derby; and a small area of ancient wooded landscapes with assarts to the north of Derby.
- Evaluated biodiversity, historic and landscape assets by landscape character type to identify areas of high environmental value (Figure 2), from which Derbyshire County Council have translated strategic GI opportunities into areas as priorities to conserve (protect), conserve and enhance (manage) and enhance (plan). Within the Study Area, for example, this shows large swathes of countryside to the west, north-west of Derby, and between Derby and Swadlincote as being of high environmental value where a GI priority should be conservation.

Figure 3 (which combines Figures 1 and 2) shows, for example, large areas of countryside between Derby and Swadlincote (including urban fringes of Swadlincote) of historic estates and parks, the character of which should be conserved; and an area north-west of Derby (tight up to the urban fringe) of historic enclosed landscapes, the character of which should be conserved.

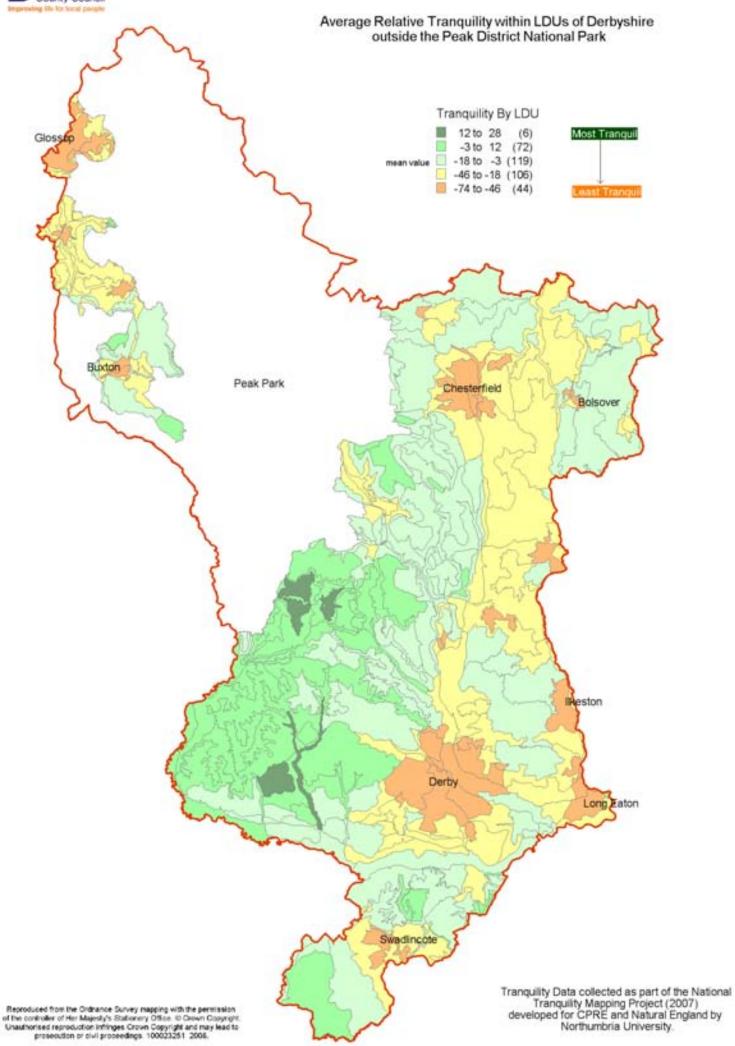
Within the Study Area, tranquillity data from the Campaign to Protect Rural England shows two areas which are most tranquil, these being west/north-west of Derby and south of the River Trent north of Swadlincote. The surrounding area is also relatively tranquil. These two areas coincide with the countryside areas highlighted for their historic landscape character and proposed conservation opportunities. The south of Derby, and west and east of Swadlincote are less tranquil.











APPENDIX A6 BIODIVERSITY NEEDS AND OPPORTUNITIES BY BROAD HABITAT TYPE

BIODIVERSITY NEEDS AND OPPORTUNITIES BY BROAD HABITAT TYPE

Opportunities for enhancing connectivity of the natural greenspace network in the Study Area are set out below by broad habitat type. Opportunity areas have been identified as either i) general search areas e.g. River Trent, quarries etc., or ii) specific locations within general search areas where opportunities for extending or enhancing known existing areas of semi-natural habitat have been identified. The codes in brackets relate to **Figure 2.8**:

Woodland

Resource

Although not all woodlands included within the NIWT are classified as BAP habitats, the data has been included as part of the resource audit because they will provide some value for woodland biodiversity. Moreover, plantation woodlands are also included within The National Forest IBAP and have therefore been taken into consideration when identifying opportunities.

