



www.landuse.co.uk

Sustainability Appraisal Report for the Stroud District Local Plan Review: Emerging Strategy Paper

Prepared by LUC
November 2018

Project Title: Sustainability Appraisal of the Stroud District Local Plan Review

Client: Stroud District Council

Version	Date	Version Details	Prepared by	Checked by	Approved by
1	12/11/18	Draft SA Report for the Stroud District Local Plan Review: Emerging Strategy Paper	Kate Nicholls Kieran Moroney Natalie Collins Harry Briggs	Taran Livingston	Taran Livingston
2	16/11/18	Final SA Report for the Stroud District Local Plan Review: Emerging Strategy Paper	Kate Nicholls Kieran Moroney Natalie Collins Harry Briggs	Taran Livingston	Taran Livingston



www.landuse.co.uk

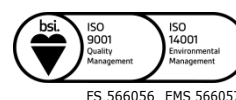
Sustainability Appraisal Report for the Stroud District Local Plan Review: Emerging Strategy Paper

Prepared by LUC
November 2018

Planning & EIA
Design
Landscape Planning
Landscape Management
Ecology
GIS & Visualisation

LUC BRISTOL
12th Floor Colston Tower
Colston Street Bristol
BS1 4XE
T +44 (0)117 929 1997
bristol@landuse.co.uk

Offices also in:
Edinburgh
Glasgow
Lancaster
London
Manchester



Land Use Consultants Ltd
Registered in England
Registered number: 2549296
Registered Office:
43 Chalton Street
London NW1 1JD
LUC uses 100% recycled paper

Contents

1	Introduction	1
	Context for the Stroud District Local Plan Review	1
	The Local Plan Review	2
	Sustainability Appraisal and Strategic Environmental Assessment	2
2	Methodology	6
	Stage A: Scoping	6
	SA Stage B: Developing and refining options and assessing effects	12
	SA Stage C: Preparing the Sustainability Appraisal report	13
	SA Stage D: Consultation on the Stroud District Local Plan Review and this SA Report	13
	SA Stage E: Monitoring implementation of the Local Plan Review	13
	Appraisal methodology	13
	Difficulties encountered and data limitations	15
3	Sustainability Context for Development in Stroud District	16
	Review of Plans, Policies and Programmes	17
	Baseline Information	28
	Key Sustainability Issues	29
4	Sustainability Appraisal Findings for the Policy Options	37
	Chapter 1: Key Issues	37
	Chapter 2: Needs	37
	Chapter 3: Future Growth Strategy	40
	Chapter 4: Background Studies	44
5	Sustainability Appraisal Findings for the Site Options	45
	Residential site options	45
	Employment site options	65
	Mixed use site options	73
	Community and retail site options	81
	Open space site options	84
	Summary	86
6	Sustainability Appraisal findings for the Emerging Strategy Paper	87
	Key Issues	87
	Needs of the district	88
	Vision	92
	Strategic Objectives	93
	Emerging growth strategy	94
	Settlement boundaries	97
	'Mini-visions' for the parish clusters	98
	Cumulative effects	117
	Recommendations	131
	Mitigation	132
7	Monitoring	136
8	Conclusions	142
	Next steps	142

Appendix 1	143
Scoping Consultation Comments	143
Appendix 2	160
Baseline Information	160
Geography	161
Population	162
Housing	162
Social Inclusion and Deprivation	164
Health	165
Culture, Leisure and Recreation	165
Education	166
Crime	166
Landscape, Biodiversity and Geodiversity	167
Historic Environment	170
Air and Water	171
Flood Risk	172
Energy and Climate Change	173
Soils	175
Resource Use/Waste and Recycling	175
Employment and Economic Activity	176
Transport	179
Tourism	181
Appendix 3	193
SA Matrices for the Policy Options	193
Appendix 4	224
Assumptions Informing the Appraisal of Site Options	224
Appendix 5	260
Detailed SA Matrices for the Site Options	260
Residential site options	261
Employment site options	530
Mixed use site options	563
Community and retail site options	602
Open space site options	607
Appendix 6	613
Detailed SA Matrices for the Emerging Strategy Paper	613
Sites in the Emerging Strategy Paper	622
Appendix 7	668
Audit Trail of Policy and Site Options	668

1 Introduction

- 1.1 This Sustainability Appraisal Report has been prepared by LUC on behalf of Stroud District Council as part of the integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Stroud District Local Plan Review.
- 1.2 This report relates to the Stroud District Local Plan Review: Emerging Strategy Paper (November 2018) and it should be read in conjunction with that document.

Context for the Stroud District Local Plan Review

- 1.3 Stroud District sits within the county of Gloucestershire. The District is approximately 45,325ha in size, taking up approximately 17.1% of the total area of Gloucestershire. It is mostly rural in character with 51.6% of the land classed as rural¹. The population density in the most rural parts of the District is less than one person per hectare².
- 1.4 The first tier settlements in the District are Stroud, Stonehouse and Cam and Dursley, as set out in the adopted Local Plan (and retained in the Local Plan Review). These settlements are located on the A419 and A4135 respectively – these roads provide relatively easy motorway access at the M5 which passes through the western part of the District. Approximately 22km of the Severn Estuary shoreline falls within the jurisdiction of Stroud District Council³.
- 1.5 The town of Stroud is positioned as the focal point of the 'Five Valleys' (Chalford Valley, Nailsworth Valley, Ruscombe Valley, Slad Valley and Painswick Valley)⁴, providing it with a dramatic landscape setting and connection with the wider countryside. Existing market towns and large villages of the District include Berkeley, Frampton on Severn, Minchinhampton, Nailsworth, and Wotton Under Edge.
- 1.6 Much of the land in the eastern portion of the District beyond the more sizeable settlements falls within the Cotswolds Area of Outstanding Natural Beauty (AONB) which has been designated in recognition of its rich, diverse and high quality landscape. Significant areas of land at the Severn Estuary have been designated as a Special Protection Area (SPA), a Special Area of Conservation (SAC) and a Ramsar site and these areas fall partly within the boundaries of the District to the south west. Additional important biodiversity sites in the District include Cotswold Commons and Beechwoods National Nature Reserve (NNR) and Cotswold Beechwoods SAC both of which are in close proximity to Painswick and Rodborough Common SAC immediately to the south of Stroud.
- 1.7 The Stroud Valleys were among the earliest cloth making areas in Britain. As such, factories and mills are present within the District from these times with surviving structures mainly centred on the town of Stroud. Following the decline of the textile industry in the District the factories and mills have mainly been used for other industrial purposes, or have been converted to alternative uses such as residential and office use⁵. Stroud District Council is currently based in Ebley Mill which is thought to have been present in Stroud town since 1393.
- 1.8 Given its historic past unsurprisingly the District is home to numerous heritage assets, many of which are located within the 41 Conservation Areas currently designated. The Industrial Heritage Conservation Area (IHCA) which covers the length of the Cotswold Canals for approximately 23km, is notable for being one of the largest conservation areas in Britain.

¹ Defra (June 2011) *Local Authority Rural-Urban Classification*

² Gloucestershire County Council (October 2013) *Census Briefing for Commissioners*

³ EPR for Stroud District Council *Severn Estuary (Stroud District) Visitor Survey Report*

⁴ Stroud District Council (January 2009) *Public Realm Strategy: Stroud town centre*

⁵ Local Development Framework: Scott Wilson for Stroud District Council (June 2009) *Local Development Framework: Sustainability Appraisal Scoping Report*

The Local Plan Review

- 1.9 Stroud District Council adopted its current Local Plan in November 2015, which set out the planning strategy for the District up to 2031. Although the Plan was adopted relatively recently, an early review is being commenced in order to ensure that it remains up to date and can meet future needs for development over the 20 year period between 2016 and 2036.
- 1.10 An Issues and Options consultation for the Local Plan Review was published in October 2017 and a series of public consultation events were held during autumn 2017. These events were designed to gather feedback on key issues of particular concern in Stroud District today, the matters most likely to grow in importance over the next 20 years and options for addressing key issues and providing for future needs.

Sustainability Appraisal and Strategic Environmental Assessment

- 1.11 Sustainability Appraisal is a statutory requirement of the Planning and Compulsory Purchase Act 2004. It is designed to ensure that the plan preparation process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process involves appraising the likely social, environmental and economic effects of the policies and proposals within a plan from the outset of its development.
- 1.12 Strategic Environmental Assessment (SEA) is also a statutory assessment process, required under the SEA Directive⁶, transposed in the UK by the SEA Regulations (Statutory Instrument 2004, No 1633). The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment and which set the framework for future consent of projects requiring Environmental Impact Assessment (EIA)⁷. The purpose of SEA, as defined in Article 1 of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans...with a view to promoting sustainable development'*.
- 1.13 SEA and SA are separate processes but have similar aims and objectives. Simply put, SEA focuses on the likely environmental effects of a plan whilst SA includes a wider range of considerations, extending to social and economic impacts. National Planning Practice Guidance⁸ shows how it is possible to satisfy both requirements by undertaking a joint SA/SEA process, and to present an SA report that incorporates the requirements of the SEA Regulations. The SA/SEA of the Stroud District Local Plan Review is being undertaken using this integrated approach and throughout this report the abbreviation 'SA' should therefore be taken to refer to 'SA incorporating the requirements of SEA'.

Structure of this report

- 1.14 This report is the SA report for the Stroud District Local Plan Review: Emerging Strategy Paper (November 2018). **Table 1.1** below signposts how the requirements of the SEA Regulations have been met within this report.

Table 1.1: Requirements of the SEA Regulations and where these have been addressed in this SA Report

SEA Regulation Requirements	Where covered in this SA report
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated (Reg. 12). The information to be given is (Schedule 2):	

⁶ SEA Directive 2001/42/EC

⁷ Under EU Directives 85/337/EEC and 97/11/EC concerning EIA.

⁸ <http://planningguidance.planningportal.gov.uk/>

SEA Regulation Requirements	Where covered in this SA report
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes	Chapters 1 and 3.
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	Chapter 3 and Appendix 2.
c) The environmental characteristics of areas likely to be significantly affected	Chapter 3 and Appendix 2.
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	Chapter 3 and Appendix 2.
e) The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation	Chapter 3.
f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects)	Chapters 4, 5 and 6 and Appendices 5, 6 and 7.
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Chapters 4, 5 and 6 and Appendices 5, 6 and 7.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Chapter 2 and Appendix 7.
i) a description of measures envisaged concerning monitoring in accordance with Reg. 17;	Chapter 7.
j) a non-technical summary of the information provided under the above headings	A separate non-technical summary document will be prepared to accompany the final version of the Environmental Report.
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Reg. 12(3))	Addressed throughout this SA report.
<p>Consultation:</p> <ul style="list-style-type: none"> authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Reg. 12(5)) 	Consultation on the SA Scoping Report was undertaken between April and June 2018.

SEA Regulation Requirements	Where covered in this SA report
<ul style="list-style-type: none"> authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Reg. 13) 	Consultation is being undertaken in relation to the Stroud District Local Plan Review: Emerging Strategy Paper between 16 th November and 18 th January 2019. The consultation document is accompanied by this SA report.
<ul style="list-style-type: none"> other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Reg. 14). 	N/A
Taking the environmental report and the results of the consultations into account in decision-making (Reg. 16)	
<p>Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Reg. 14 must be informed and the following made available to those so informed:</p> <ul style="list-style-type: none"> the plan or programme as adopted a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report, the consultation opinions expressed and the results of consultations entered into have been taken into account, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and the measures decided concerning monitoring 	To be addressed after the Local Plan Review is adopted in a separate SEA/SA Adoption Statement. However, the reasons for choosing the sites included in the Emerging Strategy Paper are set out in Appendix 7.
<p>Monitoring of the significant environmental effects of the plan's or programme's implementation (Reg. 17)</p>	To be addressed after the Local Plan Review is adopted.
<p>Quality assurance: environmental reports should be of a sufficient standard to meet the requirements of the SEA Regulations.</p>	This report has been produced in line with current guidance and good practice for SEA/SA and this table demonstrates where the requirements of the SEA Regulations have been met.

1.15 This section has introduced the SA process for the Stroud District Local Plan Review. The remainder of the report is structured into the following sections:

- **Chapter 2: Methodology** describes the approach that is being taken to the SA of the Local Plan Review.
- **Chapter 3: Sustainability Context for Development in Stroud** describes the relationship between the Stroud District Local Plan Review and other relevant plans, policies and programmes; summarises the social, economic and environmental characteristics of the District and identifies the key sustainability issues.
- **Chapter 4: Sustainability Appraisal Findings for the Policy Options** summarises the SA findings for the reasonable alternative policy options that were considered in the Local Plan Review Issues and Options consultation.
- **Chapter 5: Sustainability Appraisal findings for the Site Options** summarises the SA findings for the reasonable alternative site options that have been considered for the Local Plan Review.
- **Chapter 6: Sustainability Appraisal findings for the Emerging Strategy Paper** presents the SA findings for the Emerging Strategy Paper (policy approaches and sites) that the Council has taken forward in the Local Plan Review.
- **Chapter 7: Monitoring** describes the approach that should be taken to monitoring the likely significant effects of the Local Plan Review and proposes monitoring indicators.

- **Chapter 8: Conclusions** summarises the key findings from the SA of the Emerging Strategy version of the Local Plan Review and describes the next steps to be undertaken.

1.16 The main body of the report is supported by a number of appendices as follows:

- **Appendix 1** presents the consultation comments received in relation to the SA Scoping Report and explains how they have been addressed.
- **Appendix 2** presents the updated baseline information for Stroud District.
- **Appendix 3** presents the detailed SA matrices for the policy options.
- **Appendix 4** presents the assumptions that have been used in the appraisal of site options.
- **Appendix 5** presents the detailed SA matrices for the site options.
- **Appendix 6** presents the detailed SA matrices for the Emerging Strategy Paper.
- **Appendix 7** sets out an audit trail of the site and policy options considered and provides the Council's reasons for selecting or rejecting each one.

2 Methodology

- 2.1 In addition to complying with legal requirements, the approach being taken to the SA of the Stroud District Local Plan Review is based on current best practice and the guidance on SA/SEA set out in the National Planning Practice Guidance, which involves carrying out SA as an integral part of the plan-making process. **Table 2.1** below sets out the main stages of the plan-making process and shows how these correspond to the SA process.

Table 2.1: Corresponding stages in plan making and SA

Local Plan Step 1: Evidence Gathering and engagement
SA stages and tasks
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope
<ul style="list-style-type: none"> • 1: Identifying other relevant policies, plans and programmes, and sustainability objectives • 2: Collecting baseline information • 3: Identifying sustainability issues and problems • 4: Developing the SA framework • 5: Consulting on the scope of the SA
Local Plan Step 2: Production
SA stages and tasks
Stage B: Developing and refining options and assessing effects
<ul style="list-style-type: none"> • 1: Testing the Local Plan objectives against the SA framework • 2: Developing the Local Plan options • 3: Evaluating the effects of the Local Plan • 4: Considering ways of mitigating adverse effects and maximising beneficial effects • 5: Proposing measures to monitor the significant effects of implementing the Local Plan
Stage C: Preparing the Sustainability Appraisal Report
<ul style="list-style-type: none"> • 1: Preparing the SA Report
Stage D: Seek representations on the Local Plan and the Sustainability Appraisal Report
<ul style="list-style-type: none"> • 1: Public participation on Local Plan and the SA Report • 2(i): Appraising significant changes
Local Plan Step 3: Examination
SA stages and tasks
<ul style="list-style-type: none"> • 2(ii): Appraising significant changes resulting from representations
Local Plan Step 4 & 5: Adoption and Monitoring
SA stages and tasks
<ul style="list-style-type: none"> • 3: Making decisions and providing information
Stage E: Monitoring the significant effects of implementing the Local Plan
<ul style="list-style-type: none"> • 1: Finalising aims and methods for monitoring • 2: Responding to adverse effects

- 2.2 The sections below describe the approach that has been taken to the SA of the Stroud District Local Plan Review to date and provide information on the subsequent stages of the process.

Stage A: Scoping

- 2.3 The SA process began in April 2018 with the production of a Scoping Report for the Local Plan Review. The SA Scoping Report was prepared by LUC on behalf of Stroud District Council.
- 2.4 The Scoping stage of the SA involves understanding the social, economic and environmental baseline for the plan area as well as the sustainability policy context and key sustainability issues. The Scoping Report presented the outputs of the following tasks:

- Policies, plans and programmes of relevance to the Local Plan Review were identified and the relationships between them and the Local Plan Review and the SA were considered, enabling any potential synergies to be exploited and any potential inconsistencies and incompatibilities to be identified and addressed.
- Baseline information was collected on environmental, social and economic issues in Stroud District. This baseline information provides the basis for predicting and monitoring the likely effects of options for policies and site allocations and helps to identify alternative ways of dealing with any adverse effects identified.
- Key sustainability issues for Stroud District were identified.
- A Sustainability Appraisal framework was presented, setting out the SA objectives against which options and subsequently policies would be appraised. The SA framework provides a way in which the sustainability impacts of implementing a plan can be described, analysed and compared. It comprises a series of sustainability objectives and associated sub-questions that can be used to 'interrogate' options and draft policies during the plan-making process. These SA objectives define the long-term aspirations of the District with regard to social, economic and environmental considerations. During the SA, the performances of the plan options (and later, policies) are assessed against these SA objectives and sub-questions.

- 2.5 Public and stakeholder participation is an important part of the SA and wider plan-making processes. It helps to ensure that the SA report is robust and has due regard for all appropriate information that will support the plan in making a contribution to sustainable development. The SA Scoping Report was published between April and June 2018 for a five week consultation period with the three statutory consultees (Natural England, the Environment Agency and Historic England) and the general public.
- 2.6 **Appendix 1** lists the comments that were received during the Scoping consultation and describes how each one has been addressed. In light of the comments received a number of amendments have been made to the review of plans, policies and programmes, the baseline information and the key sustainability issues.
- 2.7 As well as changes that have been made to address consultation comments, some parts of the Scoping Report, namely the review of plans, policies and programmes and the baseline information, have been subject to a general update as part of the preparation of this SA Report in order to ensure that they reflected the current situation in Stroud District. Updated versions of the review of plans, policies and programmes and the baseline information are presented in **Chapter 3** and **Appendix 2**. The review of plans, policies and programmes and the baseline information will continue to be updated as appropriate throughout the SA process to ensure that they remain current.
- 2.8 **Table 2.2** overleaf presents the SA framework for the Stroud District Local Plan Review which includes 17 headline SA objectives along with their associated sub-questions. The table also shows how all of the 'SEA topics' (as listed in Schedule 2 of the SEA Regulations) have been covered by the SA objectives in Stroud's SA framework, reflecting the fact that an integrated approach is being taken to the SA and SEA of the Local Plan Review. A small number of changes have been made to some of the sub-objectives in the SA framework since it was presented in the Scoping Report, in response to comments received during the Scoping consultation – these changes are detailed in **Appendix 1**.

Table 2.2: SA framework for the Stroud District Local Plan Review

SA Objective	Sub-Objective	Relevant SEA Topics
Social		
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	SA 1.1: Does the Plan deliver the range of types, tenures and affordable homes the District needs over the Plan Period? SA 1.2: Does the Plan increase the supply of affordable homes in urban and rural areas? SA 1.3: Does the Plan reduce the percentage of unfit/ non-decent homes?	Population; Human Health; and Material Assets
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	SA 2.1: Does the Plan improve access to doctors' surgeries and health care facilities? SA 2.2: Does the Plan encourage healthy lifestyles and provide opportunities for sport and recreation, including through the provision of green infrastructure and public open space? SA 2.3: Does the Plan contribute to narrowing health inequalities?	Population; and Human Health
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	SA 3.1: Does the Plan promote equality of access and opportunity and social inclusion through adequate provision and distribution of local community services? SA 3.2: Does the Plan meet the challenge of a growing and ageing population? SA 3.3: Does the Plan help to limit the potential for fuel poverty in the District?	Population; and Human Health
SA 4: To reduce crime, anti-social behaviour and disorder and the fear of crime.	SA 4.1: Does the Plan promote principles of good urban design to reduce the potential for crime in the District? SA 4.2: Does the Plan assist in reducing the fear of crime?	Population; and Human Health
SA 5: To create and sustain vibrant communities.	SA 5.1: Does the Plan help to improve residential amenity (including potential to reduce light, smell and noise pollution) and sense of place? SA 5.2: Does the Plan help to improve the satisfaction of people with their neighbourhoods as places to live and encourage ownership? SA 5.3: Does the Plan safeguard and enhance the identity of the District's existing communities and settlements? SA 5.4: Does the Plan promote regeneration in the District? SA 5.5: Does the Plan provide, protect or enhance locations for cultural activities, including the arts?	Population; Human Health; and Material Assets
SA 6: To maintain and improve access to all services and facilities.	SA 6.1: Does the Plan promote compact, mixed-use development? SA 6.2: Does the Plan promote the provision of new and the protection of existing services and	Population; and Material Assets

SA Objective	Sub-Objective	Relevant SEA Topics
	facilities at sustainable locations? SA 6.3: Does the Plan encourage the protection of existing town centres including their vitality and viability?	
Environmental		
SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.	SA 7.1: Does the Plan avoid adverse effects on designated and undesignated biodiversity and geodiversity assets within and outside the District, including the net loss and fragmentation of green infrastructure and damage to ecological networks? SA 7.2: Does the Plan outline opportunities for improvements to the conservation, connection and enhancement of ecological assets, particularly at risk assets? SA 7.3: Does the Plan provide and manage opportunities for people to come into contact with resilient wildlife places whilst encouraging respect for and raising awareness of the sensitivity of such locations?	Biodiversity; Flora; Fauna; and Landscape
SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.	SA 8.1: Does the Plan protect and enhance the District's sensitive and special landscapes (including the Cotswolds AONB), and townscapes? SA 8.2: Does the Plan prohibit inappropriate development that will have an adverse effect on the character of the District's countryside and settlements? SA 8.3: Does the Plan promote the accessibility of the District's countryside in a sustainable and well-managed manner? SA 8.4: Does the Plan prevent coalescence between settlements? SA 8.5: Does the Plan protect and enhance the District's natural environment assets (including parks and green spaces, common land, woodland and forest reserves) public realm?	Landscape; Biodiversity; Flora; and Fauna
SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.	SA 9.1: Does the Plan avoid adverse effects on the District's designated and undesignated heritage assets (e.g. Scheduled Ancient Monuments, Listed buildings, Historic Parks and Gardens and Conservation Areas), including their setting and their contribution to wider local character and distinctiveness? SA 9.2: Does the Plan outline opportunities for improvements to the conservation, management and enhancement of the District's heritage assets, particularly at risk assets? SA 9.3: Does the Plan promote sustainable and appropriately managed access to as well as enjoyment and understanding of the local historic environment for the District's residents and visitors? SA 9.4: Does the Plan help to preserve and record archaeological features?	Cultural Heritage, including architectural and archaeological heritage
SA 10: To ensure that air quality	SA 10.1: Does the Plan avoid, minimise and mitigate the effects of poor air quality?	Air; Climatic Factors; and

SA Objective	Sub-Objective	Relevant SEA Topics
continues to improve.	<p>SA 10.2: Does the Plan promote more sustainable transport patterns and reduce the need to travel, particularly in areas of high congestion, including public transport, walking and cycling?</p> <p>SA 10.3: Does the Plan promote more sustainable transport patterns in rural areas?</p> <p>SA 10.4: Does the Plan facilitate the continued restoration, management and promotion the canal towpaths as part of the transport infrastructure</p>	Human Health
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	<p>SA 11.1: Does the Plan seek to avoid deterioration and where possible improve the water quality of the district's rivers and inland water?</p> <p>SA 11.2: Does the Plan enable the use of recycled water and generally reduce the need to make use of water resources?</p> <p>SA 11.3: Does the Plan minimise inappropriate development in Nitrate Vulnerable Zones, Drinking Water Safeguard Zones and Source Protection Zones?</p>	Water; Biodiversity; Fauna; and Flora
SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the economy and the environment.	<p>SA 12.1: Does the Plan reduce the risk of flooding from all sources including rivers, watercourses and sewer flooding to people and property?</p> <p>SA 12.2: Does the Plan minimise development in areas prone to flood risk and areas prone to increasing flood risk elsewhere, taking into account the impacts of climate change?</p> <p>SA 12.3: Does the Plan increase the provision of sustainable drainage at new developments?</p> <p>SA 12.4: Does the Plan promote flood risk reduction and improvement to the flood regime?</p>	Water; Soil; Climatic Factors; and Human Health
SA 13: To improve efficiency in land use and protection of soil quality through the re-use of previously developed land and existing buildings and encouraging urban renaissance.	<p>SA 13.1: Does the Plan encourage the appropriate provision of housing development on previously developed land as opposed to greenfield sites?</p> <p>SA 13.2: Does the Plan maximise the provision of employment development on previously developed land as opposed to greenfield sites?</p> <p>SA 13.3: Does the Plan encourage housing densities which would make efficient use of land?</p> <p>SA 13.4: Does the Plan ensure land is remediated where appropriate?</p> <p>SA 13.5: Does the Plan reduce the loss of soil and high grade agricultural land to development?</p>	Soil; and Climatic Factors
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	<p>SA 14.1: Does the Plan promote energy efficiency and the generation of clean, low carbon, decentralised and renewable electricity and heat?</p> <p>SA14.2. Does the Plan promote the incorporation of small-scale renewable in developments?</p> <p>SA 14.3: Does the Plan promote and facilitate the use of electric cars and sustainable modes of transport?</p> <p>SA 14.4: Does the Plan encourage the use of designs and materials which will promote energy efficiency at new development in the District?</p>	Climatic Factors; and Air

SA Objective	Sub-Objective	Relevant SEA Topics
	SA 14.5: Does the Plan promote the use of locally and sustainably sourced, and recycling of materials in construction and renovation?	
SA 15: To minimise the amount of waste produced, maximise the amount that is reused or recycled, and seek to recover energy from the largest proportion of the residual material, and achieve the sustainable management of waste.	SA 15.1: Does the Plan seek to promote the handling of waste in line with the waste hierarchy? SA 15.2: Does the Plan reduce the production of hazardous waste?	Soil; and Climatic Factors
Economic		
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	SA 16.1: Does the Plan allow for an adequate supply of land and the delivery of infrastructure to meet the District's employment needs? SA 16.2: Does the Plan provide for accessible employment opportunities? SA 16.3: Does the Plan support the prosperity and diversification of the District's rural economy? SA 16.4: Does the Plan support equality of opportunity for young people and job seekers and opportunity for the expansion and diversification of business?	Population; and Material Assets
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/ skilled workforce and support the long term competitiveness of the District.	SA 17.1: Does the Plan seek to promote business development and enhance productivity? SA 17.2: Does the Plan maintain and enhance the economic vitality and vibrancy of the District's town centres and tourist attractions? SA17.3: Does the Plan promote the image of the District as an area for investment and will it encourage inward investment? SA17.4: Does the Plan promote access to education facilities for residents? SA17.5: Does the Plan help to support increased economic activity throughout the District?	Population; and Material Assets

SA Stage B: Developing and refining options and assessing effects

- 2.9 Developing options for a plan is an iterative process, usually involving a number of consultations with the public and stakeholders. Consultation responses and the SA can help to identify where there may be other 'reasonable alternatives' to the options being considered for a plan.
- 2.10 Regulation 12 (2) of the SEA Regulations requires that:
"The (environmental or SA) report must identify, describe and evaluate the likely significant effects on the environment of—
(a) implementing the plan or programme; and
(b) reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme."
- 2.11 Any alternatives considered for the plan need to be 'reasonable'. This implies that alternatives that are not reasonable do not need to be subject to appraisal. Examples of unreasonable alternatives could include policy options that do not meet the objectives of the plan or national policy (e.g. the National Planning Policy Framework) or site options that are unavailable or undeliverable.
- 2.12 The SA findings are not the only factors taken into account when selecting options to take forward in a plan. Indeed, there will often be an equal number of positive or negative effects identified for each option, such that it is not possible to 'rank' them based on sustainability performance in order to select an option. Factors such as public opinion, deliverability and conformity with national policy will also be taken into account by plan-makers when selecting options for their plan.
- 2.13 This section describes how the appraisal of options has fed into the development of the Stroud District Local Plan Review: Emerging Strategy Paper.