Analysis of the data shows that the Study Area supports the following woodland resource:

Table W1: Woodland Resource for the Study Area

Woodland Type: Biodiversity Action Plan	Woodland Type: National Inventory of woodland and trees (NIWT)	Area (ha) (BAP woodland)	Area (ha) (NIWT woodland)	Total Area (ha)
Lowland mixed		309		
deciduous				
woodland				
	Broadleaved		496	
	Coniferous		216	
	Mixed		167	
	Young trees		424	
Totals		309	1,303	1612

Biodiversity Action Plan Targets

Table W2: Woodland BAP Targets for Lowland Derbyshire/The National Forest

Action	Target
Woodland Creation	500ha of new broadleaved woodland
	Enlarge 15 ASNW
	50ha wet woodland
	1560-1950ha trees (plantation woodland)
Positive Management	1640ha Ancient Semi-Natural Woodland (ASNW)
	1260ha Plantations on Ancient Woodland Sites (PAWS)
	100ha secondary woodland
	1000ha new planted woodland
	15 ASNW into management
Reduce woodland	Creation of new wet woodland
fragmentation	

Opportunities

The woodland resource for the Study Area is predominantly concentrated to the south of the area in the general vicinity of the Melbourne Parklands. Opportunities for creating new, and extending and linking existing, woodlands should be considered in the following areas:

• North west Swadlincote (7): Bretby Park – Near and Far woodlands – Rosliston Forestry Centre;

- South east Swadlincote (8): Swainspark Wood Swadlincote woodlands;
- Melbourne Parklands (6): Repton Shrubs Foremark Reservoir Calke Park Daniel Hayes Carver's Rocks;
- North east Findern (3);
- South Repton (5): wet woodland corridor extension.

Wood pasture and parkland

Resource

Wood pasture and parkland within the Study Area, is predominantly associated with Kedleston Hall, Calke Park, Allestree Park and Elvaston Castle.

Table WP1: Wood Pasture and Parkland Resource for the Study Area

Habitat Type	Area (ha)
Wood Pasture and Parkland	353

Biodiversity Action Plan Targets

Table WP2: Wood Pasture and Parkland BAP Targets for Lowland Derbyshire/The National Forest

Action	Target
Habitat Creation Expand 1 Site	
Positive Management	Maintain extent of habitat(s)
Carry out work on 15 trees outside parkland	
	Restore / manage 150ha of wood pasture and parkland

Opportunities

Opportunities for creating, restoring and extending wood pasture and parkland should be centred on:

- Kedleston Hall;
- Allestree Park;
- Elvaston Country Park;
- Calke Park.

Grasslands and Heathland

Resource

Table G1: Grassland and Heathland Resource for the Study Area

Habitat Type	Area (ha)
Floodplain grazing marsh	859
Lowland meadow (neutral grassland)	12
Acid grassland	2
Lowland heath	1

Biodiversity Action Plan Targets

Table G2: Grassland and Heathland BAP Targets for Lowland Derbyshire/The National Forest

Habitat Type	Action	Target
Floodplain grazing	Appropriate Management	250ha
marsh	Habitat creation / Restoration	100ha (50ha each for Iowland
		Derbyshire and The National Forest)
Wet meadow	Creation / Management	100ha
Lowland meadow	Recreation	50ha

Habitat Type	Action	Target
(neutral grassland)	Restoration	200ha
	Sympathetic management	75% (by 2010)
Acid grassland	Recreation	50ha
	Recreation	20ha
	Restoration	100ha
	Sympathetic management	50%
Heathland	Creation	10ha
	Restoration	12ha

Opportunities

Opportunities for creating, restoring and extending grasslands and heathland should be centred on:

- Lower Derwent (2) e.g. through the centre of Derby to south of Borrowash (floodplain grazing marsh and wet meadows);
- River Trent e.g. Willington to Aston on Trent (4) (floodplain grazing marsh and wet meadows);
- Kedleston-Markeaton-Allestree —(1) (lowland meadow, grasslands and heathland);
- Melbourne Parklands (6) (lowland meadow).