Identification and appraisal of policy options

- 2.14 High level options for the policies to be included in the Local Plan were identified by the Council officers preparing the Plan and published in the Local Plan Review Issues and Options Paper for consultation in October 2017. Reasonable alternative options for various policy topics were drawn from the most up-to-date evidence and guided by the national level policy set out in the NPPF..
- 2.15 The policy options were subject to SA by LUC during summer 2018 and the findings were presented to the Council officers preparing the Plan in an internal summary note in August 2018, so that the SA findings could inform decision making about which policy options to take forward in the Emerging Strategy Paper. This summary note was a working document which was intended to inform the preparation of the Local Plan and it was not made publicly available at the time. However, the SA findings for the policy options are now presented in **Chapter 4** of this SA Report. **Appendix 7** presents an audit trail explaining the reasons for the Council's decision making about which policy options to take forward in the Local Plan Review.

Identification and appraisal of site options

- 2.16 The Council identified potentially available and suitable reasonable alternative site options from various sources, including the Council's Strategic Assessment of Land Availability (SALA)⁹, the Brownfield Register and sites promoted through the Issues and Options Local Plan consultation process.
- 2.17 The latest assessment undertaken as part of the SALA update has been carried out in accordance with the Council's detailed methodology statement published in February 2016, taking account of guidance which is set out in the National Planning Practice Guidance for undertaking a combined assessment of land available for housing and economic development. All sites located within or adjacent to the most sustainable settlements have been assessed as part of this process. A study

⁹ Stroud District Council (October 2018) *Strategic Assessment of Land Availability (SALA)*

threshold of sites capable of delivering 5 or more dwellings, or economic development, other residential development, retail or community uses on sites of 0.25 ha (or 500m² of floor space) and above was set at the outset of the assessment process to make the most efficient use of resources.

- 2.18 Once the Council had identified the reasonable alternative site options for the Local Plan Review they were subject to SA by LUC. As with the policy options, the findings were presented to the Council officers preparing the Local Plan in an internal summary note in August 2018, so that the SA findings could inform decision making about which site options to take forward in the Local Plan Review. This summary note was a working document which was intended to inform the preparation of the Local Plan Review and it was not made publicly available at the time. However, the detailed SA matrices for the reasonable alternative site options can now be found in **Appendix 5** of this SA Report and the findings are summarised in **Chapter 5. Appendix 7** presents the audit trail of the reasonable alternative site options and the Council's reasons for taking forward those sites included in the Emerging Strategy Paper and for the use proposed. The detailed appraisal of each site for the use proposed in the Emerging Strategy Paper is presented in **Appendix 6**.

SA Stage C: Preparing the Sustainability Appraisal report

- 2.19 This SA Report describes the process that has been undertaken to date in carrying out the SA of the Stroud District Local Plan Review. It sets out the findings of the appraisal of policy and site options, and the emerging strategy policy approaches and sites, highlighting any likely significant effects (both positive and negative, and taking into account the likely secondary, cumulative, synergistic, short, medium and long-term and permanent and temporary effects). It also describes the reasons for selecting or rejecting certain options during the preparation of the Stroud District Local Plan Review: Emerging Strategy Paper.

SA Stage D: Consultation on the Stroud District Local Plan Review and this SA Report

- 2.20 Stroud District Council is inviting comments on the Stroud District Local Plan Review: Emerging Strategy Paper and this SA Report. Both documents are being published on the Council's website for consultation between 16th November 2018 and 18th January 2019.
- 2.21 **Appendix 1** presents the consultation comments that were received in relation to the SA Scoping Report and explains how each one has been addressed in the SA work undertaken since then.

SA Stage E: Monitoring implementation of the Local Plan Review

- 2.22 Recommendations for monitoring the likely significant social, environmental and economic effects of implementing the Stroud District Local Plan Review are presented in **Chapter 7**.

Appraisal methodology

- 2.23 The reasonable alternative policy and site options for the Local Plan Review have been appraised against the SA objectives in the SA framework (see **Table 2.2** earlier in this section), with scores being attributed to each option or policy to indicate its likely effects on each SA objective as follows:

Figure 2.1: Key to symbols and colour coding used in the SA of the Stroud District Local Plan Review

++	Significant positive effect likely
----	------------------------------------

++/-	Mixed significant positive and minor negative effects likely
+	Minor positive effect likely
+/- OR ++/--	Mixed minor or significant effects likely
-	Minor negative effect likely
--/+	Mixed significant negative and minor positive effects likely
--	Significant negative effect likely
0	Negligible effect likely
?	Likely effect uncertain

- 2.24 Where a potential positive or negative effect is uncertain, a question mark was added to the relevant score (e.g. +? or -?) and the score has been colour coded as per the potential positive, negligible or negative effect (e.g. green, yellow, orange, etc.).
- 2.25 The likely effects of options and policies need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. The appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown above. The dividing line in making a decision about the significance of an effect is often quite small. Where either (++) or (--) has been used to distinguish significant effects from more minor effects (+ or -) this is because the effect of an option or policy on the SA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, scores are relative to the scale of proposals under consideration.
- 2.26 Mixed effects have only been presented where directly opposing effects (i.e. positive and negative) have been identified through the appraisal (e.g. +/-, ++/-, --/+ and ++/--). For some SA objectives, it is possible that a policy or site might have a minor positive effect in relation to one aspect of the policy and a significant positive effect in relation to another aspect (giving a score of +/++). However, in these instances, only the most significant score is shown in the appraisal tables. Similarly if a policy or site could have a minor and significant negative effect (-/-) for the same SA objective, only the significant negative score is shown in the appraisal tables. The justification text relating to the appraisal describes where the various elements of the policy or site being appraised might have potential to result in effects of differing magnitude.
- 2.27 The SA findings for the Local Plan policy and site options are described in **Chapters 4 and 5** respectively. The SA findings for the Vision, Strategic Objectives, Mini Visions, policy approaches and sites in the Emerging Strategy are described in **Chapter 6**.

Assumptions applied during the SA

- 2.28 SA inevitably relies on an element of subjective judgement. However, in order to ensure consistency in the appraisal of the site options, detailed sets of assumptions were developed and applied, with a separate set of assumptions relating to each type of site option. These assumptions set out clear parameters within which certain SA scores would be given, based on factors such as the distance of site options from features such as biodiversity designations, public transport links and areas of high landscape sensitivity. The assumptions are presented in **Appendix 4** and were applied through the use of Geographical Information Systems (GIS) data.
- 2.29 The assumptions applied when considering the reasonable alternatives and the subsequent potential sites have been updated following further new evidence presented in the Emerging

Strategy Paper¹⁰. This document set out a number of changes to the settlement hierarchy for the District. It also divided the previously identified third tier settlements between Tier 3a and Tier 3b settlements. Tier 3a settlements are those which have been identified as providing access to a good range of local services and facilities. Tier 3b settlements have been identified as providing access to a more basic level of services and facilities. Given that this new evidence has been included as part of the Emerging Strategy Paper it has been considered for the appraisal of the potential sites only. Changes made to the assumptions in light of this new evidence are detailed in Appendix 4. The changes have been denoted by underlined text.

Difficulties encountered and data limitations

- 2.30 It is a requirement of the SEA Regulations that consideration is given to any data limitations or other difficulties that are encountered during the SA process.
- 2.31 During the appraisal of the policy options the fact that options had not yet been worked up in detail (comprising only suggested policy approaches) meant that at times it was difficult to assess in detail the likely effects of the options on each SA objective. Once draft policies are worked up in more detail it is possible to draw more certain conclusions about their likely effects.
- 2.32 There was a need to appraise a large number of site options consistently. In order to address this issue, detailed assumptions relating to each of the SA objectives were developed and applied during the appraisal of site options (as described above).
- 2.33 A number of limitations relating to the GIS data that was used to apply the assumptions are recognised:
- The available data for Local Geological Sites (relevant to SA objective 7: biodiversity and geodiversity) showed their locations only as a central point and not a site boundary. The proximity of site options to Local Geological Sites was therefore only able to be measured in relation to that central point.
 - The available data for flood zones 3a and 3b was combined as flood zone 3 and did not distinguish between 3a and 3b. This resulted in some uncertainty in the scores, as set out in the assumptions (see **Appendix 4**).
 - The available data for agricultural land classification did not distinguish between Grade 3a (considered to be high quality) and 3b (not considered to be high quality). This again resulted in some uncertainty in the scores, as set out in the assumptions (see **Appendix 4**).
- 2.34 GIS data used to inform the assessment was generally only available for the extent of Stroud District, which could affect the SA findings for sites on the edge of the District.
- 2.35 The landscape sensitivity study and the SALA heritage assessment work which was used to inform the appraisal of site options against SA objectives 8: landscape and 9: historic environment did not cover every site option. Where the evidence did not cover a particular site, an uncertain (?) score was applied (see assumptions in **Appendix 4**).
- 2.36 The SALA accessibility assessment was only appropriate for using in the appraisal of residential and mixed use sites, but not employment site options. The assumptions that were used for the appraisal of employment site options (see **Appendix 4**) therefore draws on GIS data showing the location of bus stops (but not frequency of services from each bus stop). This dataset showed the location of all bus stops, including some that may not be well-served by existing bus services.

¹⁰ Stroud District Council (November 2018) *Stroud District Local Plan Review: Emerging Strategy Paper*

3 Sustainability Context for Development in Stroud District

- 3.1 The Stroud District Local Plan Review sets out to identify the housing, employment, retail and community development that is required to meet local needs up until 2031. It provides the strategy for distributing development within the District and policies for protecting and conserving the natural and built environment.
- 3.2 The Emerging Strategy Paper identifies the key issues which the district faces and will remain relevant in the future and provides commentary on how each issue will be addressed. The top five issues for the district have been identified as:
- Ensuring new housing development is located in the right place and supported by the right services and infrastructure.
 - Conserving and enhancing Stroud District's countryside and biodiversity.
 - Maximising the potential of brownfield to contribute to housing supply.
 - Developing strategies to avoid, reduce and mitigate the indirect impacts of development on the natural environment.
 - Addressing the lack of affordable housing the district.
- 3.3 The Emerging Strategy Paper provides further commentary relating to the specific requirements within the district for the local economy and jobs, town centres, local housing and local green space and community uses. From this the Emerging Strategy details the approach the Council is taking to address these requirements.
- 3.4 The document also provides an overview of what the district is to look like as guided by the principles of the Local Plan Review over the twenty year period up to 2040. This aspirational vision of the district is supported by the inclusion of seven strategic objectives which provide a more tangible way of taking forward the overall vision for the District.
- 3.5 The strategic objectives included relate to achieving healthy, inclusive and safe communities; promoting the local economy and jobs opportunities across the district; supporting town centres and rural hinterlands; promoting healthier and more sustainable modes of transport; supporting climate change mitigation and respecting environmental limits; and conserving and enhancing the district's landscape, heritage, townscape and biodiversity.
- 3.6 The emerging growth strategy for the district is presented to support the delivery of new dwellings and new employment land sufficient to meet requirements for the next 20 years. It broadly sets out where new development is to be delivered with reference to the main settlements of the district, what type of development is to be supported at these locations and where new infrastructure and other types of mitigation will be required.
- 3.7 Updates to the settlement hierarchy and settlement boundaries are also presented as part of the document. Changes to the settlement hierarchy reflect changes on the ground for example through an increased or reduced level of provision services and facilities or transport infrastructure. The changes also reflect the consideration of new analysis of the settlements and their respective roles in the district responding to concerns raised through the Issues and Options consultation. Changes to the settlement boundaries have been made at Berkeley, Cam, Cambridge, Dursley, Eastington, Hardwicke, Hillesley, Horsley, Kings Stanley, Miserden, Sharpness, Stone, Stonehouse, Stroud, Uley and Whitminster. The updates to these settlement boundaries reflect physical changes since the last boundary review and the intended function of the settlements in question in terms of managing future growth.
- 3.8 The final and most substantial portion of the Emerging Strategy Paper relates to the parish clusters of the district and the individual settlements which form part of these clusters. A 'mini-

vision' has been set out for each parish cluster to reflect the key local issues and top priorities for the area and respond to these challenges through the provision of new development over the plan period. Where development sites are included in the Emerging Strategy these have been set out by the settlement to which they most relate within the appropriate parish cluster. Uses which will be supported at each site have been detailed.

Review of Plans, Policies and Programmes

3.9 Annex 1 of the SEA Directive requires:

(a) "an outline of the...relationship with other relevant plans or programmes"; and

(e) "the environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation"

3.10 In order to establish a clear scope for the SA it is necessary to review and develop an understanding of the environmental, social and economic objectives contained within international and national policies, plans and strategies that are of relevance to the Stroud District Local Plan Review. Given the SEA Directive requirements above, it is also necessary to consider the relationship between the Stroud District Local Plan Review and other relevant plans, policies and programmes.

3.11 This chapter summarises the relevant international and national policies, plans and programmes which should be taken into consideration during preparation of the Stroud District Local Plan Review and its SA, as well as those plans and programmes which are of relevance at a regional and local level. The objectives of these plans and programmes were taken into account when drafting the SA framework in **Chapter 2**.

3.12 A number of changes to the policy review presented below have been made since it was originally presented in the Scoping Report (April 2018), as a result of comments received from consultees (see **Appendix 1**).

International

3.13 **United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the 'Aarhus Convention')**

(1998): Establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective.

3.14 **United Nations Declaration on Sustainable Development (Johannesburg Declaration)**

(2002): Sets broad framework for international sustainable development, including building a humane, equitable and caring global society aware of the need for human dignity for all, renewable energy and energy efficiency, sustainable consumption and production and resource efficiency.

3.15 **European Environmental Noise Directive** (2002): Sets out a hierarchy for the avoidance, prevention and reduction in adverse effects associated with environmental noise, including noise generated by road and rail vehicles, infrastructure, aircraft and outdoor, industrial and mobile machinery.

3.16 **European Nitrates Directive** (1991): Identifies nitrate vulnerability zones and puts in place measures to reduce water pollution caused by the introduction of nitrates.

3.17 **European Urban Waste Water Directive** (1991): Protects the environment from the adverse effects of urban waste water collection, treatment and discharge, and discharge from certain industrial sectors.

3.18 **European Air Quality Framework Directive** (1996) and **Air Quality Directive** (2008): Put in place measures for the avoidance, prevention, and reduction in harmful effects to human health

and the environment associated with ambient air pollution and establish legally binding limits for the most common and harmful sources of air pollution.

- 3.19 **European Drinking Water Directive** (1998): Protects human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.
- 3.20 **European Landfill Directive** (1999): Prevents and reduces the negative effects on the environment from the landfilling of waste by introducing stringent technical requirements for waste and landfills.
- 3.21 **European Water Framework Directive** (2000): Protects inland surface waters, transitional waters, coastal waters and groundwater.
- 3.22 **European Waste Framework Directive** (2008): Sets out the waste hierarchy requiring the reduction of waste production and its harmfulness, the recovery of waste by means of recycling, re-use or reclamation and final disposal that does not harm the environment, including human health.
- 3.23 **European Industrial Emission Directive** (2010): Lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.
- 3.24 **European Floods Directive** (2007): A framework for the assessment and management of flood risk, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity.
- 3.25 **European Energy Performance of Buildings Directive** (2010): Aims to promote the energy performance of buildings and building units. Requires the adoption of a standard methodology for calculating energy performance and minimum requirements for energy performance.
- 3.26 **United Nations Paris Climate Change Agreement** (2015): International agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.
- 3.27 **International Convention on Wetlands (Ramsar Convention)** (1976): International agreement with the aim of conserving and managing the use of wetlands and their resources.
- 3.28 **European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)** (1979): Aims to ensure conservation and protection of wild plant and animal species and their natural habitats, to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).
- 3.29 **International Convention on Biological Diversity** (1992): International commitment to biodiversity conservation through national strategies and action plans.
- 3.30 **European Habitats Directive** (1992): Together with the Birds Directive, the Habitats Directive sets the standard for nature conservation across the EU and enables all 27 Member States to work together within the same strong legislative framework in order to protect the most vulnerable species and habitat types across their entire natural range within the EU. It also established the Natura 2000 network.
- 3.31 **European Birds Directive** (2009): Requires the maintenance of all species of naturally occurring birds in the wild state in the European territory at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements.
- 3.32 **United Nations Declaration on Forests (New York Declaration)** (2014): Sets out international commitment to cut natural forest loss by 2020 and end loss by 2030.
- 3.33 **United Nations (UNESCO) World Heritage Convention** (1972): Promotes co-operation among nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations.
- 3.34 **European Convention for the Protection of the Architectural Heritage of Europe** (1985): Defines 'architectural heritage' and requires that the signatories maintain an inventory of it and

take statutory measures to ensure its protection. Conservation policies are also required to be integrated into planning systems and other spheres of government influence as per the text of the convention.

- 3.35 **European Landscape Convention** (2002): Promotes landscape protection, management and planning. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.

National

- 3.36 **The National Planning Policy Framework (NPPF)**¹¹ is the most significant national policy context for the Local Plan Review. The revised draft of the document was adopted in July 2018. It sets out the Government's planning policy for England and how these policies should be applied. The Local Plan Review must be consistent with the NPPF requirements. The NPPF sets out information about the purposes of local plan-making, stating that:

"Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area ... So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development".

- 3.37 The presumption in favour of sustainable development is to be given priority in plan-making and in the decision making process. Specific to the plan-making process this will mean that:

"a) plans should positively seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change;

b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

- 3.38 In addition to contributing to the achievement of sustainable development the NPPF also requires Local Plans to be prepared positively in a way that is 'aspirational but deliverable'. This means that opportunities for appropriate development should be identified in order to achieve net gains across the three overarching objectives of sustainable development: that is to say achieving the economic, social and environmental objectives of the planning system. Significant adverse impacts on these objectives should be avoided however and, where possible, alternative options which reduce or eliminate these types of impacts should be taken forward. Where this is not possible mitigation followed by compensatory measures should be pursued.

- 3.39 National policy within the NPPF of most relevance to the emerging Local Plan Review has been summarised below.

- 3.40 The Government is also setting out goals for managing and improving the environment within the next 25 years within its **environment plan**¹². The document seeks to influence planning at a local level and therefore will be relevant to the scope of the SA and the Local Plan Review process. Reference has been included within each topic below to the relevant text from the environment plan.

Population Growth, Health and Wellbeing

- 3.41 The **NPPF** includes as part of its social objective the promotion of "*strong, vibrant and healthy communities*" by:

¹¹ Ministry of Housing, Communities and Local Government (July 2018) *National Planning Policy Framework*

¹² HM Government (January 2018) *A Green Future: Our 25 Year Plan to Improve the Environment*

- *"ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and*
 - *by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being."*
- 3.42 Ultimately planning policies and planning decision making should *"aim to achieve healthy, inclusive and safe places"*.
- 3.43 The document states that strategic policies should set out the pattern, scale and quality of development and make sufficient provision for *"housing (including affordable housing) ... [as well as] community facilities (such as health, education and cultural infrastructure)."* Policies should reflect *"the size, type and tenure of housing needed"*. This policy approach is to include but should not be limited to housing requirements relating to affordable homes, families with children older people, students, people with disabilities, service families, travellers, those who rent their homes and people wishing to commission the construction of their own homes. At major developments providing new housing planning policies and decisions should be expected at least 10% of new provision to be delivered for affordable home ownership subject to conditions and exemptions.
- 3.44 To help to diversify opportunities for builders, promote a better mix of site sizes and increase the number of schemes that can be built-out quickly to meet housing need, the NPPF states that at least 10% of the sites allocated for housing through a local authority's plan should be half a hectare or smaller.
- 3.45 Where there is an identified need, development of sites not already allocated for housing to provide entry-level homes suitable for first-time buyers is to be supported by local planning authorities unless such need is already to be met at other locations within the authority area. These sites should comprise of entry-level homes that offer one or more types of affordable housing.
- 3.46 The document also promotes a theme of enhancing healthy and safe communities which is to be achieved by creating places which *"promote social interaction (and) enable and support healthy lifestyles."*
- 3.47 As part of this approach social, recreational and cultural facilities and services that the community needs should be provided guided by planning policies which:
- *"plan positively provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services;*
 - *support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;*
 - *help prevent unnecessary loss of valued facilities and services."*
- 3.48 Plan making through the guidance of the NPPF recognises the important role of access to open spaces and other facilities which provide opportunities for sport and physical activity has in terms of health and well-being of communities. The importance of delivering a sufficient choice of school places to meet the needs of existing and new communities is also recognised in the document and local planning authorities should take a *"proactive, positive and collaborative approach to meeting this requirement"*.
- 3.49 The NPPF also sets out that the standard method provided in national planning guidance should be used to undertake a local housing need assessment identifying the minimum number of homes needed. The **Housing Delivery Test Measurement Rule Book**¹³ provides this standard method allowing for calculation of objectively assessed housing need using government household forecasts adjusted for local house prices and local earnings. Unmet need from neighbouring areas will also need to be taken into account as part of the calculation.

¹³ Ministry of Housing, Communities and Local Government (July 2018) *Housing Delivery Test Measurement Rule Book*

3.50 **A Green Future: Our 25 Year Plan to Improve the Environment** sets out goals for improving the environment over the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. The document identifies six key areas upon which action will be focused. Those of relevance to the topics of population growth, health and wellbeing are using and managing land sustainably; and connecting people with the environment to improve health and wellbeing. These two key areas are of relevance to the emerging Local Plan Review as follows:

- Using and managing land sustainably:
 - Embed an 'environmental net gain' principle for development, including housing and infrastructure.
- Connecting people with the environment to improve health and wellbeing:
 - Help people improve their health and wellbeing by using green spaces including through mental health services.
 - Encourage children to be close to nature, in and out of school, with particular focus on disadvantaged areas.
 - 'Green' our towns and cities by creating green infrastructure and planting one million urban trees.
 - Make 2019 a year of action for the environment, working with Step Up To Serve and other partners to help children and young people from all backgrounds to engage with nature and improve the environment.

Economy

3.51 The **NPPF** contains an economic objective to *"help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity."*

3.52 It also requires that planning seeks to *"create the conditions in which businesses can invest, expand and adapt"* with policies required to *"set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth"*. Policies addressing the economy should also seek *"to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment."*

3.53 Planning policies are also required specifically to address support for the rural economy. Sustainable growth and expansion of all types of business and enterprise in rural areas should be supported, both through conversion of existing buildings and well-designed new buildings, while the diversification of the rural economy and promotion of sustainable rural tourism and leisure developments is also supported

3.54 The NPPF also supports the role of town centres as functioning at the heart of local communities. This support is required to provide for a *"positive approach to [town centres'] growth, management and adaptation."* Included within this support is a requirement to *"allocate a range of suitable sites in town centres to meet the scale and type of development needed, looking at least ten years ahead."*

Transport

3.55 The **NPPF** requires that *"transport issues should be considered from the earliest stages of plan-making"*. The scale, location and density of development should reflect *"opportunities from existing or proposed transport infrastructure"*. To help reduce congestion and emissions, and improve air quality and public health the planning system should focus significant development *"on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes."* The draft revised framework also requires that planning policies support an appropriate mix of uses across an area to further help reduce the need to travel as well as the provision of high quality walking and cycling network.

3.56 While the framework promotes the use and development of sustainable transport networks it also requires that *"where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development"* should be identified and protected.

Air, Land and Water Quality

- 3.57 The **NPPF** states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued soil and the economic and other benefits of the best and most versatile agricultural land. Policies should also prevent new and existing development from *"contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution."*
- 3.58 The document also requires that strategic policies should seek to make the most effective use of land in meeting local requirements making as much use as possible of previously-developed or 'brownfield' land. Furthermore policies should *"support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land"*.
- 3.59 **A Green Future: Our 25 Year Plan to Improve the Environment**¹⁴: Of the key areas in the document around which action will be focused, those of relevance in terms of the protection of air, land and water quality are using and managing land sustainably; recovering nature and enhancing the beauty of landscapes; and increasing resource efficiency, and reducing pollution and waste. The three key areas of relevance to the emerging Local Plan Review are as follows:
- Using and managing land sustainably:
 - Embed a 'net environmental gain' principle for development, including natural capital benefits to improved and water quality.
 - Protect best agricultural land.
 - Improve soil health, and restore and protect peatlands.
 - Recovering nature and enhancing the beauty of landscapes:
 - Respect nature by using our water more sustainably.
 - Increasing resource efficiency and reducing pollution and waste:
 - Reduce pollution by tackling air pollution in our Clean Air Strategy and reduce the impact of chemicals.

Climate Change Adaptation and Mitigation

- 3.60 The **NPPF** contains as part of its environmental objective a requirement to mitigate and adapt to climate change, *"including moving to a low carbon economy"*. The document also states that the *"planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change."* To achieve these aims new development should be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.
- 3.61 The revised framework also requires that development is directed away from areas which are at highest existing or future risk of flooding. Where development is required in such areas, the *"development should be made safe for its lifetime without increasing flood risk elsewhere."*
- 3.62 In relation to coastal change in England planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Furthermore plans should *"reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast"*.
- 3.63 **A Green Future: Our 25 Year Plan to Improve the Environment**¹⁵: The key areas in the document of relevance in terms of responding to climate change are using and managing land sustainably; and protecting and improving our global environment. Actions that will be taken as part of these two key areas are as follows:
- Using and managing land sustainably:

¹⁴ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

¹⁵ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

- Take action to reduce the risk of harm from flooding and coastal erosion including greater use of natural flood management solutions.
- Protecting and improving our global environment:
 - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.

Biodiversity

- 3.64 A further requirement of the **NPPF's** environmental objective is that the planning system should contribute to protecting and enhancing the natural environment including helping to improve biodiversity, and using natural resources prudently. In support of this aim the framework states that Local Plans should "*identify and map safeguard components of local wildlife-rich habitats and wider ecological networks*" and should also "*promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*"
- 3.65 The framework requires that plans should take a strategic approach in terms of "*maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries*".
- 3.66 **A Green Future: Our 25 Year Plan to Improve the Environment**¹⁶: The key areas in the document of relevance in terms of the protection and promotion of biodiversity are recovering nature and enhancing the beauty of landscapes; securing clean, productive and biologically diverse seas and oceans; and protecting and improving our global environment. Actions that will be taken as part of these three key areas are as follows:
- Recovering nature and enhancing the beauty of landscapes:
 - Develop a Nature Recovery Network to protect and restore wildlife, and provide opportunities to re-introduce species that have been lost from the countryside.
 - Securing clean, healthy, productive and biologically diverse seas and oceans:
 - Achieve a good environmental status of the UK's seas while allowing marine industries to thrive, and complete our economically coherent network of well-managed marine protected areas.
 - Protecting and improving our global environment:
 - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.
 - Support and protect international forests and sustainable agriculture.

Historic Environment

- 3.67 Of relevance to the approach of the planning system to the historic environment the **NPPF** contains an environmental objective to contribute to the protection and enhancement of the built and historic environment. The document also sets out a strategy to seek "*the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay and other threats.*" Such a strategy is required to take into consideration the desirability of sustaining and enhancing the significance of heritage assets and bringing them into viable use.
- 3.68 It should also be considerate of the wider benefits of conserving the historic environment, the contribution new development can make in terms of character and distinctiveness and the opportunity for the historic environment to contribute to this character and distinctiveness. Local authorities should also maintain or have access to a historic environment record which is to be supported by up to date evidence.

Landscape

- 3.69 The Stroud Local Plan Review will be required to have consideration for the conservation and enhancement of landscape character in the District. The **NPPF** includes as part of its approach to

¹⁶ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

protecting the natural environment, recognition for the intrinsic character and beauty of the countryside, and the wider benefits to be secured from natural capital. Importantly, great weight is to be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty.

3.70 As part of the approach to achieving well-designed places the NPPF states that planning policies and decisions should ensure that developments “*are sympathetic to local character and history, including the surrounding built environment and landscape setting.*”

3.71 **A Green Future: Our 25 Year Plan to Improve the Environment**¹⁷: The key area in the document of relevance in terms of the conservation and enhancement of landscape character is recovering nature and enhancing the beauty of landscapes. Actions that will be taken as part of this key area are as follows:

- Working with AONB authorities to deliver environmental enhancements.
- Identifying opportunities for environmental enhancement of all England’s Natural Character Areas, and monitoring indicators of landscape character and quality.

Sub National

3.72 **Gloucestershire’s Local Transport Plan 2015-2031**¹⁸: The primary purpose of the document is to set out the transport issues, pressures and priorities for the County particularly in relation to increased transport demands which will result due to projected housing development and future accelerated economic growth. Transport improvement should be balanced given the need to take responsibility for reducing transport derived carbon emissions. The main transport priorities for the County to support economic growth have been set out as follows:

- A417 Missing Link.
- A46 M5 Junction 9 corridor improvements.
- M5 Junction 10 all ways improvement.
- Gloucestershire rail strategy, including Gloucester and Cheltenham stations regeneration.

3.73 **Strategic Economic Plan for Gloucestershire**¹⁹: Produced by GFirst LEP, the Local Enterprise Partnership for Gloucestershire, the SEP has set out strategic priorities to achieve economic growth of £493 million in the County from 2015-2021. These priorities include improving employability and economic productivity of the work force through upskilling; attracting new employers and talented employees to the area through promotion of and exploiting the current opportunities provided by the motorway corridor, as well as improving wider connections through future transport infrastructure and broadband improvements. Building on existing connections to the rest of the UK which Gloucestershire has at the M5 corridor, the availability of employment land at this location has been identified as a key area to attract businesses.

3.74 **Gloucestershire Local Flood Risk Management Strategy**²⁰: Gloucestershire County Council is the Lead Local Flood Authority for administrative area of the County. The County Council has responsibility to lead and coordinate on management of surface water runoff, ordinary watercourses and groundwater and also has increased responsibilities in relation to management of flood risk from the highway network and planning for emergencies.

3.75 The Gloucestershire Local Flood Risk Management Strategy sets out how the County Council aims to manage flood risk in partnership across Gloucestershire up to 2023. The strategy has mapped those areas which are most at risk of flooding, identifying areas which have less than 25%, between 25% and 50%, between 50% and 75% and over 75% susceptibility to groundwater flooding.

¹⁷ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

¹⁸ Gloucestershire County Council (November 2017) *Gloucestershire’s Local Transport Plan 2015-2031*

¹⁹ Gloucestershire Local Enterprise Partnership (March 2014) *Strategic Economic Plan for Gloucestershire*

²⁰ Gloucestershire County Council (July 2014) *Local Flood Risk Management Strategy*

- 3.76 The Annual Progress and Implementation Plans to be produced annually as follow up to the strategy are to detail progress in relation to flood risk against the strategy objectives and agreed actions.
- 3.77 There are three adopted Local Plans in place to guide planning decisions on minerals and waste developments throughout Gloucestershire. These are the **Gloucestershire Minerals Local Plan 1997-2006**²¹, the **Gloucestershire Waste Local Plan 2002-2012**²² and the **Waste Core Strategy for Gloucestershire**²³. The Gloucestershire MLP 1997-2006 was adopted in February 2003. A number of the policies in this document have since been deleted meaning they no longer form part of the development plan and work is currently being undertaken on the **Emerging Minerals Local Plan for Gloucestershire 2018 - 2032**²⁴ to replace those policies which have been saved. Consultation on the draft replacement plan occurred between September 2016 and November 2016. The Waste Core Strategy was adopted in November 2012 and replaced many of the policies in the Waste Local Plan.
- 3.78 The Gloucestershire MLP 1997-2006 through Saved Policy A1 sets out that the County Council should "*endeavour to maintain a landbank that reflects the local apportionment of the Regional Guidelines*". Saved Policy A2 sets out that the authority should "*maintain a landbank of reserves for the winning and working of aggregate minerals throughout and at the end of the Plan period*". The MLP also sets out preferred areas for aggregate mineral working beyond which proposed aggregate minerals working will only be permitted if it can be demonstrated that the mineral is of a specification, or will meet a forecast shortfall, which is required to maintain the County's appropriate contribution to local, regional and national need.
- 3.79 The Draft Minerals Local Plan for Gloucestershire 2018-2032 was published for public consultation in September 2016 with the aim of providing a clear policy framework for how mineral developments should take place across Gloucestershire. This includes the vision of the County in 2033 at the end of the plan period where it is a leading county in managing its mineral resources and mineral resources will have played a key part in delivering renewal, regeneration and economic growth. The working of minerals will also have been undertaken to limit adverse impacts including those in terms of health and well-being, economic vitality of local businesses, the natural and built environment and flood risk.
- 3.80 The plan sets out seven objectives to achieve this vision. It also sets out the type of development which is to be permitted within Mineral Safeguarded Areas and Mineral Consultation Areas as well as safeguarded mineral infrastructure sites. A total of 10 allocations have been made through the plan which includes five sites for the future working of sand & gravel and five sites for crushed rock limestone. Once adopted the plan will replace and update all aspects of the current MLP.
- 3.81 Gloucestershire Waste Core Strategy through Policy WCS2 seeks to "*raise awareness and positively influence attitudes and behaviour so as to reduce the amount of waste produced and ensure a greater proportion of waste is re-used.*" New development in the County is expected to incorporate the principles of waste minimisation and re-use. Policy WCS6 sets out that up to 2027 development will be delivered to provide residual waste recovery capacity for up to 145,000 tonnes per year of municipal solid waste; up to 73,000 tonnes per year of commercial & industrial; and strategic residual recovery facilities to allow for up to 50,000 tonnes per year.
- 3.82 Outline boundaries for site allocations to meet the need for strategic residual recovery have been set out for:
- Wingmoor Farm East, to the south west of Bishop's Cleeve in Tewkesbury
 - The Park, to the west of Bishop's Cleeve in Tewkesbury
 - Wingmoor Farm West, to the west of Bishop's Cleeve in Tewkesbury
 - Javelin Park, to the south of Quedgeley and Harwicke by Junction 12 of the M5 Motorway in Stroud

²¹ Gloucestershire County Council (February 2003) *Gloucestershire Minerals Local Plan 1997-2006*

²² Gloucestershire County Council (October 2004) *Gloucestershire Waste Local Plan 2002-2012*

²³ Gloucestershire County Council (November 2012) *Gloucestershire Waste Core Strategy*

²⁴ Gloucestershire County Council (September 2016) *Draft Minerals Local Plan for Gloucestershire*

- Land at Moreton Valence, to the south west of Hardwicke and to the north of Whitminster in Stroud.
- 3.83 **A Strategic Framework for Green Infrastructure in Gloucestershire 2015**²⁵: The framework sets out a vision of green infrastructure in Gloucestershire as being enhanced, extended, promoted and managed to maximise its contribution to the natural and historic environment as well as health and well-being, the economy and quality of life including response to climate change. The contribution that green infrastructure can make to sustainable economic growth is to be achieved by giving its provision the same consideration as the delivery of other key infrastructure across the County.
- 3.84 The strategic green infrastructure principles for the County are:
- The successful connecting of functional strategic green infrastructure across the county.
 - Maximising opportunities to improve both strategic green infrastructure and more local green infrastructure whenever change is being considered.
 - Partnership working focussing co-ordination through the Local Nature Partnership and GFirst LEP to promote and enhance green infrastructure.
 - Ensuring the functional benefits of green infrastructure are understood.
 - Embedding the principles of green infrastructure in policies guiding change in the County.
 - Securing funding (for example through S106 agreements and CIL) to deliver improvements to strategic green infrastructure and individual green infrastructure projects.
 - Ensuring that the evidence to support the evaluation of different green infrastructure initiatives is robust and up to date.
- 3.85 **Gloucestershire Health and Wellbeing Strategy 2012 - 2032**²⁶: The Gloucestershire Health and Wellbeing Strategy sets out to strengthen health and wellbeing and prevent ill health in the County. The following principles have been identified to achieve this overarching aim:
- Supporting communities to take an active role in improving health
 - Encouraging people to adopt healthy lifestyles to stop problems from developing
 - Taking early action to tackle symptoms or risks
 - Helping people to take more responsibility for their health
 - Helping people to recover quickly from illness and return home to their normal lives
 - Supporting individuals or communities where life expectancy is lower than the County average or where quality of life is poor.
- 3.86 **Gloucestershire Nature Map**²⁷: The Gloucestershire Local Nature Partnership has set out the Nature Map to identify the presence of characteristic habitats which most typify the County. At such locations habitats of these types are to be supported, expanded and appropriately linked to help promote wildlife. The Nature Map identifies landscape-scale areas as the County's wildlife Strategic Nature Areas (SNAs) in respect of Priority Habitats, which provide the best opportunity for creating and linking these key wildlife habitats. This approach is to achieve large-scale habitat restoration and creation and is expected to help deliver wide-ranging benefits for people as well as wildlife as a result of support for a range of ecosystem services.
- 3.87 **Cotswolds AONB Management Plan 2013-2018**²⁸: The management plan sets out the special qualities (the statement of significance) of the AONB and a vision of how the landscape is to evolve over the twenty year period. The benefits of the AONB are set in terms of its scenic beauty, cultural heritage, green infrastructure provision, sustainable economic growth (including rural tourism and business) and ecosystem services. Key issues have been identified for each of

²⁵ Gloucestershire Local Nature Partnership (2015) *A Strategic Framework for Green Infrastructure in Gloucestershire 2015*

²⁶ Gloucestershire Health and Wellbeing Board (2014) *Gloucestershire Health and Wellbeing Strategy 2012 - 2032*

²⁷ Gloucestershire Local Nature Partnership (Accessed: April 2018) *Gloucestershire's Natural Environment: Gloucestershire Nature Map* Online at: <http://gloucestershirenature.org.uk/actionplan>

²⁸ Cotswolds Conservation Board (March 2013) *Cotswolds AONB Management Plan 2013-2018*

the themes relating to the AONB, from which objectives and policies have been drawn to protect the AONB and its special qualities.

- 3.88 The Cotswolds Conservation Board is currently undertaking work to prepare the **Cotswolds AONB Management Plan 2018-2023**²⁹. Currently in draft form, once adopted the new plan will supersede the adopted management plan to provide updated policies and guidance for developers and partner organisations and monitoring indicators against which the success of the plan will be measured.
- 3.89 The draft plan sets a vision for the AONB in 2043 as a "*Distinctive, unique, accessible living landscape treasured for its diversity which is recognised by all for its wide open views, dry stone walls, intimate valleys, flower rich grasslands, ancient woodlands and distinctive Cotswold stone architecture.*"
- 3.90 **2017-2027 Severn Estuary Strategy**³⁰: The Strategy was developed by the Severn Estuary Partnership to "champion an integrated approach to the sustainable use and enjoyment of the Severn Estuary". The aims of this Strategy are to:
- Update and streamline the 2001 Severn Estuary Strategy.
 - Provide a strategic policy framework for the Severn Estuary.
 - Provide context to inform and support decision-making.
 - Facilitate the Marine & Coastal Act (2009) obligations related to cross-border integration, land-sea integration and taking an ecosystem-based approach to management.
- 3.91 The Strategy also sets out five principles for its enactment which are in keeping with the UK High-Level Marine Objectives. These are:
- Achieving a sustainable marine economy.
 - Ensuring a strong, healthy and just society.
 - Living within environmental limits.
 - Promoting good governance.
 - Using sound science responsibly.
- 3.92 **The Severn Estuary Shoreline Management Plan Review (SMP2)**³¹: The SMP2 sets out draft policies for how the shoreline at the Severn Estuary should be managed for the next 100 years. The plan divides the area with the estuary into 16 Theme Areas each of which is in turn divided into a number of Policy Units of more manageable sizes. Within each Policy Unit the SMP2 gives recommendations for epoch (0-20 years; 20-50 years; and 50-100 years) in terms of one of four policy options: no active intervention; hold the line; managed realignment; or advance the line.
- 3.93 **Severn river basin district River basin management plan**³²: The management plan provides a framework for protecting and enhancing the benefits provided by the water environment. To achieve this it is to inform decisions on land-use planning. The plan highlights the areas of land and bodies of water that have specific uses that need special protection. These include waters used for drinking water, bathing, commercial shellfish harvesting and those that sustain the most precious wildlife species and habitats. The plan also sets out legally binding objectives for each quality element in every water body, including an objective for the water body as a whole with the default objective being set as achievement of a good status.
- 3.94 **Flood Risk Management Strategy**³³: The Strategy is a long term plan to manage tidal flood risks in the Severn Estuary. It covers the coast from Gloucester to Lavernock Point near Cardiff

²⁹ Cotswolds Conservation Board (February 2018) *Cotswolds AONB Management Plan 2018-2023*

³⁰ Severn Estuary Partnership (May 2017) *Severn Estuary Strategy 2017-2027*

³¹ Atkins on behalf of Severn Estuary Coastal Group (October 2010) *The Severn Estuary Shoreline Management Plan Review (SMP2)*

³² Department for Environment, Food & Rural Affairs and Environment Agency (December 2015) *Part 1: Severn river basin district River basin management plan*

³³ Environment Agency and National Resources Wales (Accessed April 2018) *Severn Estuary Flood Risk Management Strategy* Online at: <http://www.severnestuarypartnership.org.uk/sep/projects/severn-estuary-flood-risk-management-strategy/>

and from Gloucester to Hinkley Point in Somerset. The three main objectives of the Strategy are to:

- Define a 100 year plan of investment for flood defences by the Environment Agency, National Resources Wales and local authorities.
- Prioritise other flood risk management measures such as providing advice to utility companies to protect critical infrastructure, development control advice and flood warning investment.
- Decide where new inter-tidal wildlife habitats should be created to compensate for losses of habitat caused by rising sea levels.

3.95 **Stroud District Environment Strategy 2007-2027**³⁴: The strategy sets out the priorities for the District to 'live within environmental limits'. The priorities for Stroud have been identified as:

- Sustainable consumption and production.
- Climate change and energy.
- Protecting natural resources and enhancing the environment.
- Creating sustainable communities.
- Keeping the Council and local community focused on environmental limits.

3.96 **A Heritage Strategy for Stroud District**³⁵: The strategy was adopted as supplementary planning advice for the Council in February 2018. The document seeks to achieve the positive management and conservation of the District's heritage. Concurrently, the strategy will be expected to maximise the contribution that the historic environment makes to the character of the District, its economic well-being, and the quality of life of its communities.

3.97 The strategy has three main objectives to ensure that the local historic environment is properly valued:

- Maximising the contribution that the historic environment makes to the character of the District, its economic well-being, and the quality of life of its communities;
- Identifying ways to positively address the issues and pressures that are facing heritage assets; and

3.98 Maximising opportunities for the historic environment to help deliver the District Council's wider corporate objectives, including those of the Local Plan.

3.99 The Localism Act³⁶ introduced new permissive rights which included the preparation of Neighbourhood Development Plans (NDPs), Neighbourhood Development Orders and Community Right to Build Orders. NDPs must be compliance with higher level planning policy and legislation but provide local communities with tools to guide the long term growth of their area. A number of a NDPs have been adopted within the District including: Eastington NDP (October 2016); Stroud NDP (October 2016); Whiteshill & Ruscombe NDP (October 2016); Hardwicke NDP (January 2017); Kingswood NDP (May 2017); and Stonehouse NDP (February 2018).

Baseline Information

3.100 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps to identify key sustainability issues and means of dealing with them.

3.101 Annex 1 of the SEA Directive requires information to be provided on:

(a) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;

(b) the environmental characteristics of areas likely to be significantly affected;

³⁴ Stroud District Council (February 2007) *Stroud District Environment Strategy 2007-2027*

³⁵ Stroud District Council (February 2018) *A Heritage Strategy for Stroud District*

³⁶ *Localism Act Care Act 2011 Chapter 3* Accessed August 2018 Online at: <http://www.legislation.gov.uk/ukpga/2011/20/contents/enacted>

(c) any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC [the 'Birds Directive'] and 92/43/EEC [the 'Habitats Directive'].

- 3.1 Baseline information was previously collated for the June 2009 Local Development Framework SA Scoping Report and this has been used as the starting point to collate baseline data. This information has been revised and updated to make use of the most recent available information sources, and these sources have been referred to in footnotes. The revised and updated baseline data set out in this report reflects the scope of the Local Plan Review.
- 3.2 Data referred to have been chosen primarily for regularity and consistency of collection, in order to enable trends in the baseline situation to be established, and also subsequent monitoring of potential sustainability effects.
- 3.3 A number of changes to the baseline information presented in **Appendix 2** have been made since it was originally presented in the Scoping Report (April 2018), as a result of comments received from consultees (see **Appendix 1** for detail).

Key Sustainability Issues

- 3.4 Analysis of the baseline information has enabled a number of key sustainability issues facing Stroud District to be identified. Identification of the key sustainability issues and consideration of how these issues might develop over time if the Local Plan Review is not implemented help to meet the requirements of Annex 1 of the SEA Directive to provide information on:
"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan; and any existing environmental problems which are relevant to the plan."
- 3.5 Key sustainability issues identified in the 2013 Interim SA Report for the Stroud Local Plan (April 2013) have been reviewed and revised in light of the updated policy review and baseline information. The updated set of key sustainability issues for Stroud District is presented in **Table 3.1** overleaf.
- 3.6 A number of changes to the key sustainability issues presented in **Table 3.1** have been made since it was originally presented in the Scoping Report (April 2018), as a result of comments received from consultees (as summarised in **Appendix 1**).
- 3.7 It is also a requirement of the SEA Directive that consideration is given to the likely evolution of the environment in the plan area (in this case Stroud District) if the Local Plan Review was not to be implemented. This analysis is also presented in **Table 3.1** in relation to each of the key sustainability issues.
- 3.8 The information in **Table 3.1** shows that, in general, the current trends in relation to the various social, economic and environmental issues affecting Stroud would be more likely to continue without the implementation of the Local Plan Review, although the policies in the adopted Stroud District Local Plan (2015) would still go some way towards addressing many of the issues. In most cases, the Local Plan Review offers opportunities to directly and strongly affect existing trends in a positive way, through an up-to-date plan which reflects the requirements of the NPPF.

Table 3.1: Key Sustainability Issues for Stroud District and Likely Evolution without the Local Plan Review