Fen, Marsh, Swamp and Reedbeds

Resource

Table F1: Fen, Marsh, Swamp and Reedbed Resource for the Study Area

Habitat Type	Area (ha)
Fen, marsh and swamp	47
Reedbed	4

Biodiversity Action Plan Targets

Table F2: Fen, Marsh, Swamp and Reedbed BAP Targets for Lowland Derbyshire/The National Forest

Habitat Type	Action	Target
Fen, marsh, swamp	Habitat creation	30ha
	Appropriate management	50ha
Reedbed	Habitat creation	70ha (30ha lowland Derbyshire; 40ha
		National Forest)
	Appropriate management	100ha

Opportunities

Opportunities for creating, restoring and extending fen, marsh, swamp and reedbeds should be centred on:

- Amber Valley (Mackworth Brook) (in the vicinity of 1) fen marsh and swamp;
- Lower Derwent (south of Borrowash) fen, marsh, swamp and reedbed;
- River Trent fen, marsh, swamp and reedbed;

Rivers and Streams

Resource

Table R1: Rivers and Streams Resource for the Study Area

Habitat Type	Area (km)
Rivers and Streams	42.14

Table R2: Rivers and Streams BAP Targets for Lowland Derbyshire/The National Forest

Action	Target
Creation	50km buffer strips
Restoration	10km (lowland Derbyshire) 30km (National Forest)
Appropriate Management	300km

Opportunities

Opportunities for creating (buffer strips), restoring and managing rivers and streams should be centred on:

- Lower Derwent;
- River Trent;
- Repton Swadlincote;
- Mackworth Brook.

Standing Open Waters

Resource

Table S1: Standing Open Water Resource for the Study Area

Habitat Type	Area (ha)
Standing Open Water	430ha

Biodiversity Action Plan

Table S2: Standing Open Water BAP Targets for Lowland Derbyshire/The National Forest

Action	Target
Creation	Priority areas for pond creation
	Minimum 1ha waterbody per year
	5 small ponds per year
Restoration	5 waterbodies per year
Sympathetic management	Trent Valley

Opportunities

The whole of the Study Area should be considered as an opportunity area for the creation and restoration of ponds. Specific areas should be identified at the local area for pond creation. Although individual ponds provide value for wildlife, associations of ponds that are geographically linked provide enhanced biodiversity by facilitating species dispersal and migration. Furthermore, ponds associated with different habitats (e.g. urban, woodland, open grassland) will tend to develop different characteristics which add to the overall diversity of the pond resource within the Study Area.

Whilst there may be opportunities to enhance the biodiversity value of the large reservoirs such as Staunton Harold and Foremark, the primary opportunities for enhancing the biodiversity value of open standing water are likely to be in relation to the old gravel pits, particularly those within the Trent valley. The relationship between old gravel pits restored for biodiversity with the river, floodplain grazing marsh, fens, swamps and reedbeds also helps to enhance the overall biodiversity value through connectivity.

Hedgerows, Field Margins, Buffer Strips and Arable Field Margins.

There are opportunities for the creation, restoration, extension and enhancement of hedgerows, field margins, buffer strips and arable field margins should be considered throughout the Study Area.

Open Mosaic Habitats on Previously Developed Land

Resource

Table OM1: Open Mosaic Habitats resource for the Study Area

Habitat Type	Area (ha)
Open Mosaics	219

Biodiversity Action Plan

There are no specific targets relating to this habitat type.

APPENDIX A7 EXAMPLES OF OPPORTUNITY AREAS

EXAMPLES OF OPPORTUNITY AREAS

Examples of opportunity areas for new and enhanced localised GI are provided below. It should be noted that the list of examples provided is not exhaustive. The opportunity areas are intended to be multifunctional and help towards delivering a range of public benefits. They focus on opportunities for the enhancement, restoration, and conservation of existing GI assets, as well as the creation of new resources (the latter could include one or a combination of appropriate greenspaces, e.g. parks, allotments, semi-natural greenspaces, and/or children play areas).

The opportunity areas described below were identified through interpretation of the relationship between:

- opportunities arising from the analysis of the GI resources (particularly in relation to the proposals for developing ecological networks for wildlife and movement networks for people);
- accessible natural greenspace deficiencies;
- areas capable of delivering combined multiple public benefits;
- stakeholder consultation; and
- existing relevant strategies (e.g. The National Forest Delivery Strategy)

Derby Urban Fringe: Kedleston to Derby Countryside Gap

An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for Estate Farmlands and Riverside Meadows landscape character types. It provides opportunities for creating, restoring and extending habitat types such as wet woodland, rush pasture, lowland fen meadows and neutral grassland. This area could provide access to Derby's immediate urban countryside fringe, connecting with a proposed City-Scale GI Corridor (proposed greenway linking Markeaton to Kedleston Hall) and could provide opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets (e.g. Kedleston Hall). Opportunities exist to enhance the Derwent Valley Heritage Way through the Derwent Valley World Heritage Site linking Derby and Darley Abbey to the countryside. It could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities in north west Derby and also within 2-10km of a wider range of communities. This area may also help to meet shortfalls in open space provision. The location of open space in this location will need to be carefully considered against its potential impact on the setting of Kedleston Hall and Park, its setting, the historic landscape character, and the relative tranquillity of the area.