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>Climate change is likely to affect biodiversity, increase hazards from fluvial flooding and also affect the social and economic aspects of life. The rural character and dispersed nature of development in Stroud means that there are likely to be difficulties with regards the delivery of reductions in greenhouse gas emissions.</p>	<p>Climate change is likely to have on-going effects regardless of the Local Plan Review. The adopted Stroud District Local Plan already includes policies seeking to address this issue, and these would continue to apply in the absence of the Local Plan Review. These policies include Core Policy CP2: Strategic growth and development locations, which seeks to provide most of the District’s development at the most sustainable locations; ES1: Sustainable Construction and Design, which supports increased energy efficiency and integrating the use of renewable and low carbon energy sources; and ES2: Renewable or low carbon energy generation which seeks to maximise the generation of energy from renewable or low carbon sources.</p> <p>The Local Plan Review offers the opportunity to update these policies to meet the current circumstances of the District in light of new development and updated growth requirements and provide further policy to address climate change if required.</p>
<p>New development in the District will mean there will be increasing demands for energy provision in the future. A significant proportion (30%) of existing homes in the District require energy efficiency improvements and the District is located within the region which has the highest regional percentage of fuel poverty in England. It is noted that the percentage of homes suffering from fuel poverty in the District is slightly less than the regional percentage, however.</p>	<p>The delivery of new homes and other development over the plan period could increase demand for and energy consumption in Stroud. At present the adopted Stroud District Local Plan includes policies seeking to address this issue, and these could continue to apply in the absence of the Local Plan Review. The policies include ES1: Sustainable Construction and Design, which supports increased energy efficiency and integrating the use of renewable and low carbon energy sources; and ES2: Renewable or low carbon energy generation which seeks to maximise the generation of energy from renewable or low carbon sources.</p> <p>The Local Plan Review offers the opportunity to update these policies to meet the current circumstances of the District and provide further policy to encourage improved energy efficiency and increase the proportion of energy which is supplied by renewable sources if required.</p>
<p>Stroud District contains many areas of high ecological value including sites of international, national and local importance. These are under threat from urbanising pressures, including disturbance and damage from recreational use. As well as the need to avoid damage at these sites, it will be necessary to restore and enhance them where possible.</p>	<p>Pressures on the natural environment in Stroud District are likely to continue regardless of the Local Plan Review particularly given the requirement for more housing and employment development to meet growth projections and due to the effects of climate change. The adopted Stroud Local Plan (2015) already includes policies seeking to address these pressures, including ES6: Providing for biodiversity and geodiversity which safeguards internationally, nationally and locally designated biodiversity and geodiversity sites as well as protecting undesignated sites and protected sites.</p> <p>However, without the site allocations to be made through the Local Plan Review, further development may not come forward in the most appropriate locations and impacts on biodiversity could be amplified. The Local Plan review also offers the opportunity to update planning policy in relation to the protection of areas which are of importance in</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
	<p>terms of their biodiversity and geodiversity with consideration for the future evolution of development in the District. The SA for the Local Plan Review will incorporate the findings of HRA which will provide further insight into biodiversity impacts specifically at European sites presenting the opportunities to limit adverse impacts at such locations.</p>
<p>The countryside is under pressure from urbanising influences which are driven by a need for new housing provision and economic growth and infrastructure improvements to support new growth in Stroud.</p>	<p>Pressures on the countryside are likely to continue regardless of the implementation of the Local Plan Review. The adopted Stroud District Local Plan (2015) has already set out strategic growth areas, within or adjacent to larger settlements which will focus much of the new development in the District in those areas which have been subject to SA and selected by the Councils as the most sustainable and appropriate locations for development.</p> <p>However, without the new allocations to be made through the Local Plan Review, further development may not come forward in the most sustainable and appropriate locations and impacts on the countryside could be more significantly adverse.</p>
<p>The District has significant areas of landscape importance, most notably to the east within the boundaries of the Cotswolds AONB.</p>	<p>The adopted Stroud District Local Plan (2015) already includes policies to protect and enhance the landscape, including ES7: Landscape Character, which seeks to conserve and enhance the natural and scenic beauty of landscape character in the District including that of the Cotswolds AONB and its setting.</p> <p>The Local Plan Review offers the opportunity to update the current policy position in responses to the evolution of the District and development pressures it currently faces through more specific development management policies and site allocations that are selected following consideration of their impacts on landscape character through the SA. The emerging Cotswolds AONB Management Plan will provide further context to the development set out through the Local Plan Review and allow the updated pressures which the AONB is now facing to be appropriately considered.</p>
<p>The large area of Grade 3 Agricultural Land is a significant asset to the District; however pressures from development and climate change threatened the viability and productivity of such soils.</p>	<p>The pressures for new development in the District are likely to result in some development occurring in areas where high quality agricultural soils are present. The adopted Stroud District Local Plan (2015) contains policy to promote development at locations which would result in the re-use of previously developed land most notably through Core Policy CP14: High Quality Sustainable Development.</p> <p>The Local Plan Review presents the opportunity to update planning policy in the District to specifically protect higher value agricultural soils in the District in addition to promoting the re-use of previously developed land. The Local Plan Review might also be used to allocate sites for development which do not make use of higher quality agricultural soils (with consideration for the other principles of sustainable development).</p>
<p>The River Severn and its tributaries pass through the District and these</p>	<p>The adopted Stroud Local Plan (2015) already includes policies to reduce flood risk in</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>have the potential to cause serious flooding.</p>	<p>the District including ES4: Water resources, quality and flood risk, which seeks to reduce flood risk in the District through appropriate siting of development, support for the provision of SuDS and other proposals which would reduce vulnerability to flood risk in Stroud.</p> <p>New development supported through the Local Plan Review can increase the risk of flooding; however the Local Plan Review offers the opportunity to provide development at locations which present the lowest flood risk and drafting new planning policy which will address the evolving flood risk situation in Stroud.</p>
<p>Much of the western portion of the District falls within Surface Water NVZs and/or Ground Water NVZs which indicates that different water bodies which pass through Stroud are exposed to significant levels of nitrates with a potential adverse impact on local water quality. Areas of the District also fall within SPZs.</p>	<p>The adopted Stroud Local Plan (2015) already includes policies seeking to protect and enhance water quality including Core Policy CP14: High Quality Sustainable Development which seeks to protect, conserve and enhance the built and natural environment including exposure to water pollution and ES4: Water resources, quality and flood risk, which seeks to maintain water quality encouraging the use of SuDS and appropriate recycling of water.</p> <p>The Local Plan Review presents the opportunity to allocate new development at sites which are less likely to have adverse impacts in terms of local water quality following their consideration through the SA process. There is also the opportunity through the Local Plan Review to include new development management policies thereby updating the planning policy position to directly address the updated water quality situation in Stroud.</p>
<p>The age structure of the population shows that currently there is a higher proportion of older people in the South West than nationally. There is expected to be an increasingly disproportionate number of older people in the area. This will have implications for the economy, service provision, accommodation and health.</p>	<p>The Stroud Local Plan (2015) through Core Policies CP7: Lifetime communities and CP8: New housing development expects new development to contribute to the provision of sustainable and inclusive communities meeting needs of residents including older people and also provide range of different types, tenures and sizes of housing, to create mixed communities.</p> <p>The Local Plan Review offers the opportunity to build on this policy approach through development management and site allocation policies which will help to meet the requirements of the future age structure of the District. In addition to development management policies which promote the provision of homes suitable for all sections of the community this will include the consideration of sites in terms of access to existing services centres and services and facilities through the SA process.</p>
<p>Stroud generally displays higher levels of public health than the national average however there is a requirement to address health inequalities as well as specific health problems such as obesity in the District.</p>	<p>Although not explicit in the adopted Stroud District Local Plan (2015), opportunities to consider access to healthcare, open spaces and other recreational facilities would have been taken into account during identification and allocation of the strategic development locations in Core Policy CP2: Strategic growth and development locations. The Local Plan Review presents further opportunities to allocate new housing development sites at locations which are in close proximity to existing healthcare</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
	facilities, open spaces and other facilities which might encourage healthier lifestyle choices including increased levels of physical activity. The Local Plan Review might also be used to allocate open spaces and local green spaces to protect them from development and ensure that appropriate levels of access to open space are achieved.
<p>House prices have increased by the highest percentage within the South West when compared to the other regions of England.</p>	<p>The adopted Stroud District Local Plan (2015) seeks to increase house building to address historic undersupply and the needs of concealed households by exceeding the minimum housing requirement (11,400) set out in Core Policy CP2: Strategic Growth and Development Locations. The proportion of new development at larger sites which is to be delivered as affordable housing where viability is demonstrated is set out in the adopted Stroud District Local Plan (2015) through Core Policy CP9: Affordable housing, which requires a minimum of 30% of housing to be affordable.</p> <p>Meeting the future housing requirements identified in the new national methodology to 2036 through the Local Plan Review is intended to address national historic undersupply and resultant house price increases. Without the implementation of the site allocations to be included as part of the Local Plan Review there may be less certainty about the delivery of affordable housing at site allocations.</p>
<p>Much of the housing stock in the District is quite old and the worst housing conditions are most evident in the private rented sector.</p>	<p>The adopted Stroud District Local Plan (2015) through Core Policy CP2: Strategic Growth and Development Locations sets out the level of housing (11,400) and that which should be provided at the strategic sites in the District. As such the assessed need for housing is to be met up to 2031. Core Policy CP8: New housing development sets out that new housing development should be well designed to address local housing needs, incorporating a range of different types, tenures and sizes of housing. As such the current Local Plan would help to provide high quality housing to meet local need up to 2031.</p> <p>The Local Plan Review presents the opportunity to allocate housing up to 2036 to meet future requirements and to update the planning policy position to ensure that future housing provision is of the highest quality.</p>
<p>Stroud on average is one of the least deprived districts/unitary authorities in the country. However, there are pockets of deprivation particularly in relation to housing and service provision.</p>	<p>Without the implementation of new site allocations to be included in the Local Plan Review there may be less certainty about the delivery of housing and employment land and therefore deprivation in Stroud would be less likely to be addressed.</p>
<p>Economic productivity in the District in terms of the GVA per hour worked indices is slightly lower than the national figure. There is a requirement to make appropriate use of the District's strong strategic transport links along the M5 corridor to facilitate future economic growth. Furthermore there is a net flow of commuters out of the District.</p>	<p>Without the implementation of new site allocations to be included in the Local Plan review there may be less certainty about the delivery of employment land and necessary transport infrastructure and therefore any potential for economic stagnation would be less likely to be addressed.</p>
<p>The town centres of the District face evolving pressures in terms of</p>	<p>The adopted Stroud District Local Plan (2015) through Policy CP12 Town centres and</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>outside retail offers of the surrounding areas and the continued importance of e-retailing and provision of services online. Service uses and to a lesser extent comparison and convenience uses have seen a decline at many of the town centres while there has been a growth in leisure uses in recent years up to the end of 2016. There is a requirement to protect and enhance the role of town centres as economic drivers and employment supporters in a sustainable manner which is responsive to the evolving situation in Stroud.</p>	<p>retailing seeks to protect and bolster the role that the District's town centres play in providing jobs and contributing to a strong local economy. This includes supporting Stroud town centre as the principal town centre with priority to be given to improving retail facilities in Dursley, Stonehouse, Nailsworth and Wotton-under-Edge after this. Retail and other uses (including leisure, entertainment, cultural and tourist uses as well as other mixed-uses) that would support the vitality and viability of the centres in the hierarchy below Stroud town centre are to be directed in a sequential manner.</p> <p>The Local Plan Review presents the opportunity to incorporate updated policy to protect the evolving role of the town centres in the District. The Local Plan policy position may be updated to reflect the current strengths and opportunities at these town centres with consideration for existing weaknesses and emerging pressures to protect these centres in terms of their importance for economic growth and job provision.</p>
<p>While a high proportion of residents in the District make use of alternative modes of transport such as cycling to commute, car ownership in the area is high, and there are serious congestion problems in key locations. The re-establishment of the Cotswold Canals presents opportunities for the promotion of alternative modes of transport however there is a need to handle this sensitively.</p>	<p>The adopted Stroud District Local Plan (2015) through Core Policy CP2: Strategic Growth and Development Locations sets out development to be provided at the strategic sites in the District with development to take place in accordance with the settlement hierarchy beyond these locations. As such the adopted Local Plan seeks to guide development to locations which have been appraised as part of the SA process and are the more sustainable locations in the District. Core Policy CP13: Demand management and sustainable travel measures furthermore requires that all development is located where there are choices in modes of transport available and where the distance people need to travel is minimised. Policies EI12: Promoting transport choice and accessibility; EI13: Protecting and extending our cycle routes and EI14: Provision and protection of rail stations and halts, further help to promote sustainable transport options in the District. Policy ES11: Maintaining, restoring and regenerating the District's canals protects the future improvement, reconstruction, restoration or continued use of the canals or towpaths in Stroud.</p> <p>The Local Plan Review presents the opportunity to incorporate support for the establishment of stronger sustainable transport links and the provision of new development at allocated sites where these links will be accessible. Furthermore the policy position of Local Plan can be updated to reflect the evolved situation of the restoration of the canals in Stroud and progress with cycling and walking capital projects.</p>
<p>The Industrial Heritage Conservation Area (IHCA) which covers 23km of the Cotswold Canals is currently one of several heritage assets which are included on Historic England's Heritage at Risk list. Within the District areas of significant built historic importance and aesthetic quality are under pressure due to new development in the District and there is a</p>	<p>The adopted Stroud District Local Plan (2015) already includes policies seeking to protect and enhance the historic environment, including ES10: Valuing our historic environment and assets, which requires development to enhance the heritage significance and setting of the Districts heritage assets.</p> <p>The Local Plan Review presents the opportunity to guide new development to locations</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>requirement for them to be preserved and enhanced.</p>	<p>which are less sensitive in terms of their impact on heritage assets (with consideration for other sustainability issues) through the SA process applied to potential site allocations. The Local Plan Review provides a way of delivering elements of the new Heritage Strategy and will also allow for any update required to be made to the policy position the Council has taken with regards the protection of heritage assets and their setting through appropriate development policies.</p>
<p>The District needs to capitalise further on the tourism industry so that this sector continues to contribute fully to economic growth. There is also a need to consider how links to the wider Cotswolds area can be made most use of profitably and how these links can be promoted. There may be opportunities to grow the tourism market at the District's town centres particularly where there are existing links to the Cotswolds AONB and Cotswolds Way. Recent years have seen a rise in the number of leisure uses at town centre locations and identified strengths at the various centres include independent cafes and shops, traditional markets and the attractive landscape setting.</p>	<p>The adopted Stroud District Local Plan (2015) through Policy EI10 Provision of new tourism opportunities sets out the approach to tourism development in Stroud. This is to protect and enhance landscapes and environmentally sensitive sites, whilst aiming to provide adequate facilities and enhancing enjoyment and profitability. The policy position of the current Local Plan thereby seeks to protect and enhance the functioning of the tourism sector in the District. Policy CP12 Town centres and retailing seeks to protect and bolster the role that the District's town centres play in providing jobs and contributing to a strong local economy. This includes supporting Stroud town centre as the principal town centre with priority to be given to improving retail facilities in Dursley, Stonehouse, Nailsworth and Wotton-under-Edge after this. Retail and other uses (including leisure, entertainment, cultural and tourist uses as well as other mixed-uses) that would support the vitality and viability of the centres in the hierarchy below Stroud town centre are to be directed in a sequential manner.</p> <p>The Local Plan Review presents the opportunity to provide updated development policy to guide future tourism development in light of the evolving situation in the District and the evolution of its town centres. This may include the potential to support the role of market town centres, build on current links to the Cotswolds AONB or to support development which would help to reposition the appeal of the District to attract new tourists.</p>
<p>The transport infrastructure is strong in the west along the M5 and A38 from north to south, although there are signs of peak congestion. The existing transport network is weaker to the east with areas of congestion prevalent. Access from to east to west in the District is also limited relative to the connectivity provided from north to south.</p>	<p>The adopted Stroud District Local Plan (2015) through Core Policy CP2: Strategic Growth and Development Locations sets out development to be provided at the strategic sites in the District with development to take place in accordance with the settlement hierarchy beyond these locations. As such the adopted Local Plan seeks to guide development to locations which have been appraised as part of the SA process which is considerate of these locations accessibility and therefore to the more sustainable locations in the District.</p> <p>The Local Plan Review presents the opportunity to guide future development through new site allocations and development management policies to the more sustainable and accessible locations of the District. In this manner it will be possible for the future development in Stroud to make use of existing transport links and infrastructure which is supported through future investment plans. This approach will also help to promote</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
	<p>the development of locations which are more accessible by the rail network, public transport and other modes of alternative transport to the benefit of location congestion issues given that these factors will be considered through the site assessment process and SA Report. The Local Plan Review will also present the opportunity to provide support for increased north-south and east-west connectivity where this is required.</p>

4 Sustainability Appraisal Findings for the Policy Options

- 4.1 This chapter presents the SA findings for the policy options that have been considered for the Local Plan Review. These options were initially set out in the Issues and Options consultation paper (October 2017), although some additional work has since been undertaken by the Council to develop some of those options.
- 4.2 The appraisal work set out in this chapter is presented in the same order that the options appeared in the Issues and Options consultation paper. Detailed SA matrices relating to some of the options can be found in **Appendix 3**.
- 4.3 The SA findings set out in this chapter were originally presented to Stroud District Council officers in early August 2018, so that the findings could inform the policy approaches included within the Emerging Strategy Paper, and further policy development which will take place in the subsequent stage of the Local Plan Review in 2019.

Chapter 1: Key Issues

- 4.4 The first chapter of the Issues and Options consultation paper sets out the key issues facing Stroud District, in relation to economy, affordable housing, environment, health and wellbeing and delivery.
- 4.5 Alternative options are not included in this chapter; therefore no appraisal work in relation to the key issues has been undertaken. However, a review of the key issues was undertaken following preparation of the SA Scoping Report (April 2018) in order to ensure that there are no inconsistencies and that an appropriate range of key issues is identified in the Local Plan. This review did not result in the SA team recommending that any changes should be made to the key issues in the Local Plan.

Chapter 2: Needs

Local Economy and Jobs

- 4.6 This section of the Local Plan sets out a number of alternative options in relation to the need for economic growth and job creation in the District. While some of the questions posed in the consultation are open ended and do not comprise alternative options that can be appraised, a number of distinct options are identified and the sections below provide a commentary on their likely significant sustainability effects.

Question 2.1c

- Option 1: Locating growth adjacent to M5 junctions.
- Option 2: Continuing expansion of employment land at existing settlements/sites.

- 4.7 The specific nature of these options means that negligible effects would be likely in relation to many of the SA objectives. However, locating more employment development adjacent to the M5 junctions could have minor negative effects on SA objectives 10: **air quality** and 14: **climate change** as this approach may result in higher levels of car use for employees commuting to and from the sites, as well as potentially attracting less sustainable, transport-based commercial activities such as logistics. Development adjacent to the M5 junctions would be some distance from the main settlements in the District including Stroud and Cam and Dursley. There may also be minor negative effects on SA objective 16: **employment** as employment opportunities

adjacent to the M5 junctions may not be easily accessible for people without access to a car. A minor negative effect on SA objective 2: **health** could also result from there being more limited opportunities for people to walk or cycle to work.

- 4.8 Conversely, continuing to expand employment land at existing settlements and sites could have minor positive effects on the SA objectives described above, as more people may be able to make use of existing sustainable transport links to access work opportunities without relying on private cars.
- 4.9 The effects of both options on the environmental objectives, including SA objectives 7: **biodiversity**, 8: **landscape**, 9: **historic environment** and 12: **flood risk**, would depend on the specific location of employment land allocations under either option, and so cannot be determined at this high level.

Question 2.1d

- Option 1: Increased flexibility to allow other job generating uses on all employment sites.
- Option 2: Increased flexibility allowed on some sites only.
- Option 3: Identify a percentage threshold for non B class employment uses.

- 4.10 Allowing for increased flexibility in terms of the uses permitted at employment sites (Options 1 and 2) could have a positive effect on SA objective 6: **access to services** for employees at those sites, as they would be able to make use of facilities such as retail outlets during breaks and after work. Depending on nature of the other uses, there could also be positive effects on SA objective 2: **health**, i.e. if gyms were located within employment sites alongside Class B uses. Although such effects would be particularly positive under Option 1, which would allow flexibility on all employment sites and not just some (as with Option 2), the positive effects are not likely to be significant under either option as they only relate to employees at the sites concerned, rather than a large number of residents across the District. The likely effects of Option 3 would depend on the percentage threshold for non B class employment uses that is eventually applied, with the potential positive effects on the above SA objectives being greater if the percentage threshold is higher.
- 4.11 However, under all options there is a potential for minor negative effects on SA objective 16: **employment** if allowing a greater mix of employment uses were to result in an overall lower number of jobs being created. Some of the non B class uses that could be located within employment sites, such as retail units and gyms, are not likely to generate significant numbers of well-paid jobs in comparison to other potential B class uses. However, the potential negative effects of this nature are uncertain for all three options depending on the other uses that may eventually come forward and the number of associated jobs. As previously, the potential for negative effects is greater under Option 1 which would allow flexibility for other job generating uses on all, rather than just some, sites.

Question 2.1e

- Option 1: Promote further home working, encourage development of live-work units and co-working facilities.

- 4.12 The option for the Local Plan Review to promote more home working and to encourage the development of live-work units and co-working facilities is likely to have minor positive effects on SA objectives 10: **air quality** and 14: **climate change** as it may lead to lower levels of car use for commuting. There is also likely to be a minor positive effect on SA objective 16: **employment** as this approach should mean that a wider range of job opportunities are available to more people, including those without cars or with restricted working hours. The creation of co-working facilities in particular may also have a minor positive effect on SA objective 17: **economic growth** as it would support business development.
- 4.13 The specific nature of this option means that negligible effects on the other SA objectives are expected.

Question 2.1f

- Option 1: Promote further farm diversification.

- Option 2: Control pattern of rural development more closely.

- 4.14 Promoting further farm diversification under Option 1 could have a minor positive effect on SA objectives 16: **employment** and 17: **economic growth** as this approach could offer local employment opportunities and allow farming businesses to respond flexibly to changes in agriculture to ensure that their businesses remain viable. Depending on the nature of diversification that takes place, there may also be minor positive effects on SA objectives 3: **health** and 6: **access to services and facilities** if the businesses provide opportunities for physical activity, or add to the range of community services and facilities available in the area. Conversely, Option 2 would involve more close control over rural development, which could have minor negative effects on those SA objectives.
- 4.15 However, Option 1 could have negative effects on some of the environmental SA objectives, in particular SA objective 8: **landscape**, although this is uncertain depending on the nature and location of diversification activities. Controlling rural development more closely under Option 2 could have a positive effect on that objective.

Our Town Centres

- 4.16 This section of the Issues and Options consultation document sets out a number of 'mix and match' options for improving the town centres of Stroud, Nailsworth, Dursley, Wotton-under-Edge and Stonehouse. As these options are generally aspirational, broadly positive effects on the SA objectives are expected to occur.
- 4.17 In general, improving the District's town centres will have positive effects on SA objectives 5: **vibrant communities** and 6: **access to services**. There are also likely to be positive effects on SA objectives 10: **air quality** and 14: **climate change** as improvements to the town centres may encourage more people to shop and spend time in those areas, which are generally more accessible via sustainable transport compared to out of town retail parks or other larger centres. Significant positive effects on SA objective 17: **economic growth** would also be expected as the overall purpose of the options are to maintain and enhance the vitality and viability of the District's town centres. Several of the options for the town centres are associated with marketing the tourism potential of the towns, i.e. promoting the proximity of Stroud and Dursley and so would have positive effects on SA objective 17: **economic growth** for that reason as well.
- 4.18 Considering the specific options set out in the Issues and Options document, there is, however, potential for some of the options to have a negative effect on SA objectives 10: **air quality** and 14: **climate change** where they could be seen to encourage car use. For example, one of the options that is included for both Stroud and Dursley is to improve signage to car parking for motorists – while this could benefit the street scene and reduce congestion, it could indirectly encourage car use. The other approach proposed for Dursley, to enhance signage in the town for pedestrians and cyclists, would have more positive effects on those SA objectives. Similarly, one of the options for Wotton-under-Edge is to find a solution for the lack of car and coach parking, including allocating a site – this could again have a negative effect on SA objectives 10: **air quality** and 14: **climate change**, as could the option for Stroud to relax parking restrictions in the evening and two of the options for Stonehouse that refer to promoting the town's links with the strategic road network.
- 4.19 One of the proposals for Nailsworth, improving the town square, would have a positive effect on SA objective 8: **landscape and townscape**.
- 4.20 The option for Stroud to support new housing in the town centre for young professionals could have a minor positive effect on SA objective 1: **housing**.

A Local Need for Housing

- 4.21 This section of the Issues and Options consultation document poses a number of open ended consultation questions in relation to the need for housing development in the District, but does not identify alternative options that can be subject to SA. Therefore, no appraisal work has been undertaken in relation to this section. Any potential development sites that have been put forward in response to question 2.3c have been subject to SA along with other site options.

Local Green Spaces and Community Facilities

- 4.22 This section of the Issues and Options consultation document poses a number of open ended consultation questions in relation to the need for local green spaces and community facilities in the District, but does not identify alternative options that can be subject to SA. Therefore, no appraisal work has been undertaken in relation to this section. A small number of potential open space site options have been subject to SA separately.

Chapter 3: Future Growth Strategy

Future Growth Strategy

- 4.23 In summary, the four strategic growth options being considered for the Stroud Local Plan Review comprise:
- Option 1: Concentrated development - 5,550 dwellings and 30ha B class employment.
 - Option 2: Wider distribution - 5,520 dwellings and 30ha B class employment.
 - Option 3: Dispersal -5,695 dwellings and 40ha B class employment.
 - Option 4: Growth Point -6,010 dwellings and 40ha B class employment.
- 4.24 The Council's paper "Local Plan Review: Developing a preferred strategy (revised March 2018)" describes the options in more detail (including how much housing would be delivered in the broad locations making up the option) and has been taken into account during the appraisal, along with four maps prepared by the Council illustrating the broad locations for growth under each option.

Summary of SA findings

- 4.25 **Table 1** at the end of this section summarises the sustainability effects identified for the four future growth strategy options being considered for the Stroud Local Plan. The justification for the sustainability effects identified is provided in the detailed SA matrix in **Appendix 1** at the end of this note.
- 4.26 It is expected that Option 1 would provide new housing and economic growth at locations to achieve the most positive effects as well as having the lowest number of outright significant negative effects. These effects are likely given that this approach would provide the majority of housing and employment development adjacent to the main towns in the district and would be concentrated at a few larger sites.
- 4.27 Option 1 would provide enough housing to ensure the housing stock meets the needs of local people, and the provision of much of this development at a smaller number of larger sites is likely to mean that high levels of affordable housing could be provided without significant impacts on viability. This approach may also provide more opportunities for the incorporation of new infrastructure to support low carbon and renewable energies as well as sustainable waste management practices. This option also provides a high level of new employment land in relatively accessible locations. The concentration of new development across a smaller number of larger sites is also likely to mean that transport connectivity issues which might otherwise adversely affect the accessibility of employment opportunities in the district might be addressed by securing government funding for new infrastructure provision.
- 4.28 It is expected that providing new housing by the larger towns of the district would mean that new residents would be located in close proximity to a range of existing services and facilities which would be to the benefit of promoting modal shift and health and well-being as well as social inclusion. Furthermore, it is likely that this approach would help to improve the vitality and viability of the town centres at the settlements in question, although it recognised that this approach would not directly support the growth of the more rural villages of the district.
- 4.29 Considering the high level of growth required over the plan period it is expected that all options would require development to proceed at large areas of greenfield land. Option 1 may however present increased opportunities to make use of brownfield sites which are more likely to be available at the larger settlements in the district. Option 1 would also provide the majority of new growth away from the more sensitive biodiversity and geodiversity sites (particularly the Severn

Estuary SPA, SAC and Ramsar site) and landscape designations (including the Cotswolds AONB) in the district. Providing development near the large settlements of the district will also help to avoid the areas at most risk of flooding and areas which have been designated as having potential to adversely impact water quality if development was to proceed.

- 4.30 Conversely Option 2 and Option 3 would result in a greater spread of development throughout the district at the smaller towns and more rural villages. These locations are currently less accessible and provide access to a lower number of key services and facilities. Furthermore the wider dispersal of development through the district would place a higher level of development in close proximity to potentially sensitivity biodiversity and geodiversity designations while also resulting in adverse impacts on the established character of the more rural villages and the AONB. Both of these options would make use of a higher number of smaller development sites meaning that issues relating to viability³⁷ may be more likely to result in relation to the delivery of affordable housing. It is also considered government funding which might otherwise be used to help to address connectivity issues in the district would be less likely to be secured at the smaller sites which these options would put forward.

Table 1: Summary of sustainability effects for the Future Growth Strategy Options for Stroud Local Plan

SA Objective	Option 1: Concentrated development	Option 2: Wider distribution	Option 3: Dispersal	Option 4: Focus on a single growth point
SA 1: Housing	++	++/-	++/-	++
SA 2: Health	++/-	+/-	+/--	++/--?
SA 3: Social inclusion	++/-	+/-	+/--	++/--?
SA 4: Crime	0	0	0	0
SA 5: Vibrant communities	+/-	+/-	+/-	+/-
SA 6: Services and facilities	++/-	++/-	+/--	++/-
SA 7: Biodiversity/geodiversity	-?	--?	--?	--?
SA 8: Landscapes/townscapes	-?	--?	--?	--?
SA 9: Historic environment	+?/--?	+?/--?	+?/--?	+/--?
SA 10: Air quality	+	+/-	-	+/-
SA 11: Water quality	-	--	--	0
SA 12: Flooding	+/-	-	--	-
SA 13: Efficient land use	+/--	--	--	--
SA 14: Climate change	+	+/-?	-	+/-?
SA 15: Waste	+?	0	0	+
SA 16: Employment	++/-	++/-	+/--	++?/-
SA 17: Economic growth	+/-	+/-	+/-	++?/-

- 4.31 Option 4 would provide the majority of new development at large scale sites at just three locations in the district; including at the new growth point to the south of Sharpness. It is expected that the new growth point at Sharpness in particular would not provide immediate access to existing services and facilities, meaning that new residents may be required to travel longer distances on a day to day basis. However, the large scale of development concentrated at only three locations is likely to support the incorporation of new services and facilities at these growth points as well as supporting higher levels of affordable housing and the securing of

³⁷ National Planning Practice Guidance (paragraph 031 Reference ID: 23b-031-20161116) refers to the fact that contributions for affordable housing should not be sought from some smaller-scale developments.

government funding for infrastructure improvements. The latter in particular could be of particular benefit in terms of securing future inward economic investment.

- 4.32 However, large scale development at the three growth point locations in Option 4 is likely to result in the loss of a large amount of greenfield land with reduced focus on the use of brownfield sites. The development to be provided at the Sharpness growth point would be provided at a location which could adversely impact upon the integrity of the Severn Estuary SPA, SAC and Ramsar site in particular. This location by the Severn Estuary also contains areas of Flood Zone 2 and Flood Zone 3 although it is noted that flood defences are in place which would help mitigate the potential for adverse flood risk.

Conclusion

- 4.33 Option 1 performs slightly better overall in terms of potential positive effects and slightly fewer negative effects. However, there are elements of the other three options that also perform well. In particular, concentrating all the new growth at the three potential growth points could have fewer negative environmental impacts than Options 2 and 3, and would have most of the same significant positive effects as Option 1 for provision of housing, employment opportunities, access to services, health and social inclusion due to the creation of new, mixed-use communities. Option 2 with a slightly wider distribution than Option 1 could have benefits in terms of access to services and employment opportunities for some of the other larger towns and villages in the District. Therefore, it may be worth considering a hybrid option which most resembles Option 1: Concentrated development, but perhaps including growth at one or two growth points and/or one or two of the smaller towns and larger villages as well (although this would need to avoid settlements where negative environmental effects on biodiversity/geodiversity, landscape/townscape, historic environment, water quality and flooding are more likely).

Gloucester's Fringe

- 4.34 This section of the Issues and Options consultation document identifies a number of broad locations for growth on the fringe of Gloucester. These locations have been subject to SA along with the other site options.

South of the District

- 4.35 This section of the Issues and Options consultation document considers whether there are broad locations that could be considered for growth in the South of the District. Potential development locations in that area have been subject to SA along with the other site options.

Settlement Hierarchy

- 4.36 This section of the Issues and Options consultation document presents the settlement hierarchy as it is set out in the adopted Local Plan and asks for comment on that. No alternative options are set out and therefore no appraisal work has been undertaken in relation to the settlement hierarchy.

Settlement Boundaries

- 4.37 This section of the Issues and Options consultation document identifies three alternative approaches to managing development proposals on the edges of towns and villages:

Question 3.5a

- Option 1: Continue with existing settlement development limits, amended as necessary.
- Option 2: Assess proposals on a case by case basis using broader criteria (e.g. landscape impact; form of settlement, proximity to services, etc.).
- Option 3: Continue with settlement development limits but expand the types of development that are allowed beyond them in the countryside.

- 4.38 A fourth option also asks consultees whether there are any other approaches that should be considered, which cannot be appraised as no other approaches are identified.

- 4.39 The appraisal of these options has been informed by the discussion paper that was prepared by Council officers for the Planning Review Panel, entitled 'Review of Settlement Development Limits'.
- 4.40 Continuing with the current approach of defining stringent settlement development limits (Option 1) is likely to have broadly positive effects on the environmental SA objectives as development outside of settlement limits is strictly controlled. The protection resulting from this approach would have minor positive effects on SA objectives 7: **biodiversity**, 8: **landscape** and 13: **land use and soils**. There may also be minor positive effects on SA objective 10: **air quality** as focussing development within existing settlement limits, as opposed to permitting more dispersed development, could result in lower levels of car use. In addition, there could be a minor positive effect in relation to SA objective 6: **access to services**. However, the lack of flexibility associated with this approach could have minor negative effects on SA objectives 1: **housing** and 16: **economy** if proposals for development outside of settlement limits that would otherwise benefit these SA objectives are prevented from coming forward. It is possible that this less flexible approach could result in development proposals being refused in locations where there would not actually be adverse impacts on the environment, but the opportunity to consider and assess this on a case-by-case basis is lost.
- 4.41 Option 2 (assessing proposals on a case by case basis using criteria) would allow for more flexibility, which may benefit SA objectives 1: **housing** and 16: **economy** if residential and commercial developments are able to come forward in wider locations where it can be established that there would not be harm as a result. This more flexible approach would not necessarily result in adverse effects in relation to the environmental SA objectives, as there would be criteria that proposals would still be required to meet; however there may be an increased chance of negative effects on SA objectives 7: **biodiversity** and 8: **landscape** in particular if there is less stringent protection compared to Option 1. Effects would depend largely on the criteria that are applied and how stringently they are enforced, as well as whether the Council has available the evidence needed to thoroughly assess proposals, such as Conservation Area appraisals and up to date landscape sensitivity assessments. There may also be minor negative effects on SA objective 6: **access to services** and SA objective 10: **air quality** if this approach were to result in more dispersed development which is likely to be associated with higher levels of car use.
- 4.42 The third option would involve continuing with the current settlement development limits but expanding the types of development that are allowed beyond them in the countryside. This approach would provide the environmental protection of option 1, although not as strongly because certain types of development would not be as tightly controlled in terms of their location and may therefore be more likely to have adverse impacts. As with option 2 however, there could be benefits for SA objectives 1: **housing** and 16: **economy** assuming that the types of developments that might be allowed would be things like live work units and exemplar carbon neutral schemes. There may also be minor negative effects on SA objective 10: **air quality** if more dispersed development under this option were to result in higher levels of car use. In addition, dispersed development could have a negative effect in relation to SA objective 6: **access to services**.
- 4.43 A number of hybrid options are also identified in the discussion paper referred to above and the effects of these would be a mixture of the positives and negatives described above for the three options in the Issues and Options document. For example, one hybrid option could be a combination of Options 1 and 2 – removing settlement development limits for large settlements but retaining them for small villages with few facilities in sensitive locations. This approach would have some of the more positive social and economic effects described above for Option 2, while still providing some of the environmental protection associated with Option 1.

Broad Locations and Potential Sites

- 4.44 Reasonable alternative locations for development have been subject to SA and the findings are presented separately. This includes the site options set out in the Issues and Options consultation document as well as other reasonable alternative options that have been considered previously by the Council or that have come forward since the Issues and Options consultation.

Chapter 4: Background Studies

- 4.45 This final section of the Issues and Options consultation document describes the background studies that are being prepared to inform the Local Plan Review and asks consultees whether any others are considered necessary. No alternative options suitable for appraisal are included in this section.

5 Sustainability Appraisal Findings for the Site Options

- 5.1 This chapter summarises the SA findings for the reasonable alternative site options that have been considered for the Local Plan Review. The SA findings described in this chapter are structured by the type of site uses being considered: residential, employment, mixed use, community/retail and open space. A small number of sites have been appraised as options for more than one type of use, in line with the audit trail of site options provided by Stroud District Council (SDC).
- 5.2 This work was originally presented in an internal SA note to Stroud District Council officers in early August 2018, so that the findings could be taken into account to inform the selection of potential sites for inclusion in the Local Plan Review Emerging Strategy Paper.
- 5.3 **Appendix 4** presents the assumptions regarding minor and significant effects for each SA objective that have been applied in the SA of each type of site option, in order to ensure consistency in the appraisal of a large number of alternative options. The assumptions for community/retail site options have been taken as a guide but not able to be applied as strictly as for the other site types because the SA findings are strongly influenced by the specific type of community or retail use proposed for each of those site options (which include a football stadium, extension to a school and retail).
- 5.4 Detailed findings for each site option are presented in SA matrices found in **Appendix 5**. An audit trail showing whether each site option was selected or discounted for inclusion in the Local Plan Review Emerging Strategy Paper is presented in **Appendix 7**.

Residential site options

- 5.5 **Table 5.1** at the end of this section presents a summary of the SA scores for the 270 reasonable alternative residential site options. As discussed below, development of new residential areas within the District is generally likely to have positive effects on some of the social and economic objectives (housing, employment), mixed effects on health and access to services depending on proximity to existing settlements, and more negative effects on the environmental objectives due to the loss of greenfield land and permeable surfaces, and potential impacts on the landscape, cultural heritage and biodiversity/geodiversity.
- 5.6 Due to the nature of the development proposed at these sites, all 270 of the residential site options would have at least minor positive effects on SA objective 1: **housing**. Six of the sites are relatively large in size (i.e. they would accommodate at least 600 homes) and would have significant positive effects as they would make a bigger contribution to meeting the District's housing need, while the other 264 sites would accommodate less than 600 homes and therefore have minor positive effects.
- 5.7 The likely effects of the residential site options on SA objective 2: **health** are very mixed. Fifty-one of the site options would have significant positive effects as they are within 400m of a GP surgery as well as being within 800m of open space and within 400m of walking and cycle paths, which could be used by residents to engage in active outdoor recreation. However, 24 of the site options could have significant negative effects on this objective as they contain an existing green infrastructure asset that could be lost as a result of new residential development onsite. These potential significant negative effects are uncertain, however, as it may be possible to retain such features within the sites particularly if required through other policies in the Local Plan. The remaining sites would mainly have either mixed or minor positive effects on health as the access that they provide to GPs and green infrastructure is more varied.

- 5.8 Twenty-nine of the 270 residential site options are on brownfield land and therefore could have minor positive effects on SA objectives 5: **vibrant communities** and 15: **waste**, as well as at least minor positive effects on SA objective 13: **efficient land use**. However, the remaining 241 sites would have either minor (69) or significant (172) negative effects on SA objective 13 as they are on greenfield land and are either large in size or include areas of high quality agricultural land.
- 5.9 The brownfield sites would also have more positive effects than the greenfield sites in relation to SA objective 12: **flood risk** as their development would avoid the loss of permeable surfaces. Forty of the 270 residential site options are likely to have significant negative effects on flood risk as they are within flood zone 3 and are located on greenfield land. **Figure 5.4** at the end of this section shows the distribution of these residential sites throughout the district and the likely sustainability for this SA objective. If any of those sites are to be allocated in the Local Plan Review it will be necessary to direct built development to those areas of the sites that are outside of flood zone 3 and incorporate appropriate mitigation measures such as Sustainable Drainage Systems (SuDS).
- 5.10 The effects of the residential site options on SA objective 6: **services and facilities** are very mixed and range between significant positive (82 sites) and significant negative (49 sites) depending on their location in relation to the District's larger settlements, which are assumed to include a wider range of existing services and facilities. For that reason, the sites at Cam and Dursley, Stonehouse and Stroud would have significant positive effects.
- 5.11 Thirty-seven of the 270 residential site options could have a significant negative effect on SA objective 7: **biodiversity** as they are within 250m of an internationally or nationally designated nature conservation site. A further 207 sites could have minor negative effects on this objective as they are within 250m-1km of international or national designations, or are within 250m of a locally designated site, or fall within 3km of Rodborough Common SAC or 7.7km of the Severn Estuary SAC/SPA/Ramsar site. The likely sustainability effects for the residential sites relating to biodiversity are presented in **Figure 5.1** at the end of this section. If any of the sites with potential significant negative effects in particular are taken forward in the Local Plan Review, consideration should be given to how appropriate mitigation could be incorporated into Local Plan policies. In all cases, the potential negative effects are uncertain depending on the detailed proposals that eventually come forward at each site and the types of habitats and species present at the nature conservation sites.
- 5.12 One hundred and forty-eight of the residential site options could have significant negative effects on SA objective 8: **landscape** as they are either entirely or partly within areas that have been assessed in the Landscape Sensitivity Assessment³⁸ as being of high sensitivity to residential development, or because they are within the Cotswold AONB. Appropriate mitigation of potential effects on the landscape will need to be considered within the Local Plan policies. However, the effects of 27 of the residential site options on this objective are uncertain as the Landscape Sensitivity Assessment did not cover the whole district and many of the site options were not covered by the assessment. While the effects of all site options are to some extent uncertain, depending on the specific proposals that eventually come forward for each site and their design and layout, expanding the evidence base would enable more certain conclusions to be drawn about the likely effects of the 27 residential sites which currently have entirely uncertain effects. The expected sustainability effects of all residential sites in relation to SA objective 8 are presented in **Figure 5.2** at the end of this section.
- 5.13 The likely effects of the residential site options on SA objective 9: **historic environment** are also uncertain in all cases, depending on the specific proposals that may come forward at each site. The effects of 109 sites are entirely uncertain as they were not included in the Strategic Assessment of Land Availability (SALA) heritage assessment. Forty-five sites could have significant negative effects as they were assessed as having significant or highly significant heritage constraints, while a further 33 sites could have minor negative effects. Therefore, appropriate mitigation of potential effects on the historic environment will need to be considered within the Local Plan policies, particularly if any of the sites with potential significant negative effects are taken forward. Fifteen of the residential site options could also have minor positive

³⁸ White Consultants (December 2016) Stroud District Landscape Sensitivity Assessment

effects as the SALA heritage assessment identified opportunities for development at those sites to have potential for positive heritage benefits. If any of those sites are taken forward in the Local Plan Review, particular consideration should be given to how this could be achieved.

- 5.14 Two hundred of the 270 residential site options could have a significant negative effect on SA objective 11: **water quality** as they are within either a Drinking Water Safeguarding Zone or a Source Protection Zone. If any of those sites are taken forward in the Local Plan Review, adequate mitigation measures to ensure no disturbance to the water table or pollution of groundwater will be required either within development management policies or specifically in relation to each site allocation.
- 5.15 The effects of residential site options on SA objective 10: **air quality** will depend largely on the extent to which their location facilitates modal shift away from private car. Levels of sustainable transport use are likely to be higher where sites are located in close proximity to sustainable transport links as well as local/district/town centre locations and employment opportunities. Making use of information from the Stroud SALA Transport Accessibility Assessment, each site has been rated in relation to accessibility to these features. A significant negative effect has been recorded for 101 residential sites in relation to air quality because they were rated through the Transport Accessibility Assessment as providing the lowest levels of access to sustainable transport links, local/district/town centre locations and employment opportunities, while only five residential sites are expected to have a significant positive effect in relation to this SA objective. A further 54 sites are expected to have a minor negative effect. For 13 of the residential sites, the effects are uncertain as they were not included in the SALA Transport Accessibility Assessment. **Figure 5.3** at the end of this section presents the likely sustainability effects for each residential site in relation to SA objective 10.
- 5.16 Seventy-eight of the residential site options are likely to have a significant positive effect on SA objective 16: **employment** as they are within 600m of a key employment site which may provide job opportunities for new residents, and are at a Tier 1 or 2 settlement where access to employment opportunities is assumed to be best. A further 77 sites would have a minor positive effect as they meet one, but not both, of these criteria. For nine of the residential sites where a positive effect has been recorded (five sites with a significant positive effect and four sites with a minor positive effect), a significant negative effect is also expected in combination given that the land in question currently supports an element of existing employment use which is likely to be lost as a result of new residential development. A further eighty-five of the 270 residential site options would have an entirely significant negative effect on employment as they are more than 1km from a key employment site and are not at a Tier 1 or 2 settlement, while the remaining 30 sites would have a minor negative effect as they are within 600m-1km of a key employment site but are not at a Tier 1 or 2 settlement.
- 5.17 The specific location of residential sites within the District will not influence sustainable economic growth, therefore the likely effects of the residential site options on SA objective 17: **economic growth** (which also covers education) are determined by their proximity to existing schools. All of the potential positive effects identified are uncertain as it is not known at this stage whether there would be capacity at those schools to accommodate additional pupils from new developments nearby. Thirty-one of the 270 site options are within 800m of both a primary and secondary school and therefore could have significant positive effects on this objective, while a further 188 sites are within 800m of either type of school (but not both) and could have a minor positive effect. The remaining 51 sites are not within 800m of an existing school and would have a minor negative effect.
- 5.18 All of the residential site options would have negligible effects on SA objectives 3: **social inclusion**, 4: **crime** and 14: **climate change**.

Table 5.1: Summary of SA scores for residential site options

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
BER002	+	++	0	0	+	+	-?	?	0	+	0	0	+	0	+?	+	+?
BER003	+	++	0	0	+	+	-?	?	0	+	0	0	+	0	+?	+	+?
BER004	+	++	0	0	0	+	-?	--?	0	-	0	--	--?	0	0	++	+?
BER005	+	++	0	0	0	+	-?	-?	0	+	0	--	--?	0	0	++	+?
BER006	+	++	0	0	0	+	-?	-?	0	-	0	--	--?	0	0	++	+?
BER011	+	++	0	0	0	+	-?	--?	0	-	0	--	--?	0	0	++	+?
BER014	+	-	0	0	+	--	-?	?	?	?	0	0	+	0	+?	--	-?
BIS001	+	-/+	0	0	+	0	0?	--?	?	-	--?	0	+	0	+?	--	+?
BIS002	+	-/+	0	0	0	0	0?	--?	0	-	--?	-	--?	0	0	--	+?
BRI004	+	-/+	0	0	0	0	-?	--?	?	--	--?	-	-	0	0	+	+?
BRI005	+	-/+	0	0	0	0	-?	--?	?	0	--?	-	-	0	0	+	+?
BRI007	+	-/+	0	0	0	0	-?	--?	-	--	--?	-	-	0	0	+	+?
BRI008	+	-/+	0	0	+	0	-?	-?	--/+?	0	--?	-	+	0	+?	+	+?
BRI010	+	-/+	0	0	0	0	-?	--?	-	0	--?	-	-	0	0	+	+?
BRI011	+	-/+	0	0	+	0	-?	-?	--	0	--?	-	+	0	+?	--	+?
BRI012	+	-/+	0	0	+	0	-?	-?	-/+?	0	--?	-	+	0	+?	--	+?
BRI013	+	-/+	0	0	+	0	-?	?	0	0	--?	0	+	0	+?	--	-?
BRI014	+	-/+	0	0	0	0	-?	-?	?	0	--?	-	-	0	0	--	-?
BRI015	+	-/+	0	0	0	0	-?	--?	-	0	--?	--	-	0	0	--	-?
BRI016	+	-/+	0	0	0	0	-?	--?	--	0	--?	--	-	0	0	--	-?
BRI017	+	-/+	0	0	0	-	-?	--?	--	+	--?	--	-	0	0	+	+?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
BRI019	+	-/+	0	0	0	-	-?	-?	?	+	--?	-	-	0	0	+	+?
BRI020	+	-/+	0	0	0	-	-?	-?	?	+	--?	-	-	0	0	+	+?
BRI022	+	-/+	0	0	+	0	-?	-?	--/+?	0	--?	-	+	0	+?	+	+?
BRO001	+	-	0	0	0	--	-?	--?	?	-	0	-	--?	0	0	--	-?
CAM001	+	+/--?	0	0	0	++	--?	?	?	0	--?	-	-	0	0	++	+?
CAM003	+	-/+	0	0	0	++	-?	--?	?	--	--?	-	--?	0	0	++	+?
CAM004	+	-/+	0	0	0	++	-?	--?	?	+	--?	-	-	0	0	++	++?
CAM005	+	-/+	0	0	0	++	-?	--?	?	+	--?	-	--?	0	0	++	+?
CAM006	+	-/+	0	0	0	++	-?	--?	?	-	--?	-	--?	0	0	++	+?
CAM007	+	+/--?	0	0	0	++	--?	-?	?	-	--?	-	-	0	0	++	++?
CAM008	+	-/+	0	0	0	++	-?	-?	--	+	--?	-	-	0	0	+	+?
CAM009	+	-/+	0	0	+	++	-?	-?	?	+	--?	0	+	0	+?	+/--	+?
CAM010	+	-/+	0	0	0	++	-?	--?	?	--	--?	-	--?	0	0	++	+?
CAM011	+	-/+	0	0	0	++	-?	--?	0	0	--?	-	--?	0	0	++	+?
CAM013	+	-/+	0	0	0	++	-?	-?	0	--	--?	-	--	0	0	++	-?
CAM015	+	-/+	0	0	0	--	-?	-?	0	0	--?	-	--	0	0	-	-?
CAM016	+	-/+	0	0	0	--	-?	-?	0	--	--?	-	--	0	0	+	-?
CAM021	+	-/+	0	0	0	++	-?	-?	0	-	--?	--	--?	0	0	++	+?
CAM022	+	-/+	0	0	0	++	-?	--?	?	+	--?	-	-	0	0	++	++?
CAM023	+	-/+	0	0	0	++	-?	--?	?	--	--?	-	--?	0	0	+	+?
CAM024	+	-/+	0	0	0	++	-?	--?	?	0	--?	-	--?	0	0	++	+?
CAM025	+	-/+	0	0	0	--	-?	-?	0	--	--?	-	--	0	0	+	-?
CAM026	+	-/+	0	0	0	++	-?	-?	0	--	--?	-	--	0	0	++	-?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
CAM A	+	-/++	0	0	0	++	-?	-?	0	0	--?	-	--?	0	0	++	+?
CAM E	+	-/+	0	0	0	++	-?	-?	0	--	--?	--	--?	0	0	++	+?
CBR002	+	-/+	0	0	0	-	-?	--?	?	0	--?	-	--	0	0	--	+?
CBR003	+	-/+	0	0	0	-	-?	?	?	-	--?	-	--	0	0	--	+?
CHA001	+	+	0	0	0	0	-?	--?	0	0	--?	-	--?	0	0	-	++?
COA001	+	-/+	0	0	0	0	-?	-?	--	-	--?	-	--?	0	0	--	+?
COA002	+	-/+	0	0	0	0	-?	--?	0	--	--?	-	--?	0	0	--	+?
COA A	+	-/+	0	0	0	0	-?	-?	--	-	--?	-	--?	0	0	--	+?
CRA001	+	-/+	0	0	0	--	--?	--?	?	--	--?	-	--?	0	0	--	+?
DUR001	+	+/--?	0	0	0	++	--?	-?	--	+	--?	-	-	0	0	++	++?
DUR002	+	+/--?	0	0	0	++	--?	-?	0	+	--?	-	-	0	0	++	++?
DUR005	+	++	0	0	0	++	-?	--?	?	-	--?	--	--?	0	0	++	++?
DUR006	+	++	0	0	0	++	-?	-?	--	+	--?	-	-	0	0	+	++?
DUR007	+	++	0	0	+	++	-?	-?	--/+?	+	--?	0	+	0	+?	+	+?
DUR008	+	++	0	0	+	++	-?	-?	-/+?	+	--?	0	+	0	+?	+	+?
DUR009	+	++	0	0	0	++	0?	--?	?	+	--?	--	-	0	0	+/--	+?
DUR010	+	-/+	0	0	0	++	-?	-?	0	--	--?	-	--?	0	0	+	+?
DUR011	+	-/+	0	0	0	++	-?	--?	0	--	--?	-	--?	0	0	+	+?
DUR012	+	-/+	0	0	0	--	-?	-?	0	--	--?	-	--?	0	0	--	+?
DUR013	+	-/+	0	0	0	++	-?	-?	0	0	--?	-	--?	0	0	--	+?
DUR014	+	+/--?	0	0	0	++	--?	-?	?	--	--?	-	-	0	0	+	+?
DUR017	+	++	0	0	+	++	-?	-?	-	++	--?	0	+	0	+?	++	+?
DUR020	+	-/++	0	0	0	++	--?	--?	?	-	--?	-	-	0	0	++	++?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
DUR021	+	+/--?	0	0	0	++	-?	-?	0	+	--?	-	-	0	0	++	++?
DUR022	+	++	0	0	+	++	-?	-?	--/+?	++	--?	0	+	0	+?	+	+
DUR A	+	-/+	0	0	0	++	-?	-?	0	--	--?	-	--?	0	0	+	+
EAS001	+	-/+	0	0	0	0	-?	-?	--	--	--?	-	--?	0	0	+	+
EAS003	+	+/--?	0	0	0	0	-?	--?	0	--	--?	--	--?	0	0	-	-?
EAS004	+	-/+	0	0	0	0	-?	-?	-	--	--?	-	--?	0	0	-	+
EAS005	+	-/+	0	0	0	0	-?	--?	--	-	--?	-	--?	0	0	-	+
EAS007	++	-/+	0	0	0	--	-?	--?	--	--	--?	--	--	0	0	+	+
EAS008	+	-/+	0	0	0	--	-?	--?	0	-	--?	--	--?	0	0	+	+
EAS009	+	-/+	0	0	0	--	-?	--?	--	--	--?	-	--?	0	0	-	-?
EAS011	+	-	0	0	0	--	-?	-?	?	--	--?	-	--?	0	0	-	-?
EAS012	+	-	0	0	0	--	-?	-?	?	--	0	-	--?	0	0	-	-?
EAS013	+	-/+	0	0	0	--	-?	--?	?	--	--?	-	--?	0	0	-	-?
EAS014	++	-/+	0	0	0	--	-?	--?	?	--	--?	-	--	0	0	-	-?
EAS015	+	-/+	0	0	0	--	-?	?	?	-	--?	-	--?	0	0	--	-?
EAS A	+	-/+	0	0	0	0	-?	-?	-	--	--?	-	--?	0	0	-	-?
EAS B1	+	-/+	0	0	0	0	-?	-?	0	--	--?	-	--?	0	0	-	-?
FRA001	+	++	0	0	+	+	-?	-?	0	--	--?	0	+	0	+?	++	+
FRA004	+	++	0	0	0	+	-?	-?	-	--	0	-	--	0	0	++	+
FRL001	+	-/+	0	0	0	--	-?	--?	?	-	--?	-	--?	0	0	--	+
HAR001	++	+/--?	0	0	0	0	--?	-?	--	--	0	--	--	0	0	+	+
HAR002	+	-/+	0	0	0	--	-?	-?	--	--	0	--	--?	0	0	+	+
HAR004	+	-/+	0	0	0	--	-?	?	0	--	0	--	--	0	0	+	-?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
HAR005	+	-/+	0	0	0	0	0?	?	0	0	0	-	--?	0	0	+	-?
HAR007	++	-	0	0	0	--	-?	?	?	--	0	-	--	0	0	+	-?
HAR008	+	-	0	0	0	--	-?	?	?	--	0	-	--?	0	0	+	-?
HAR010	+	-	0	0	0	--	-?	?	?	?	0	-	--	0	0	-	-?
HAR011	+	-	0	0	0	--	-?	?	?	?	0	-	--?	0	0	--	-?
HAR012	+	-/+	0	0	0	--	-?	?	?	?	0	--	--?	0	0	+	-?
HAR014	+	-/+	0	0	0	0	0?	-?	0	0	0	-	--?	0	0	+	+
HFD001	+	-/+	0	0	0	-	-?	-?	?	--	0	-	--?	0	0	-	+
HFD002	+	-/+	0	0	+	-	0?	-?	?	--	0	0	+	0	+	-	+
HFD003	+	-/+	0	0	0	-	0?	-?	?	--	0	-	--?	0	0	-	+
HFD004	+	-/+	0	0	0	-	0?	--?	?	--	0	-	--?	0	0	-	+
HFD005	+	-/+	0	0	0	-	0?	--?	?	--	0	-	--?	0	0	--	+
HFD006	+	-/+	0	0	0	-	-?	-?	?	--	0	-	--?	0	0	-	+
HIL001	+	-/+	0	0	0	-	-?	--?	?	--	--?	-	--	0	0	--	+
HOR001	+	-/+	0	0	0	0	-?	--?	0	-	--?	-	--?	0	0	--	+
HOR002	+	-/+	0	0	0	0	-?	--?	?	-	--?	--	-	0	0	--	+
HOR A	+	-/+	0	0	0	0	-?	--?	0	-	--?	-	--?	0	0	--	+
KST001	+	-/+	0	0	0	0	-?	--?	0	--	--?	-	--?	0	0	-	+
KST002	+	++/--?	0	0	0	0	--?	--?	-	--	--?	-	--?	0	0	+	+
KST003	+	-/+	0	0	0	0	-?	--?	0	--	--?	-	--?	0	0	--	+
KST004	+	-/+	0	0	0	0	-?	--?	0	0	--?	-	--?	0	0	--	+
KST006	+	-/+	0	0	0	0	-?	--?	0	0	--?	-	--?	0	0	--	+
KIN001	+	-/+	0	0	0	0	-?	--?	-	--	0	-	--?	0	0	+	++?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
KIN002	+	-/+	0	0	0	0	-?	--?	--	0	0	--	--?	0	0	+	+++
KIN003	+	-/+	0	0	0	0	0?	-?	?	--	0	-	--?	0	0	+	+
KIN004	+	-/+	0	0	0	0	0?	-?	?	--	0	-	--?	0	0	+	+
KIN005	+	-/+	0	0	0	0	0?	-?	0	--	0	-	--?	0	0	+	+
KIN007	+	-/+	0	0	0	0	0?	--?	?	0	0	-	--?	0	0	+	+++
KIN008	+	-/+	0	0	0	--	0?	--?	?	--	0	--	--?	0	0	+	+++
KIN009	+	-	0	0	0	--	0?	?	?	?	0	-	--?	0	0	--	-?
KIN010	+	-/+	0	0	0	0	-?	-?	-	0	0	-	--?	0	0	+/--	+
KIN011	+	-/+	0	0	0	0	0?	-?	0	--	0	-	--?	0	0	+	+
LEO001	+	-/+	0	0	0	0	-?	--?	0	0	--?	-	--	0	0	-	+
LEO002	+	-/++	0	0	+	0	-?	-?	?	0	--?	0	+	0	+	-	+
LEO004	+	-/+	0	0	0	0	-?	-?	-	0	--?	-	--	0	0	-	+
LEO005	+	-/+	0	0	0	0	-?	--?	?	0	--?	-	--	0	0	+	+
LEO007	+	-/+	0	0	0	0	-?	-?	0	0	--?	-	--?	0	0	-	+
LEO B	+	-/+	0	0	0	0	-?	-?	-	0	--?	-	--	0	0	--	+
MAN001	+	-/+	0	0	0	0	0?	--?	-	0	--?	-	--?	0	0	--	+++
MAN002	+	+/--?	0	0	0	0	--?	--?	0	0	--?	-	--?	0	0	--	+++
MAN003	+	++	0	0	0	0	-?	--?	?	0	--?	-	-	0	0	-	+
MAN A	+	+/--?	0	0	0	0	--?	--?	0	0	--?	-	--?	0	0	--	+++
MID001	+	-/++	0	0	0	-	-?	--?	?	0	--?	-	--?	0	0	--	+
MIN001	+	++/--?	0	0	0	+	-?	--?	--	0	--?	-	--?	0	0	+	+
MIN002	+	+	0	0	0	+	-?	--?	?	0	--?	-	--?	0	0	+	+
MIN003	+	-/+	0	0	0	+	-?	--?	?	--	--?	-	--?	0	0	+	-?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
MIN004	+	-/+	0	0	0	+	-?	--?	0	--	--?	-	--?	0	0	+	-?
MIN005	+	++	0	0	0	+	-?	--?	--	--	--?	-	--?	0	0	+	+
MIN006	+	++	0	0	0	+	-?	--?	--	0	--?	-	--?	0	0	+	+
MIN007	+	+/--?	0	0	0	+	--?	--?	?	0	--?	-	--?	0	0	+	+
MIN008	+	+	0	0	0	+	--?	--?	0	--	--?	-	-	0	0	+	+
MIN009	+	+	0	0	0	--	--?	--?	?	?	--?	-	-	0	0	-	+
MIN013	+	-/+	0	0	0	--	--?	--?	?	?	--?	-	-	0	0	-	-?
NAI001	+	++	0	0	0	+	--?	-?	-	0	--?	-	-	0	0	++	-?
NAI004	+	++	0	0	0	+	-?	--?	-	+	--?	--	-	0	0	++	-?
NAI006	+	++	0	0	0	+	-?	-?	?	-	--?	-	-	0	0	++	-?
NAI007	+	+	0	0	0	+	-?	--?	0	-	--?	-	-	0	0	+	+
NAI008	+	+/--?	0	0	+	+	-?	-?	0	0	--?	0	+	0	+	+	+
NAI009	+	-/+	0	0	0	+	-?	--?	?	--	--?	-	-	0	0	++	+
NAI010	+	++	0	0	0	+	-?	--?	--	-	--?	-	-	0	0	++	+
NAI011	+	++	0	0	0	+	-?	--?	--	-	--?	-	-	0	0	++	+
NAI012	+	-/+	0	0	0	+	--?	--?	0	0	--?	-	--?	0	0	+	+
NPT001	+	-/+	0	0	0	-	-?	?	?	?	0	--	-	0	0	--	-?
NEW003 a	+	-/+	0	0	0	0	-?	-?	0	-	0	--	--?	0	0	+	+
NEW003 b	+	-/+	0	0	0	--	-?	?	0	--	0	-	--?	0	0	+	+
NEW005	+	-/+	0	0	0	0	-?	-?	?	-	0	-	-	0	0	-	+
NEW006	+	++/--?	0	0	+	--	--?	?	0	-	0	0	+	0	+	--	+
NIB001	+	-/+	0	0	0	0	--?	--?	-	0	0	-	--?	0	0	--	+