Lower Derwent Floodplain: Derby City Centre to Elvaston Castle Country Park

An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for Lowland Village Farmlands and Riverside Meadows landscape character types. It provides opportunities for creating, restoring and extending habitat types such as wet woodland and floodplain grazing marsh and opportunities to manage flood risk. This area could connect with proposed City-Scale GI Corridors (existing greenway running along the Derwent River, through Derby and towards Long Eaton; proposed greenway linking Elvaston Castle Country Park to Borrowash, Ambaston and Shardlow) and could provide opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets (e.g. Elvaston Castle Historic Park and Garden). As well as being in an area with high potential for delivering multiple public benefits, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including east central Derby and south Spondon and also within 2-10km of a wider range of communities. This area may also help to meet shortfalls in open space provision.

Derby Urban Fringe: Findern to Derby Countryside Gap

An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the Lowland Village Farmlands, Wet pasture Meadows and Settled Farmlands landscape character types. It provides opportunities for creating new, restoring and extending habitat types such as cereal field margins and neutral grassland in a

location with no accessible natural greenspace site provision. This area could connect with proposed City-Scale GI Corridors (proposed greenways linking Findern to Normanton; and the Trent & Mersey Canal to Stenson Fields and Heatherton) and offers opportunities to manage nearby streams. It may also help to meet shortfalls in open space provision.

Trent Floodplain: Willington to Aston-on-Trent

An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for Lowland Village Farmlands and Riverside Meadows landscape character types. It provides opportunities for creating, restoring and extending habitat types such as wet woodlands, floodpain grazing marsh, rush pasture and reedbed. It also offers opportunities for creating buffer strips, restoring and managing rivers and streams; offering opportunities to manage flood risk. This area could connect with proposed City-Scale GI Corridors (existing greenway running from northern Derby to Osgathorpe via the Trent & Mersey Canal; proposed greenways linking Swarkestone to Stretton, Findern to the Trent & Mersey Canal, the Trent & Mersey Canal to Stenson Fields and Heatherton, Weston-on-Trent to southern Long Eaton, Weston-on-Trent to Castle Donington, and Aston-on-Trent to the Trent & Mersey Canal). As well as being an area with high potential for delivering multiple public benefits, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including Willington, Twyford Barrow-upon-Trent, Swarkestone and Aston-on-Trent and also within 2-10km of a wider range of communities. It may also help to meet shortfalls in open space provision.

Melbourne Parklands

An area within The National Forest, which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for Estate Farmlands and Wooded Estatelands landscape character types. It provides opportunities for creating new, and extending and linking existing woodlands (Repton Shrubs – Foremark Reservoir – Calke Park – Daniel Hayes – Carver's Rocks), lowland meadows and acid grasslands as well restoring/extending wood pasture and parkland habitat types (focused on Calke Abbey Park). It could connect with proposed City-Scale GI Corridors (proposed greenway linking Heath End to Ticknall and Dale Cottage) and could provide opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets (e.g. Calke Abbey Historic Park and Garden)

North West Swadlincote Urban Fringe

An area within The National Forest, which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the Coalfield Village Farmland landscape character type. It provides opportunities for creating new and extending and linking existing woodlands (Bretby Park – Near and Far woodlands – Rosliston Forestry Centre), primary habitat types such as neutral grassland and ancient and species rich hedgerows, and secondary habitats such as rush pasture. This area could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including north west Swadlincote and Stapenhill and also within 2-10km of a wider range of communities. It may help to meet shortfalls in open space provision and could connect with proposed City-Scale GI Corridors (proposed greenways linking Swadlincote to Melbourne, and Stanton to Burton-upon-Trent).

South East Swadlincote Urban Fringe

An area within The National Forest, which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the Coalfield Village Farmland landscape character type. It provides opportunities for creating new, and extending and linking existing woodlands (Swainspark Wood – Swadlincote woodlands) primary habitat types such as neutral grassland and ancient and species rich hedgerows, and secondary habitats such lowland dry acid grassland. This area could connect with proposed City-Scale GI Corridors (proposed greenways linking Castle Gresley to Conkers, Conkers Circuit to Church Gresley, and Woodville to Ashby-de-la-Zouch) and could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities in south east Swadlincote. It may also help to meet shortfalls in open space provision.

Nottingham to Derby Countryside Gap

An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the Lowland Village Farmlands landscape character type. It provides opportunities for creating new, and extending and linking existing lowland mixed deciduous woodland and for creating, restoring and extending habitat types such as neutral grassland and wet woodland. This area could connect with City-Scale GI Corridors (e.g. existing greenway linking Long Eaton and Derby). It could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including Nottingham, Draycott, Breaston, Borrowash, and Derby, and also within 2-10km of a broader range of communities. It may also help meet shortfalls in open space provision.

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