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
NIB002	+	-/++	0	0	0	0	-?	--?	0	-	0	-	--?	0	0	--	+?
NIB003	+	-/++	0	0	0	0	--?	--?	0	--	0	-	--?	0	0	--	+?
NWO001	+	-/++	0	0	0	0	-?	--?	0	--	--?	-	-	0	0	-	+?
NWO003	+	-/++	0	0	0	0	--?	--?	--	0	--?	-	-	0	0	-	+?
NYM001	+	-/++	0	0	0	-	-?	--?	?	-	--?	-	--?	0	0	--	+?
NYM002	+	-/+	0	0	0	-	-?	--?	?	-	--?	-	--?	0	0	--	+?
OAK001	+	-/+	0	0	0	0	-?	--?	0	-	--?	-	--?	0	0	--	+?
OAK002	+	-/+	0	0	+	--	0?	--?	?	--	--?	0	+	0	+?	--	-?
OAK A	+	-/+	0	0	0	0	-?	--?	0	-	--?	-	--?	0	0	--	+?
PAI001	+	++	0	0	0	0	--?	--?	--	--	--?	-	--?	0	0	--	+?
PAI002	+	++	0	0	0	0	--?	--?	--	--	--?	-	--?	0	0	--	+?
PAI004	+	++	0	0	0	0	-?	--?	0	--	--?	-	--?	0	0	--	+?
PAI005	+	+	0	0	0	0	-?	--?	-	--	--?	--	--?	0	0	--	+?
PAI006	+	-/+	0	0	0	0	-?	--?	--	--	--?	-	-	0	0	--	+?
PAI007	+	-/++	0	0	0	0	-?	--?	-	--	--?	-	--?	0	0	--	+?
PAI008	+	-/++	0	0	0	0	-?	--?	-	0	--?	-	--?	0	0	--	+?
PAI009	+	++/--?	0	0	0	--	--?	--?	?	?	--?	-	-	0	0	--	-?
PAI010	+	-/++	0	0	0	--	-?	--?	?	?	--?	-	-	0	0	--	-?
PAI011	+	-/++	0	0	0	--	--?	--?	?	--	--?	-	-	0	0	--	-?
PAI012	+	-/++	0	0	0	--	-?	--?	?	--	--?	-	--?	0	0	--	+?
PAI A	+	++	0	0	0	0	-?	--?	0	--	--?	-	--?	0	0	--	+?
PAI B	+	-/++	0	0	0	0	-?	--?	-	--	--?	-	--?	0	0	--	+?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
RAN001	+	-/++	0	0	0	--	-?	--?	?	--	--?	-	-	0	0	--	+?
SAU001	+	++	0	0	+	-	-?	?	0	--	--?	-	+	0	+?	+	+?
SLI001	+	-/++	0	0	0	0	-?	--?	--	--	--?	-	--	0	0	--	+?
SLI003	+	-/++	0	0	0	0	-?	-?	0	-	--?	-	--	0	0	--	+?
SWO002	+	-/++	0	0	0	-	-?	-?	--	0	--?	--	-	0	0	+	+?
STI001	+	-/+	0	0	0	-	-?	--?	?	--	--?	-	--	0	0	--	-?
STN002	+	-/+	0	0	0	-	-?	?	?	-	0	-	--?	0	0	--	+?
STN003	+	-/+	0	0	0	-	-?	?	?	-	0	-	--	0	0	--	+?
STO002	+	+/--?	0	0	+	++	--?	?	0	-	--?	0	+	0	+?	++	++?
STO003	+	++	0	0	0	++	-?	?	0	+	--?	-	-	0	0	++	++?
STO004	+	++	0	0	0	++	-?	?	0	-	--?	-	-	0	0	++	+?
STO007	+	++	0	0	0	++	-?	?	--	-	--?	--	--?	0	0	++	+?
STO008	+	++	0	0	0	++	-?	--?	--	0	--?	--	-	0	0	++	-?
STO009	+	++	0	0	0	++	-?	-?	?	-	--?	-	-	0	0	++	+?
STO010	+	++	0	0	0	++	-?	-?	?	+	--?	-	-	0	0	++	+?
STO012	+	+	0	0	0	++	-?	--?	?	+	--?	-	-	0	0	+	++?
STO013	+	+	0	0	0	++	-?	--?	?	--	--?	-	--?	0	0	+	++?
STO014	+	-/+	0	0	+	--	-?	--?	--/+?	--	--?	0	+	0	+?	--	+?
STO015	+	-/+	0	0	0	--	-?	-?	0	0	--?	-	--?	0	0	++	+?
STO017	+	-	0	0	0	--	-?	-?	0	--	--?	-	--?	0	0	+	-?
STO018	+	+/--?	0	0	0	++	--?	--?	0	+	--?	-	--?	0	0	+	+?
STO019	+	++	0	0	0	++	-?	?	--/+?	--	--?	--	--?	0	0	++	+?
STO020	+	-/+	0	0	0	--	-?	-?	--	--	--?	-	--	0	0	-	-?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
STO B1	+	-/+	0	0	0	++	-?	--?	0	0	--?	-	--?	0	0	++	+?
STR001	+	+	0	0	0	++	-?	?	0	+	--?	-	-	0	0	+	++?
STR003	+	++	0	0	+	++	-?	-?	--/+?	+	--?	-	+	0	+?	++/-	++?
STR005	+	++	0	0	0	++	-?	-?	-	-	--?	-	-	0	0	++	++?
STR007	+	++	0	0	+	++	-?	-?	--/+?	++	--?	-	+	0	+?	++/-	++?
STR008	+	++	0	0	0	++	-?	--?	-	+	--?	-	-	0	0	++	++?
STR010	+	++/--?	0	0	+	++	--?	--?	-/+?	++	--?	0	+	0	+?	++/-	++?
STR018	+	++	0	0	+	++	-?	-?	-/+?	++	--?	0	+	0	+?	++/-	+?
STR019	+	++	0	0	0	++	-?	--?	?	-	--?	-	-	0	0	++	+?
STR020	+	-/+	0	0	0	++	-?	-?	?	+	--?	-	-	0	0	++	+?
STR021	+	+	0	0	0	++	-?	--?	?	0	--?	-	--?	0	0	++	+?
STR022	+	++/--?	0	0	0	++	--?	--?	0	-	--?	-	-	0	0	++	+?
STR023	+	++	0	0	0	++	-?	--?	-	-	--?	-	--?	0	0	++	+?
STR024	+	-/+	0	0	0	++	-?	--?	?	0	--?	-	--?	0	0	++	+?
STR025	+	-/+	0	0	0	++	-?	--?	?	0	--?	-	-	0	0	+	+?
STR026	+	-/+	0	0	0	++	-?	--?	?	--	--?	-	--?	0	0	+	+?
STR030	+	+/--?	0	0	0	++	--?	-?	0	0	--?	-	--?	0	0	++	+?
STR031	+	+	0	0	0	++	-?	--?	?	0	--?	--	-	0	0	++	+?
STR033	+	-/+	0	0	0	++	-?	--?	?	--	--?	-	-	0	0	++	+?
STR034	+	-/+	0	0	0	++	-?	--?	?	-	--?	-	--?	0	0	+	++?
STR035	+	-/+	0	0	0	++	-?	--?	-	--	--?	-	--?	0	0	++	++?

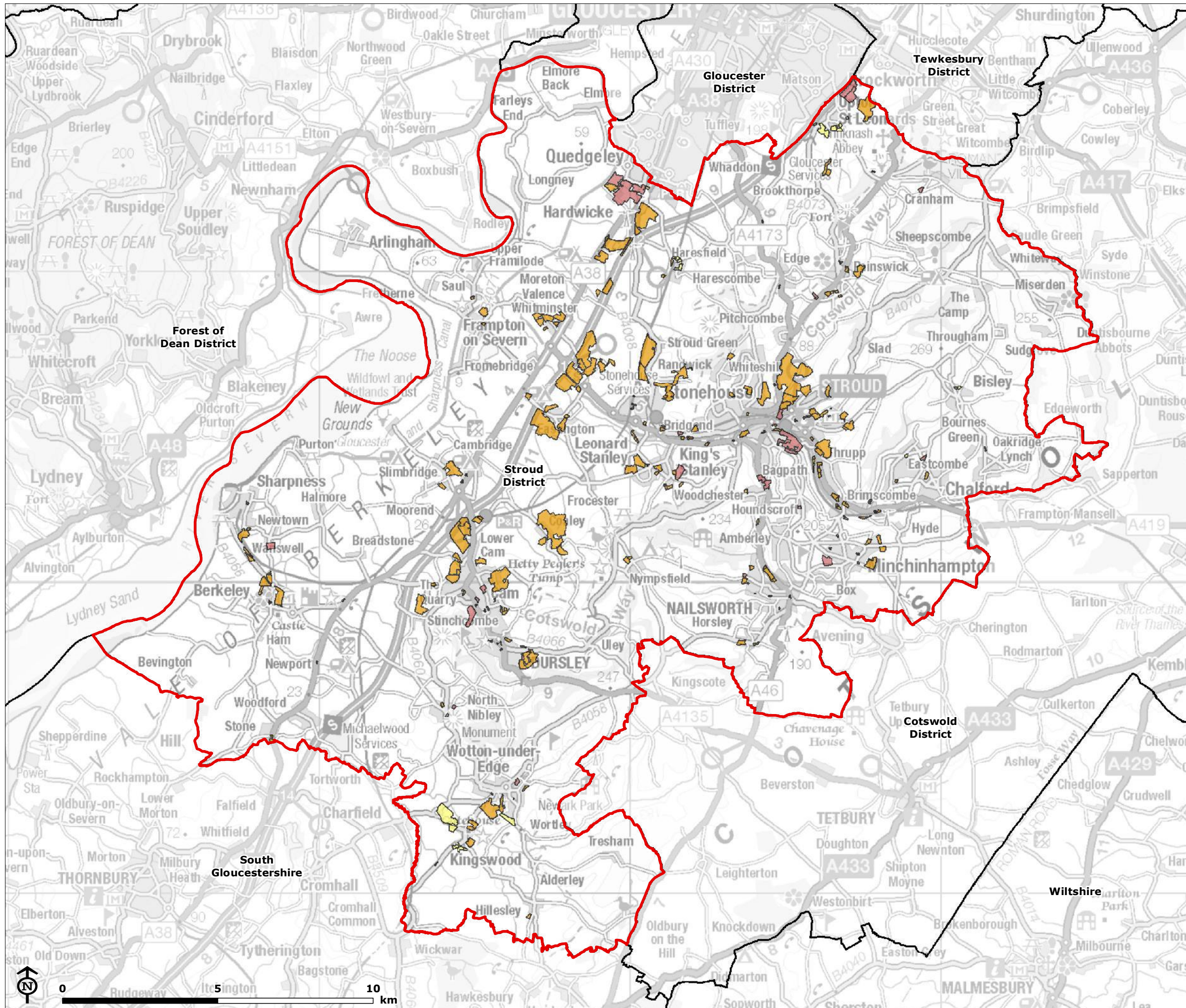
SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
STR036	+	-/+	0	0	0	--	-?	--?	?	+	--?	-	--?	0	0	+	+?
STR037	++	+	0	0	0	--	-?	--?	--	--	--?	--	--	0	0	+	+?
STR038	+	++	0	0	0	++	-?	--?	?	-	--?	-	--?	0	0	++	+?
STR039	+	-/+	0	0	0	++	-?	--?	?	+	--?	-	--?	0	0	++	+?
STR040	+	-/+	0	0	0	++	-?	--?	?	--	--?	-	-	0	0	++	+?
STR041	+	-/+	0	0	0	++	-?	--?	?	0	--?	-	-	0	0	++	-?
STR043	+	++/--?	0	0	0	++	--?	--?	--	0	--?	-	-	0	0	++	+?
STR044	+	-/+	0	0	0	++	-?	--?	--	--	--?	--	--?	0	0	+/--	+?
STR045	+	-/+	0	0	0	++	-?	-?	--	+	--?	-	-	0	0	++	-?
STR046	+	-/+	0	0	0	++	-?	-?	--	+	--?	-	-	0	0	++	-?
STR047	+	++/--?	0	0	0	++	--?	-?	0	0	--?	-	-	0	0	++	-?
STR048	+	-/+	0	0	0	++	-?	-?	--	0	--?	--	-	0	0	++	-?
STR053	+	-/+	0	0	0	++	-?	--?	-	0	--?	-	--?	0	0	+	++?
STR054	+	-/+	0	0	0	++	-?	--?	--/+?	+	--?	--	-	0	0	++	+?
STR056	+	-/+	0	0	0	++	-?	--?	0	--	--?	-	-	0	0	++	+?
STR057	+	++	0	0	0	++	--?	--?	--	-	--?	--	-	0	0	++	+?
STR055	+	-/+	0	0	0	++	-?	--?	?	?	--?	-	--?	0	0	+	+?
STR D	+	+	0	0	0	++	-?	--?	?	-	--?	-	--?	0	0	++	+?
UPT001	+	-/+	0	0	0	0	0?	--?	-/+?	--	0	-	--?	0	0	--	+?
UPT002	+	-/+	0	0	0	0	0?	-?	?	--	0	-	--?	0	0	--	+?
UPT003	+	-/+	0	0	0	0	0?	-?	0	--	0	-	--?	0	0	--	+?
UPT004	+	-/+	0	0	0	0	0?	-?	0	--	0	-	--?	0	0	--	+?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
UPT005	+	-/+	0	0	0	0	0?	--?	?	-	0	-	--?	0	0	--	+?
UPT006	+	+	0	0	0	--	--?	-?	0	--	0	-	--?	0	0	--	+?
UPT007	+	-/+	0	0	0	--	--?	-?	?	--	0	-	--?	0	0	--	+?
UPT008	+	-/+	0	0	0	--	-?	--?	?	--	0	-	--	0	0	--	+?
UPT009	+	-/+	0	0	0	--	-?	--?	?	?	0	-	--?	0	0	--	-?
UPT010	+	++/--?	0	0	+	--	--?	--?	?	?	0	0	+	0	+?	--	-?
UPT011	+	-/+	0	0	0	--	0?	-?	?	-	0	-	--?	0	0	--	-?
UPT012	+	-/+	0	0	0	--	0?	-?	?	--	0	-	--?	0	0	--	+?
WHI001	+	-/+	0	0	0	0	-?	-?	0	-	0	-	--?	0	0	--	+?
WHI002	+	-/+	0	0	0	0	-?	--?	?	-	0	-	--?	0	0	--	+?
WHI004	+	-/+	0	0	0	0	-?	-?	-	--	--?	-	--?	0	0	--	+?
WHI005	+	-/+	0	0	0	0	-?	-?	0	--	--?	-	--?	0	0	--	+?
WHI006	+	-/+	0	0	0	--	-?	-?	?	--	--?	-	--?	0	0	--	+?
WHI008	+	-/+	0	0	0	0	-?	-?	-	--	0	-	--?	0	0	--	+?
WHI A	+	-/+	0	0	0	0	-?	-?	0	--	--?	-	--?	0	0	--	+?
WHI E	+	-/+	0	0	0	0	-?	-?	0	-	0	-	--?	0	0	--	+?
WUE001	+	++	0	0	0	+	--?	--?	?	-	0	--	--?	0	0	++	+?
WUE002	+	++	0	0	0	+	-?	--?	?	--	0	-	--?	0	0	+	+?
WUE003	+	++	0	0	0	+	-?	--?	0	+	0	-	--?	0	0	++	+?
WUE004	+	+	0	0	0	+	0?	--?	?	0	0	--	--	0	0	+	+?
WUE005	+	++	0	0	0	+	-?	--?	?	+	0	--	--?	0	0	++	+?
WUE006	+	++	0	0	0	+	-?	--?	0	+	0	--	--?	0	0	++	+?
WUE007	++	++	0	0	0	+	-?	--?	?	--	0	--	--	0	0	++	++?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
WUE008	+	++	0	0	+	+	-?	--?	-/+?	+	0	0	+	0	+?	++/-	+?

**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.1: SA Scores for residential site options Objective 7: Biodiversity/geodiversity



Stroud District

Score

0?

-?

--?

Other local authority boundary

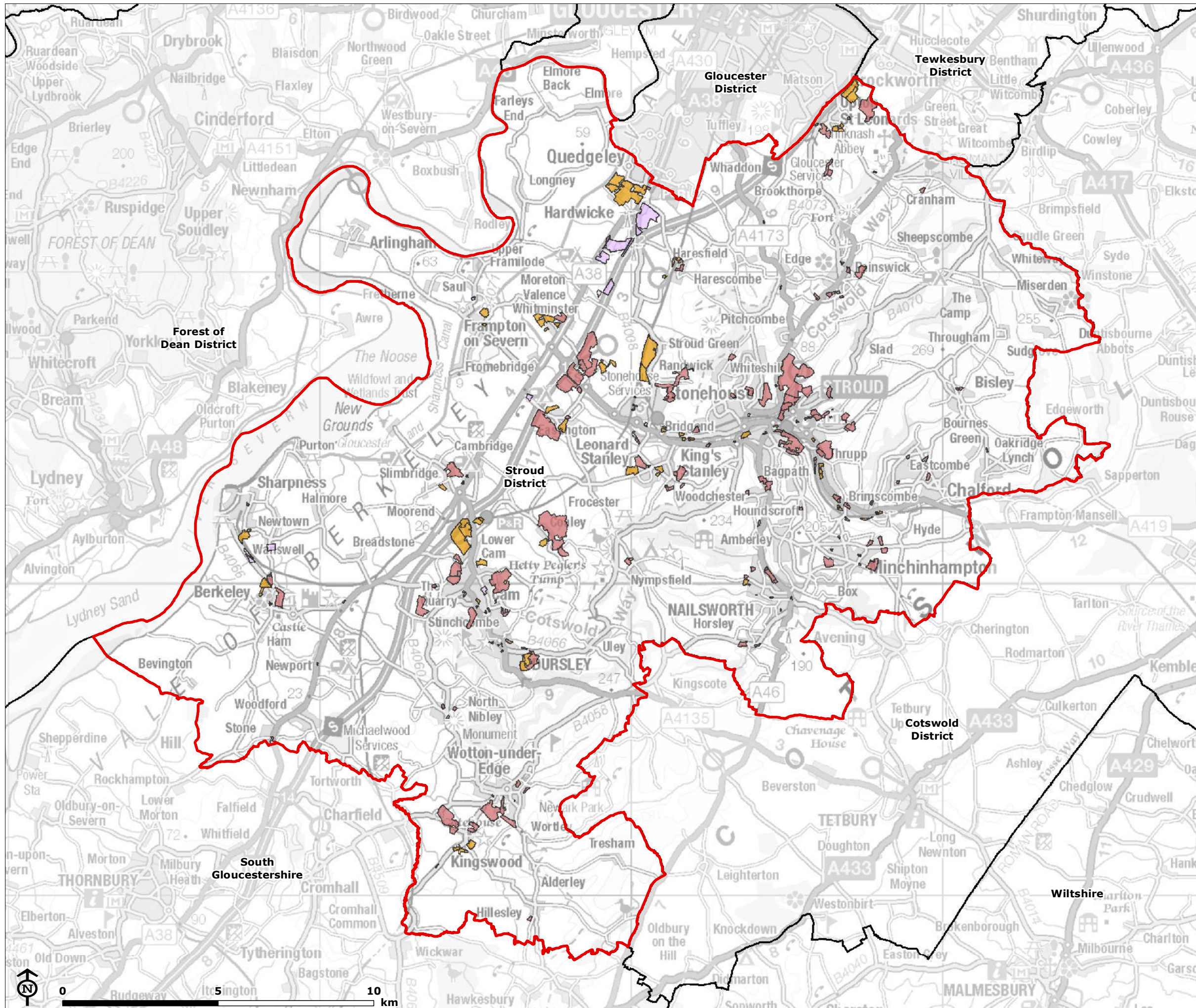
Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.2: SA Scores for residential site options for SA Objective 8: landscapes/townscapes

Stroud District
 Other local authority boundary
Score
 ?
 -?
 --?



Map Scale @A3: 1:120,000



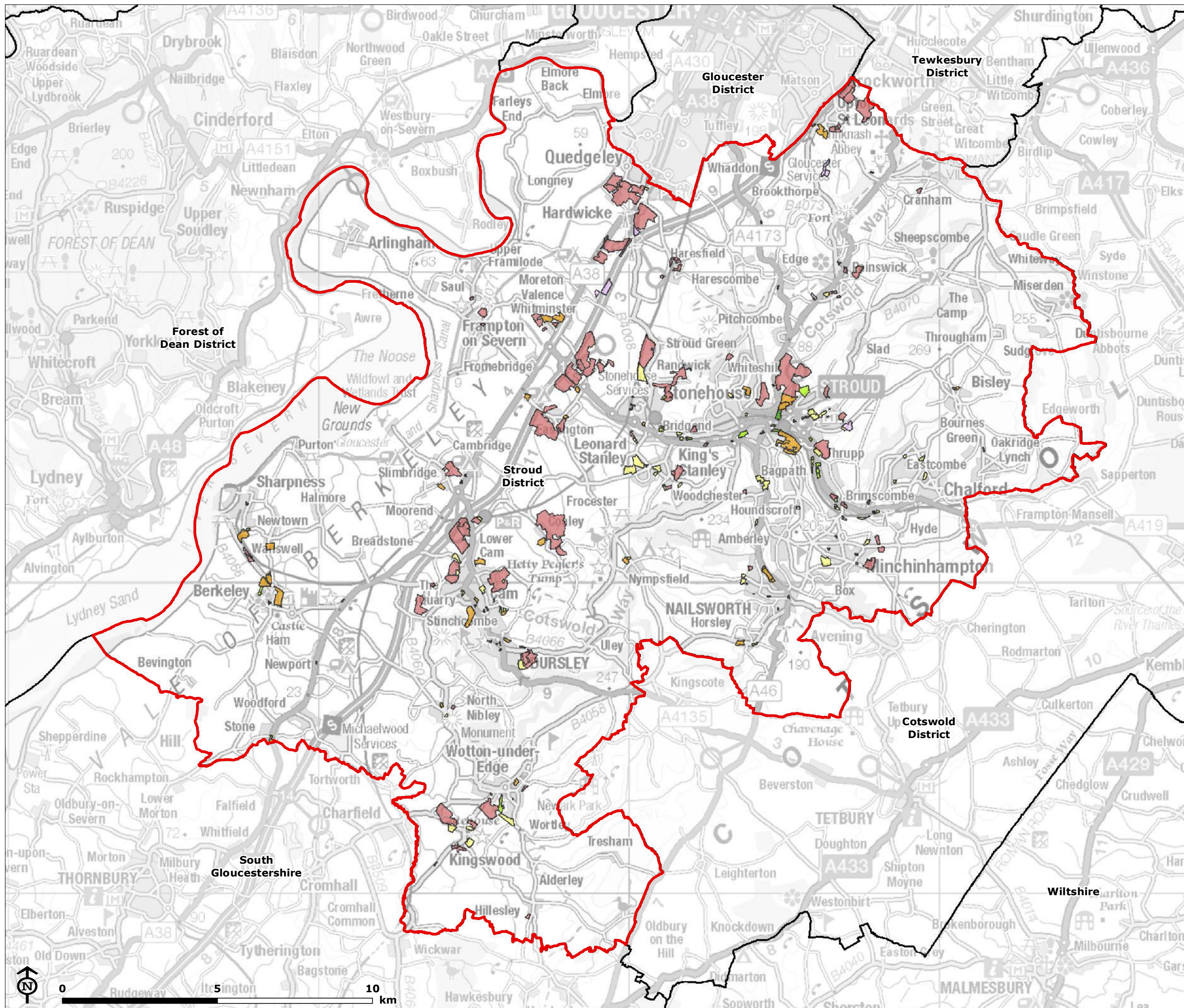
**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.3: SA Scores for residential site options for SA Objective 10: air quality

Stroud District
 Other local authority boundary

Score

	++
	+
	0
	?
	-
	--



Map Scale @A3: 1:120,000



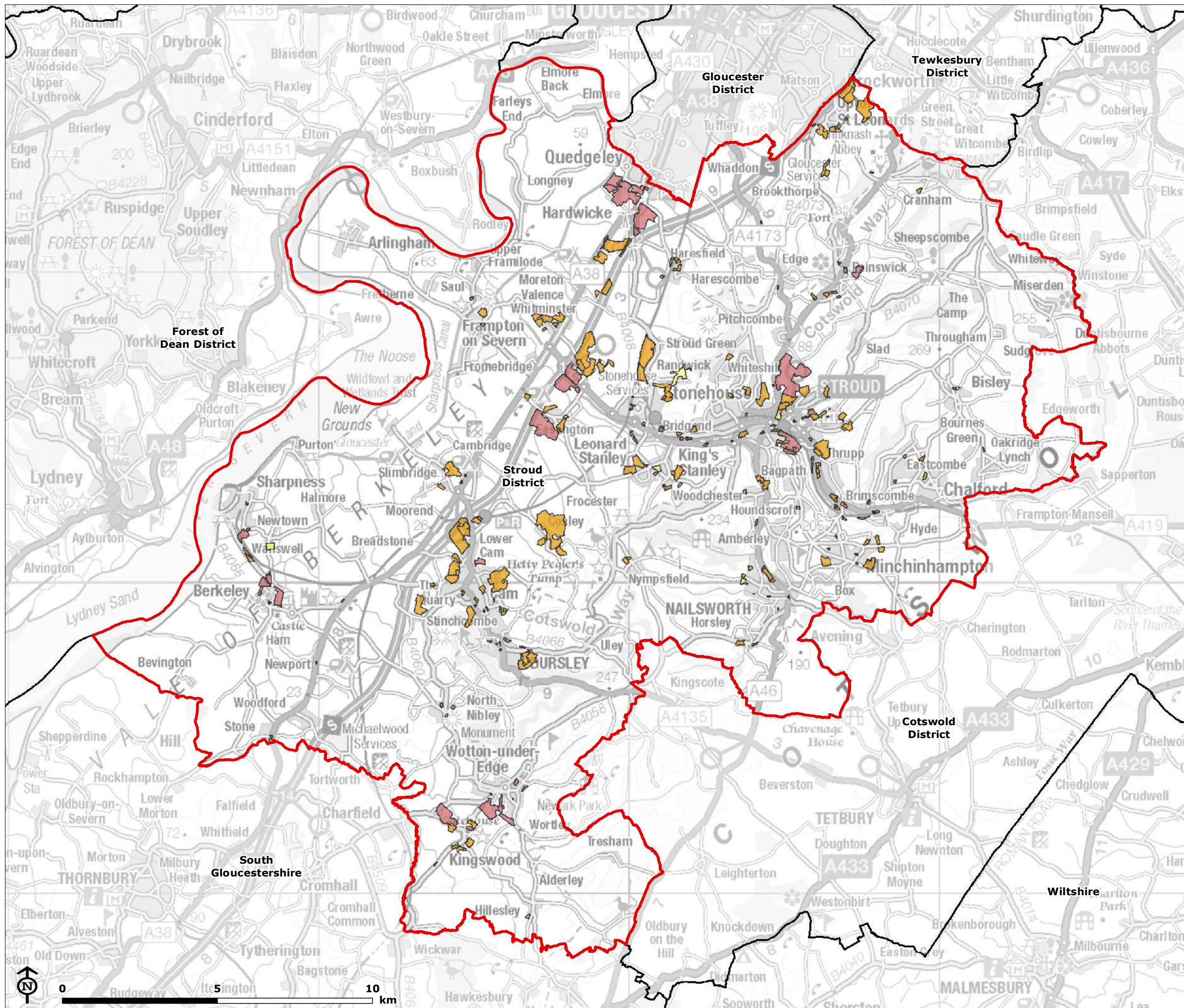
**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.4: SA Scores for residential site options for SA Objective 12: flooding

Stroud District
 Other local authority boundary

Score

	0
	-
	--



Map Scale @A3: 1:120,000



Employment site options

- 5.19 **Table 5.2** at the end of this section presents a summary of the SA scores for the 32 reasonable alternative employment site options. Similar to the residential site options, development of new employment areas within the District is generally likely to have positive effects on some of the social and economic objectives (vibrant communities, employment, economic growth), mixed effects on health depending on proximity to existing settlements, and more negative effects on the environmental objectives due to the loss of greenfield land and permeable surfaces, and potential impacts on the landscape, cultural heritage and biodiversity/geodiversity.
- 5.20 Due to the nature of the development proposed at these sites, all of the employment site options will have at least minor positive effects on SA objectives 16: **employment** and 17: **economic growth**. Four of the 32 sites (BER013, EAS007, HAR009 and HFD008) would have significant positive effects on those objectives as they are relatively large (i.e. they would provide more than 10ha of employment land), while the effects of the other options would all be minor positive.
- 5.21 Twenty of the 32 employment site options are on brownfield land and therefore could have minor positive effects on SA objectives 5: **vibrant communities** as they could contribute to regeneration and 15: **waste** as they could promote the reuse of buildings and construction materials, as well as at least minor positive effects on SA objective 13: **efficient land use**. Two of the sites (BER013 and HAR009) would have significant positive effects on SA objective 13 as they are large in size. The brownfield sites would also have fewer negative effects than the greenfield sites in relation to SA objective 12: **flood risk** as their development would avoid the loss of permeable surfaces. Eight of the 32 greenfield site options could have significant negative effects on flood risk as they are within flood zone 3; however these effects are uncertain as it is not known at this point whether the sites are within flood zone 3a or 3b (national policy states that buildings used for financial, professional and other services; offices; general industry, storage and distribution are classed as 'less vulnerable uses', which are suitable in areas of flood zone 1, 2 and 3a but are unsuitable in flood zone 3b). The likely sustainability effects for all employment sites in relation to flood are presented in **Figure 5.8** at the end of this section. If any of those eight sites are allocated in the Local Plan Review it will be necessary to incorporate appropriate mitigation measures such as SuDS.
- 5.22 The likely effects of the employment site options on SA objective 2: **health** are fairly mixed. Eight of the site options would have significant positive effects as they are within 800m of open space which could be used by employees during breaks, as well as being within 400m of walking and cycle paths which may offer good opportunities for people to travel to work via active modes of transport. However, six sites would have minor negative effects as they are not within 800m of any open space or 400m of a walking or cycle path, and a further two sites (CAM019 and SWO001) could have significant negative effects as they contain an existing green infrastructure asset that could be lost as a result of employment development onsite.
- 5.23 Five of the 32 employment site options could have a significant negative effect on SA objective 7: **biodiversity** as they are within 250m of an internationally or nationally designated nature conservation site. A further 15 sites could have minor negative effects on this objective as they are within 250m-1km of international or national designations, or 250m of a locally designated site. If any of the five sites with potential significant negative effects in particular are taken forward in the Local Plan Review, consideration should be given to appropriate mitigation. The likely sustainability effects for each employment site in relation to biodiversity are presented in **Figure 5.5** at the end of this section. In all cases, the potential negative effects are uncertain depending on the detailed proposals that may come forward at each site.
- 5.24 Six of the employment site options could have significant negative effects on SA objective 8: **landscape** as they are either entirely or partly within areas that have been assessed in the Landscape Sensitivity Assessment³⁹ as being of high sensitivity to employment development, or because they are within the Cotswold AONB (this is the case for three sites - MIN011, MIN012 and NAI002). The Council will need to consider these potential significant effects on landscape

³⁹ White Consultants (December 2016) Stroud District Landscape Sensitivity Assessment

when deciding whether to take these six employment sites forward in the Local Plan. For all sites, appropriate mitigation of potential effects on landscape will need to be considered within the Local Plan policies. However, the effects of 16 of the employment site options on this objective are uncertain as the Landscape Sensitivity Assessment did not cover the whole district and many of the site options were not covered by the assessment. While the effects of all site options are to some extent uncertain, depending on the specific proposals that come forward for each site and their design and layout, expanding the evidence base would enable more certain conclusions to be drawn about the likely effects of the 16 sites which currently have entirely uncertain effects. The potential effects for each employment site relating to landscape are presented in **Figure 5.6** at the end of this section.

- 5.25 The likely effects of the employment site options on SA objective 9: **historic environment** are also uncertain in all cases, depending on the specific proposals that may come forward at each site. The effects of six sites are entirely uncertain as they were not included in the SALA heritage assessment. Nine sites could have significant negative effects as they were assessed as having significant or highly significant heritage constraints, while a further three sites could have minor negative effects. Therefore, appropriate mitigation of potential effects on the historic environment will need to be considered within the Local Plan policies, particularly if any of the nine sites with potential significant negative effects are taken forward. Eight of the employment site options could also have minor positive effects as the SALA heritage assessment identified opportunities for development at those sites to have potential for positive heritage benefits. If any of those sites are taken forward in the Local Plan Review, particular consideration should be given to how this could be achieved.
- 5.26 Of the 32 employment site options, five could have a significant positive effect in relation to SA objective 10: **air quality**. These sites are located in close proximity to a railway station as well as at least one bus stop, which may enable people commuting to and from the employment sites to travel via sustainable modes of transport, reducing emissions. For 25 employment sites, a minor positive effect has been recorded given that they are located within close proximity of at least one bus stop but not a railway station. The remaining two employment sites are not located in close proximity to a railway station or bus stop, but are located in close proximity to a cycle route. An uncertain minor negative effect has therefore been recorded for these two sites (BER012 and EAS010), depending on whether the nearby cycle routes would be useful for commuting. **Figure 5.7** at the end of this section presents the likely sustainability effects of all employment sites in relation to SA objective 10.
- 5.27 Twenty-three of the 32 employment site options could have a significant negative effect on SA objective 11: **water quality** as they are within either a Drinking Water Safeguarding Zone or a Source Protection Zone. If any of those sites are taken forward in the Local Plan Review, adequate mitigation measures to ensure no disturbance to the water table or pollution of groundwater will be required either within development management policies or specifically in relation to each site allocation.
- 5.28 All of the employment site options would have negligible effects on SA objectives 1: **housing**, 3: **social inclusion**, 4: **crime**, 6: **services and facilities** and 14: **climate change**.

Table 5.2: Summary of SA scores for employment site options

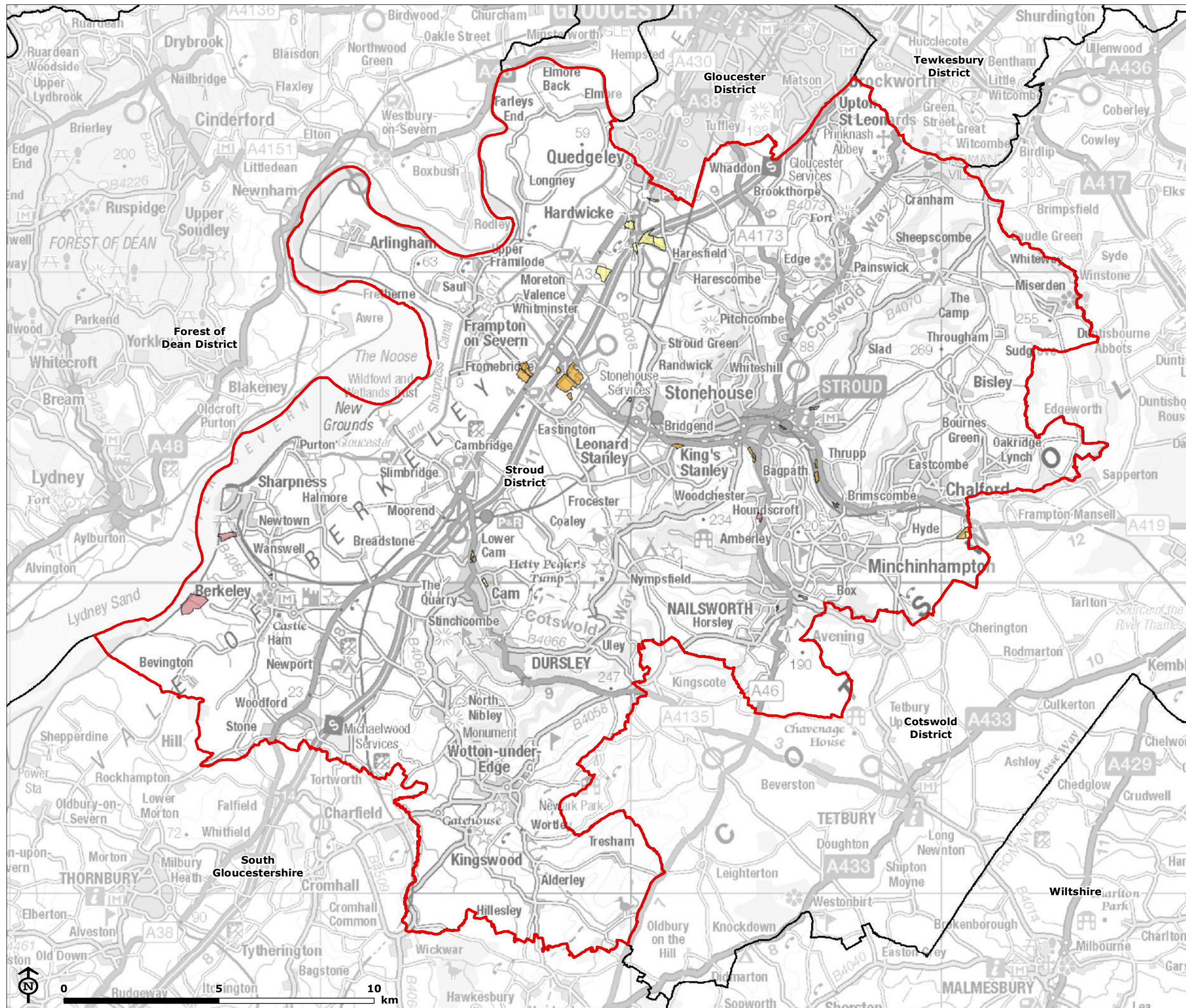
SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
BER012	0	++	0	0	0	0	0?	?	0	-?	0	--?	--?	0	0	+	+
BER013	0	+	0	0	+	0	--?	?	0	+	0	-?	++	0	+	++	++
BRI001	0	+	0	0	+	0	-?	-?	--/+?	+	--?	-?	+	0	+	+	+
BRI006	0	+	0	0	+	0	-?	-?	--/+?	+	--?	-?	+	0	+	+	+
BRI018	0	+	0	0	+	0	-?	-?	--/+?	+	--?	-?	+	0	+	+	+
CAM002	0	+	0	0	+	0	0?	?	?	+	--?	-?	+	0	+	+	+
CAM019	0	+/--?	0	0	+	0	--?	?	?	+	--?	-?	+	0	+	+	+
CAM020	0	+	0	0	0	0	0?	?	0	+	--?	--?	--?	0	0	+	+
EAS006	0	++	0	0	0	0	-?	--?	--	+	--?	--?	--?	0	0	+	+
EAS007	0	++	0	0	0	0	-?	--?	--	+	--?	--?	--?	0	0	++	++
EAS010	0	-	0	0	+	0	-?	?	0	-?	--?	-?	+	0	+	+	+
FRA003	0	-	0	0	+	0	-?	?	0	+	--?	0	+	0	+	+	+
FRA C	0	-	0	0	+	0	-?	?	0	+	--?	0	+	0	+	+	+
HAR003	0	+	0	0	0	0	0?	?	?	+	0	-?	--?	0	0	+	+
HAR006	0	+	0	0	+	0	0?	?	?	+	0	-?	+	0	+	+	+
HAR009	0	-	0	0	+	0	0?	?	0	+	0	0	++	0	+	++	++
HFD007	0	+	0	0	+	0	0?	?	0	+	0	-?	+	0	+	+	+
HFD008	0	+	0	0	0	0	0?	?	0	+	0	--?	--?	0	0	++	++
HFD009	0	+	0	0	0	0	0?	?	0	+	0	-?	--?	0	0	+	+
MIN011	0	-	0	0	+	0	-?	--?	?	+	--?	0	+	0	+	+	+
MIN012	0	-	0	0	0	0	0?	--?	?	+	--?	-?	--?	0	0	+	+

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
NAI002	0	++	0	0	+	0	--?	--?	-/+?	+	--?	-?	+	0	+	+	+
NAI005	0	+	0	0	+	0	-?	--?	-	+	--?	-?	+	0	+	+	+
NEW004	0	+	0	0	0	0	--?	?	0	+	0	--?	--?	0	0	+	+
SWO001	0	++/--?	0	0	+	0	--?	-?	0	+	--?	-?	+	0	+	+	+
STO001	0	+	0	0	0	0	-?	?	0	++	--?	-?	--?	0	0	+	+
STR012	0	++	0	0	+	0	-?	-?	--/+?	++	--?	0	+	0	+	+	+
STR027	0	+	0	0	0	0	0?	-?	0	++	--?	--?	-	0	0	+	+
STR029	0	+	0	0	+	0	0?	-?	--/+?	++	--?	-?	+	0	+	+	+
STR042	0	++	0	0	+	0	-?	-?	--/+?	+	--?	-?	+	0	+	+	+
STR049	0	++	0	0	0	0	-?	-?	-	++	--?	--?	--?	0	0	+	+
STR B2	0	++	0	0	+	0	-?	-?	--/+?	+	--?	-?	+	0	+	+	+

**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.5: SA Scores for employment site options for SA Objective 7: biodiversity/geodiversity

- Stroud District
 - Other local authority boundary
- Score**
- 0?
 - ?
 - ?



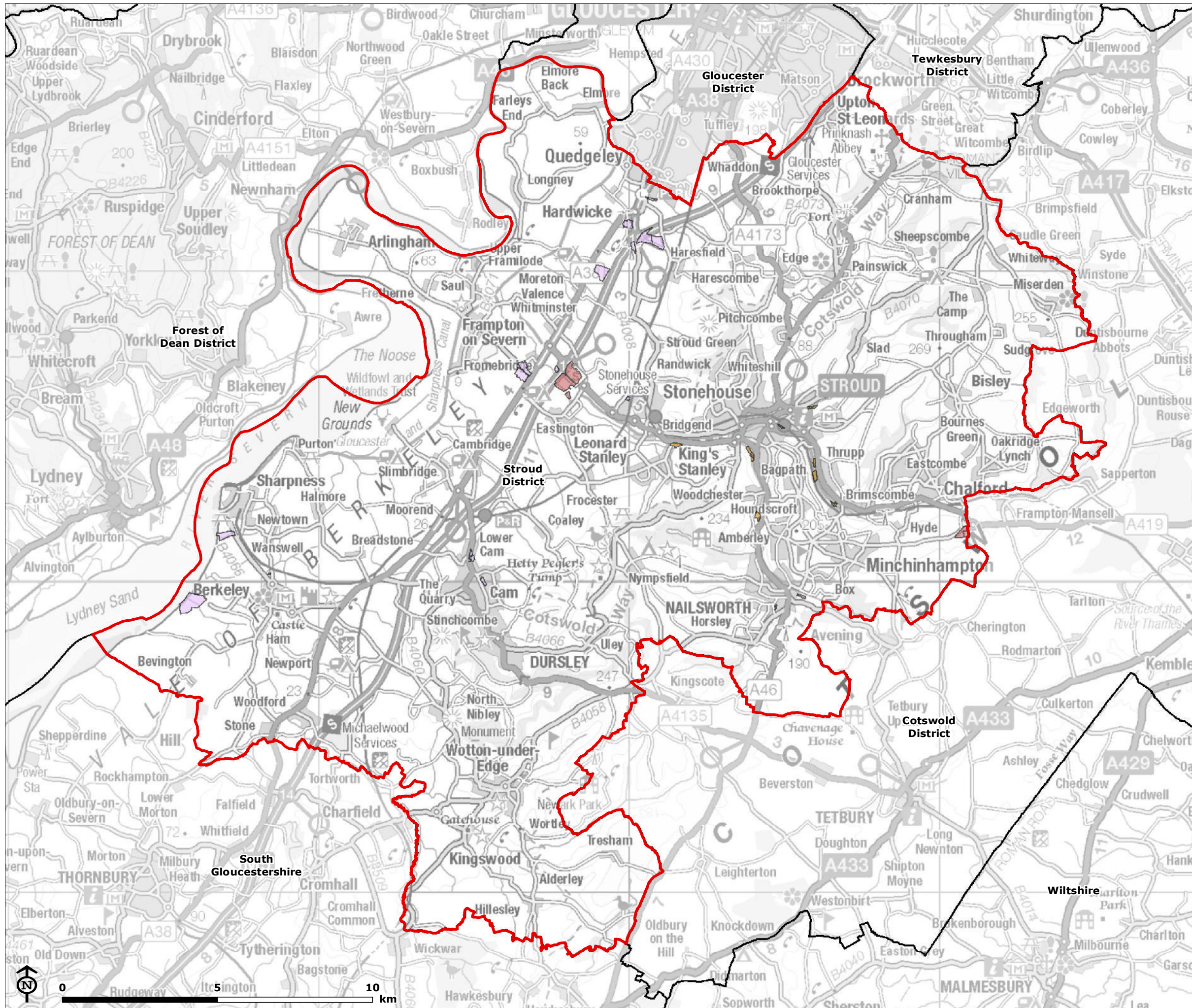
Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.6: SA Scores for employment site options for SA Objective 8: landscapes/townscapes

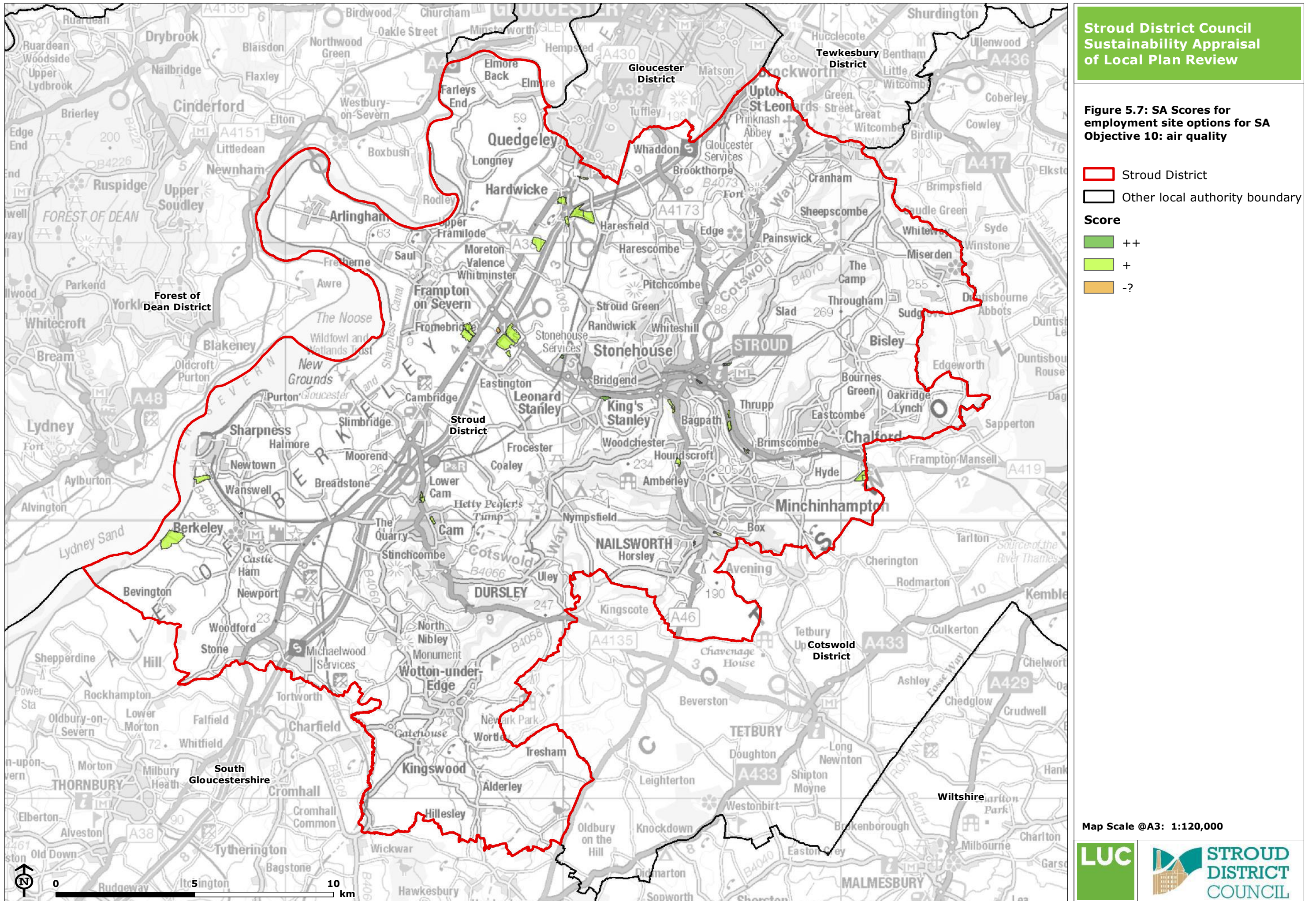
- Stroud District
 - Other local authority boundary
- Score**
- ?
 - ?
 - ?



Map Scale @A3: 1:120,000



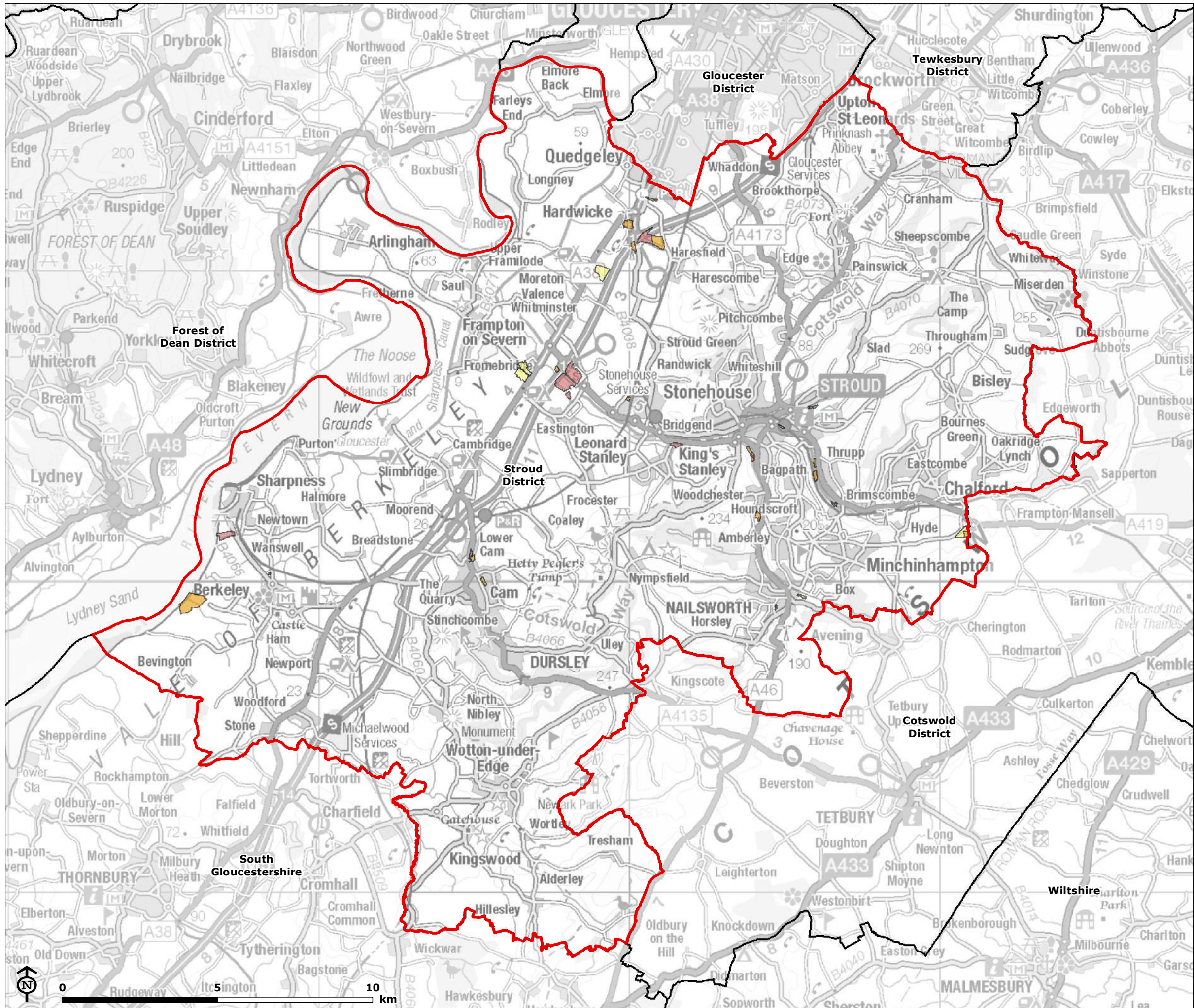
Figure 5.7: SA Scores for employment site options for SA Objective 10: air quality



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.8: SA Scores for employment site options for SA Objective 12: flooding

Stroud District
 Other local authority boundary
Score
 0
 -?
 --?



Map Scale @A3: 1:120,000



Mixed use site options

- 5.29 **Table 5.3** at the end of this section presents a summary of the SA scores for the 40 reasonable alternative mixed use site options. These sites are proposed for a mix of residential and employment development. SDC officers have advised that it is not yet possible to determine exactly how much of each site would be used for each type of development. However, they have been able to identify to the LUC SA team which sites are likely to be able to accommodate either residential or employment development at a scale which crosses the significance thresholds identified in the SA assumptions (see **Appendix 4**).
- 5.30 Due to the nature of the development proposed, these sites would have broadly positive effects on SA objectives 1: **housing**, 16: **employment** and 17: **economic growth**. Most of the positive effects are minor as most of the sites are relatively small in size, although seven sites could have significant positive effects on SA objective 1 as they could accommodate more than 600 new homes as part of the mixed use development. Where mixed use sites contain land which already supports an element of employment use, the positive effect expected in relation to SA objective 16 is uncertain given that new mixed use development may result in an overall loss in employment opportunities depending on the precise make up of mixed use proposals which come forward. This is the case for 16 of the 40 mixed use sites options. Ten sites could accommodate more than 10ha of employment land and so would have significant positive effects on SA objective 17. However, 13 sites could also have minor negative effects on SA objective 17 as part of mixed effects overall, as they are not within 800m of an existing school which could be easily accessed by new residents.
- 5.31 The effects of the mixed use sites on SA objective 2: **health** are very mixed; many of the sites are not located within 800m of an existing GP surgery that could be used by new residents and the relatively small sizes of most of the mixed use site options means that new provision cannot be assumed. However, the mixed use sites are generally well-located in terms of providing access to existing open space which would provide opportunities for active outdoor recreation, benefitting health. Eight of the site options would have significant positive effects on this objective as they are located close to both GPs and open space/walking or cycle routes.
- 5.32 The effects of the mixed use sites on SA objective 6: **services and facilities** are also very mixed and range between significant positive (18 sites) and significant negative (six sites) depending on their location in relation to the District's larger settlements, which are assumed to include a wider range of existing services and facilities. For that reason, the sites at Cam and Dursley, Stonehouse and Stroud would have generally significant positive effects.
- 5.33 Most of the mixed use site options could have minor negative effects on SA objective 7: **biodiversity** as they are within 250m-1km of an internationally or nationally designated nature conservation site or within 250m of a locally designated site, or because they fall within the identified zones of recreational influence on Rodborough Common SAC (3km) or the Severn Estuary SAC/SPA/Ramsar site (7.7km). However, five of the site options (BRI009, FRA002, NEW001, NEW002 and STR004) are within 250m of an internationally or nationally designated site and so could have significant negative effects. Therefore, it will be particularly important to consider appropriate mitigation if any of those sites are taken forward in the Local Plan Review. The likely sustainability effects for each mixed use site in relation to SA objective 7 have been mapped on **Figure 5.9** at the end of this section.
- 5.34 Fourteen of the mixed use site options could have significant negative effects on SA objective 8: **landscape** as they are either entirely or partly within areas that have been assessed in the Landscape Sensitivity Assessment⁴⁰ as being of high sensitivity to either residential or employment development, or because they are within the Cotswold AONB (this is only the case for two sites - BRI021 and MIN010). Appropriate mitigation of potential effects on landscape will need to be considered within the Local Plan policies. However, the effects of 11 of the options on this objective are uncertain as the Landscape Sensitivity Assessment did not cover the whole district and so many sites were not covered by the assessment. While the effects of all site

⁴⁰ White Consultants (December 2016) Stroud District Landscape Sensitivity Assessment

options are to some extent uncertain, depending on the specific proposals that come forward for each site and their design and layout, expanding the evidence base would enable more certain conclusions to be drawn about the likely effects of the 11 sites which currently have entirely uncertain effects. **Figure 5.10** at the end of this section presents the sustainability findings in relation to landscape for each of the mixed use sites.

- 5.35 Similarly, four of the mixed use sites are not covered by the SALA heritage assessment and so their effects on SA objective 9: **historic environment** are uncertain. For the remaining mixed use sites, a wide range of minor and significant negative effects are identified depending on the heritage sensitivity of the sites, all of which are to some extent uncertain depending on the detailed proposals for each site. Therefore, appropriate mitigation of potential effects on the historic environment will need to be considered within the Local Plan policies. Sixteen of the mixed use sites could also have minor positive effects as the SALA heritage assessment identified opportunities for development to have potential for positive heritage benefits. If any of those 16 sites are taken forward in the Local Plan Review, particular consideration should be given to how this could be achieved.
- 5.36 Most of the mixed use site options are within a Drinking Water Safeguarding Zone, reflecting the widespread extent of that zone throughout the District, and some sites are also within a Source Protection Zone. Those 34 sites could therefore have significant negative effects on SA objective 11: **water quality**, and adequate mitigation measures to ensure no disturbance to the water table or pollution of groundwater will be required either within development management policies or specifically in relation to each site allocation.
- 5.37 Just over half (21) of the mixed use site options are expected to have a significant negative effect in relation to SA objective 10: **air quality**. These are the sites which have been rated through the Stroud SALA Transport Accessibility Assessment as providing the lowest levels of access to sustainable transport links as well as features such as local/district/town centre locations and employment opportunities. A further two sites (STN001 and WHI003) are expected to have a minor negative effect in relation to this objective. Only six mixed use sites are expected to have a significant positive effect on air quality as they provide relatively very good levels of access. For one mixed use site (STR002) the effects are uncertain as the site was not included in the SALA Transport Accessibility Assessment. The likely sustainability effects in relation to SA objective 10 for all mixed use sites are presented in **Figure 5.11** at the end of this chapter.
- 5.38 Half (20) of the mixed use site options are on brownfield land and so would have minor positive effects on SA objectives 5: **vibrant communities** and potential minor positive effects on SA objective 15: **waste** depending on the extent to which opportunities exist to reuse existing buildings and materials onsite. Those brownfield sites would also have either minor or significant positive effects on SA objective 13: **efficient land use** depending on their size. The sites on brownfield land also score better than the greenfield sites in relation to SA objective 12: **flood risk** as their development would avoid the loss of permeable surfaces. Ten of the greenfield sites could have significant negative effects on SA objective 12 as they are also at least partly within areas of highest flood risk (flood zone 3). Particular consideration should be given to mitigation if any of those options are taken forward as allocations in the Local Plan Review; this could include the incorporation of SuDS, as well as requiring built development to be directed to the parts of the sites that lie outside of flood zone 3. **Figure 5.12** at the end of this section presents the likely sustainability effects for each of the mixed use sites in relation to SA objective 12.
- 5.39 Negligible effects are expected for all mixed use site options in relation to SA objectives 3: **social inclusion**, 4: **crime** and 14: **climate change**.

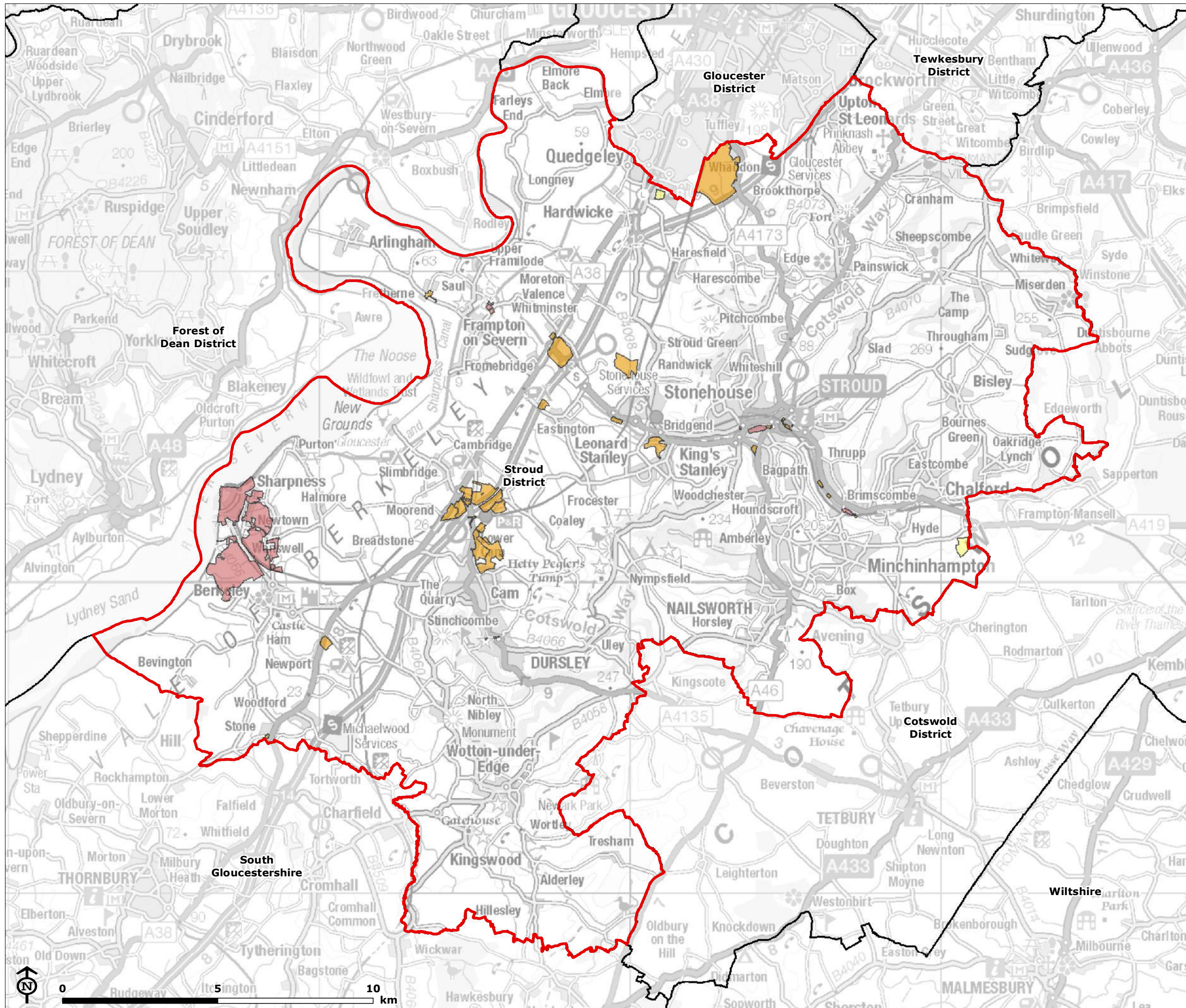
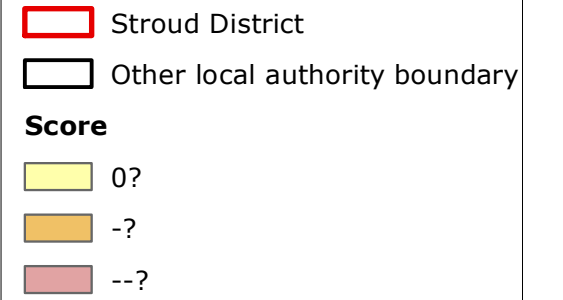
Table 5.3: Summary of SA scores for mixed use site options

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
BRI002	+	-/+	0	0	+	-	-?	-?	--/+?	+	--?	-	+	0	+?	+	+?
BRI003	+	-/+	0	0	0	-	-?	-?	-	+	--?	--	-	0	0	+	+?
BRI009	+	+/--?	0	0	+	0	--?	--?	--/+?	0	--?	-	+	0	+?	+?	+?
BRI021	+	-/+	0	0	+	0	-?	--?	--/+?	0	--?	-	+	0	+?	+?	+?
BRO002	++	-/+	0	0	0	++	-?	-?	-	--	0	--	--	0	0	++	-?/++
CAM014	+	-/+	0	0	0	++	-?	--?	-/+?	0	--?	-	--	0	0	+?	-?/+
CAM017	+	-/+	0	0	0	++	-?	--?	0	--	--?	--	--	0	0	+?	++?
CAM018	+	-/+	0	0	0	++	-?	--?	0	--	--?	--	--?	0	0	+	+?
CAM027	++	-/+	0	0	0	--	-?	?	0	--	--?	--	--	0	0	+	-?/+
CAM D	+	-/+	0	0	0	++	-?	--?	0	--	--?	--	--?	0	0	+	-?/+
DUR003	+	++	0	0	+	++	-?	-?	-/+?	+	--?	0	+	0	+?	+	+?
DUR004	+	++	0	0	+	++	-?	-?	-/+?	+	--?	0	+	0	+?	+	+?
DUR018	+	++	0	0	+	++	-?	-?	--	+	--?	0	+	0	+?	+?	+?
EAS002	+	-/+	0	0	+	0	-?	--?	--/+?	--	--?	0	+	0	+?	+?	-?/+
EAS B2	+	-/+	0	0	+	0	-?	--?	--/+?	--	--?	0	+	0	+?	+?	-?/+
FRA002	+	++/--?	0	0	0	+	--?	--?	-	--	--?	-	--	0	0	+	+?
HAR013	+	-/+	0	0	0	++	0?	?	0	--	0	-	--?	0	0	+?	-?/+
KST007	+	++	0	0	0	0	-?	--?	?	--	--?	--	--	0	0	++	++?
MIN010	+	-/+	0	0	+	--	0?	--?	0	--	--?	0	+	0	+?	+?	-?/+
NPT002	+	-/+	0	0	0	-	-?	?	?	--	0	-	--?	0	0	+	-?/+
NEW001	+	+/--?	0	0	+	0	--?	-?	--/+?	--	0	-	+	0	+?	+?	+?

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
NEW002	++	++/--?	0	0	0	0	--?	--?	-	--	0	--	--?	0	0	++	++?
SAU002	+	-/+	0	0	+	--	-?	?	--/+?	--	--?	-	+	0	+?	+?	-?/+
SLI002	++	-/+	0	0	0	0	-?	?	0	--	--?	-	--	0	0	+	+?
SLI004	+	-/+	0	0	0	--	-?	?	0	--	--?	-	--	0	0	+	+?
SLI005	++	-/+	0	0	0	--	-?	?	0	--	--?	-	--	0	0	+	+?
SLI002, SLI004, SLI005	++	-/+	0	0	0	0	-?	?	0	--	--?	-	--	0	0	++	++?
STN001	+	-/+	0	0	0	-	-?	?	?	-	0	-	--?	0	0	+	+?
STO006	+	++	0	0	0	++	-?	-?	--	0	--?	--	--?	0	0	+	+?
STO016	++	-/+	0	0	0	--	-?	-?	0	--	--?	--	--?	0	0	+	-?/+
STR002	+	-/+	0	0	+	++	-?	?	-/+?	?	--?	0	++	0	+?	+	++?
STR004	+	++/--?	0	0	+	++	--?	?	--/+?	++	--?	-	+	0	+?	+?	++?
STR006	+	++	0	0	+	++	-?	-?	--	++	--?	-	+	0	+?	+?	++?
STR014	+	-/+	0	0	+	++	-?	-?	--/+?	++	--?	0	+	0	+?	+	+?
STR015	+	++	0	0	+	++	-?	-?	--/+?	++	--?	-	+	0	+?	+	+?
STR016	+	++	0	0	+	++	-?	-?	+	++	--?	-	+	0	+?	+?	+?
STR017	+	++	0	0	+	++	-?	-?	--/+?	++	--?	0	+	0	+?	+	+?
STR032	+	-/+	0	0	+	++	-?	-?	-/+?	+	--?	0	+	0	+?	+?	++?
WHI003	+	-/+	0	0	+	0	-?	--?	?	-	--?	0	+	0	+?	+?	-?/+
WHI007	+	-/+	0	0	0	0	-?	--?	-	--	--?	-	--?	0	0	+	-?/+

**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.9: SA Scores for mixed use site options for SA objective 7: biodiversity/geodiversity

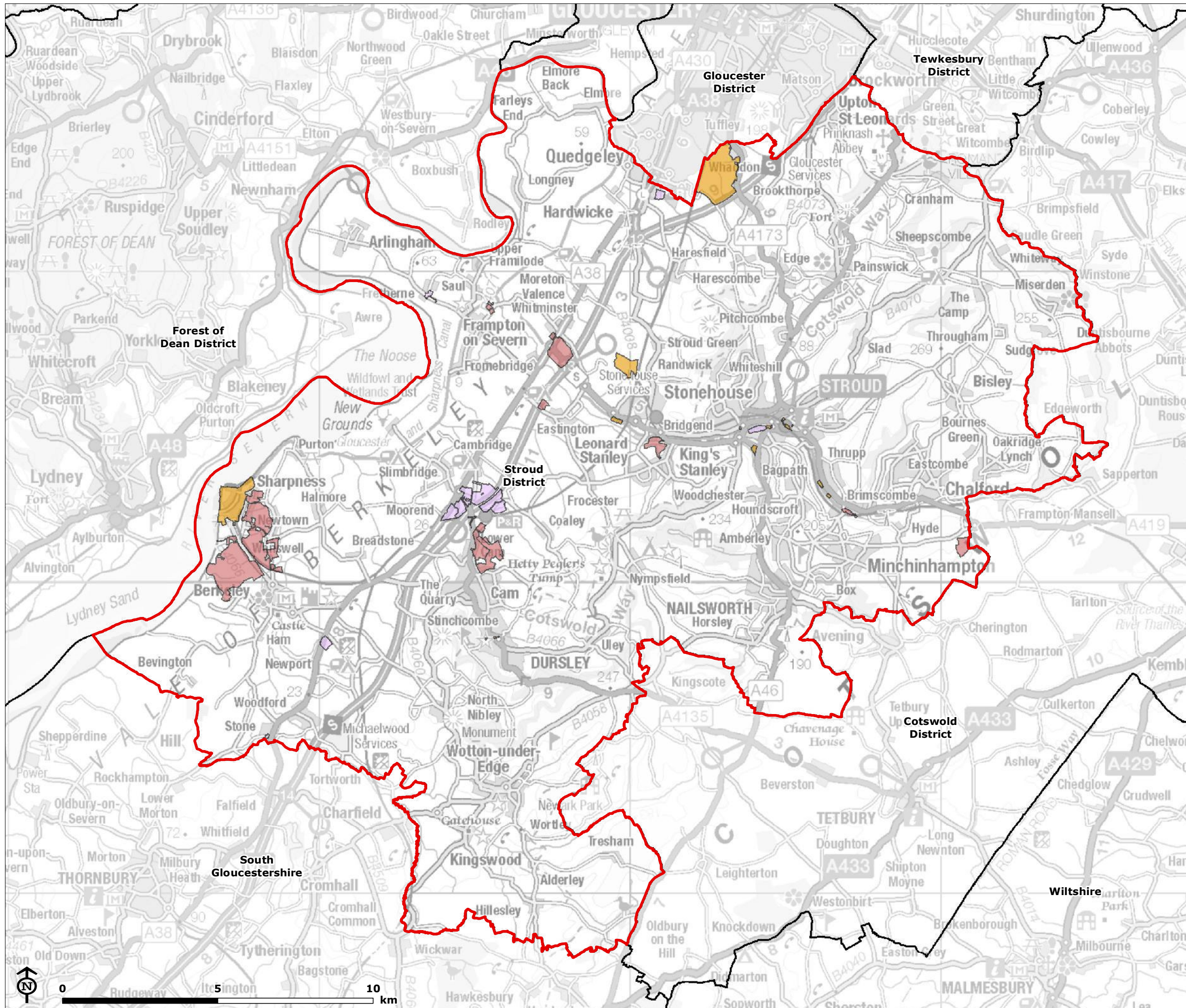


Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.10: SA Scores for mixed use site options for SA objective 8: landscapes/townscapes



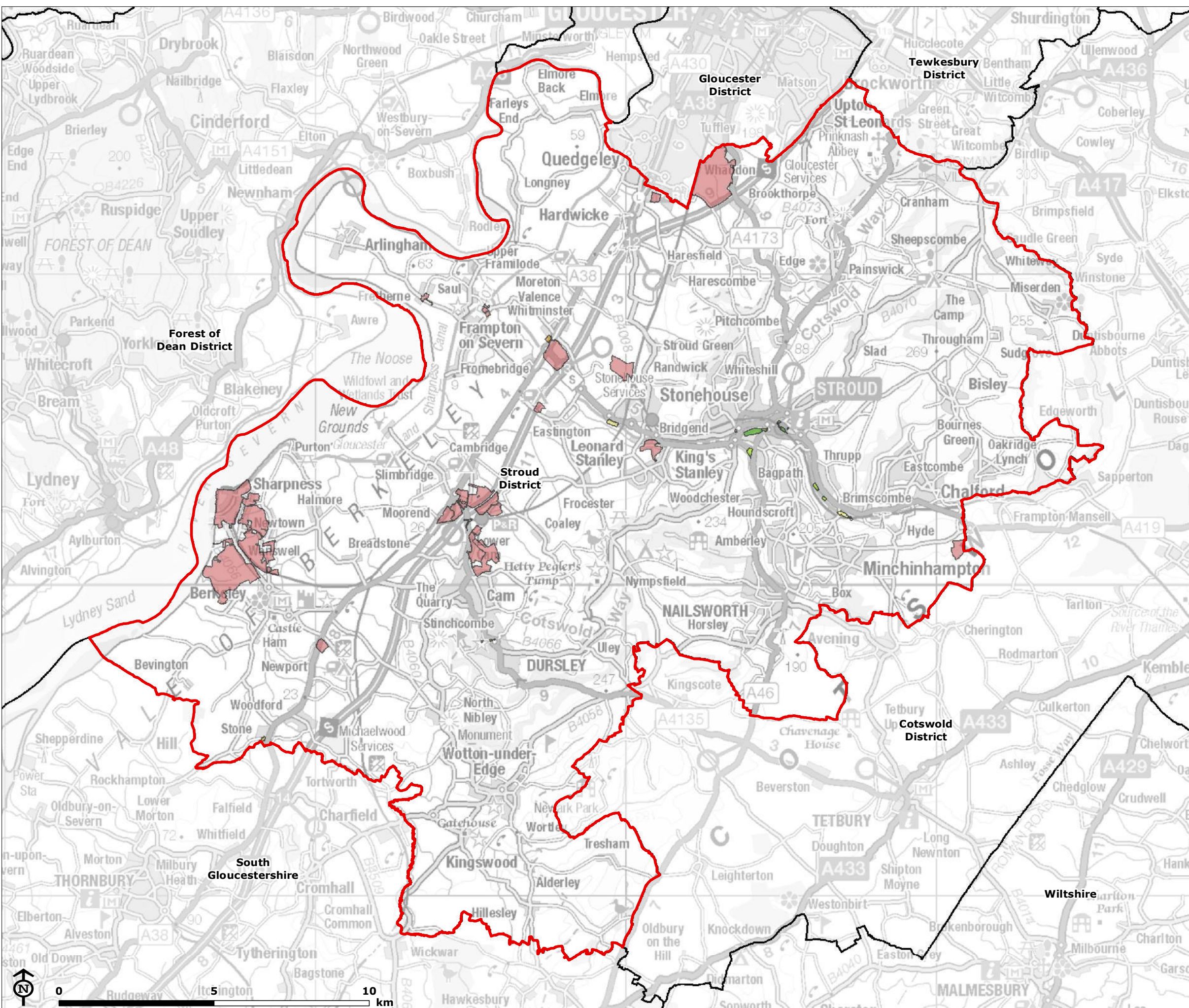
- Stroud District
 - Other local authority boundary
- Score**
- ?
 - ?
 - ?

Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.11: SA Scores for mixed use site options for SA objective 10: air quality



Score

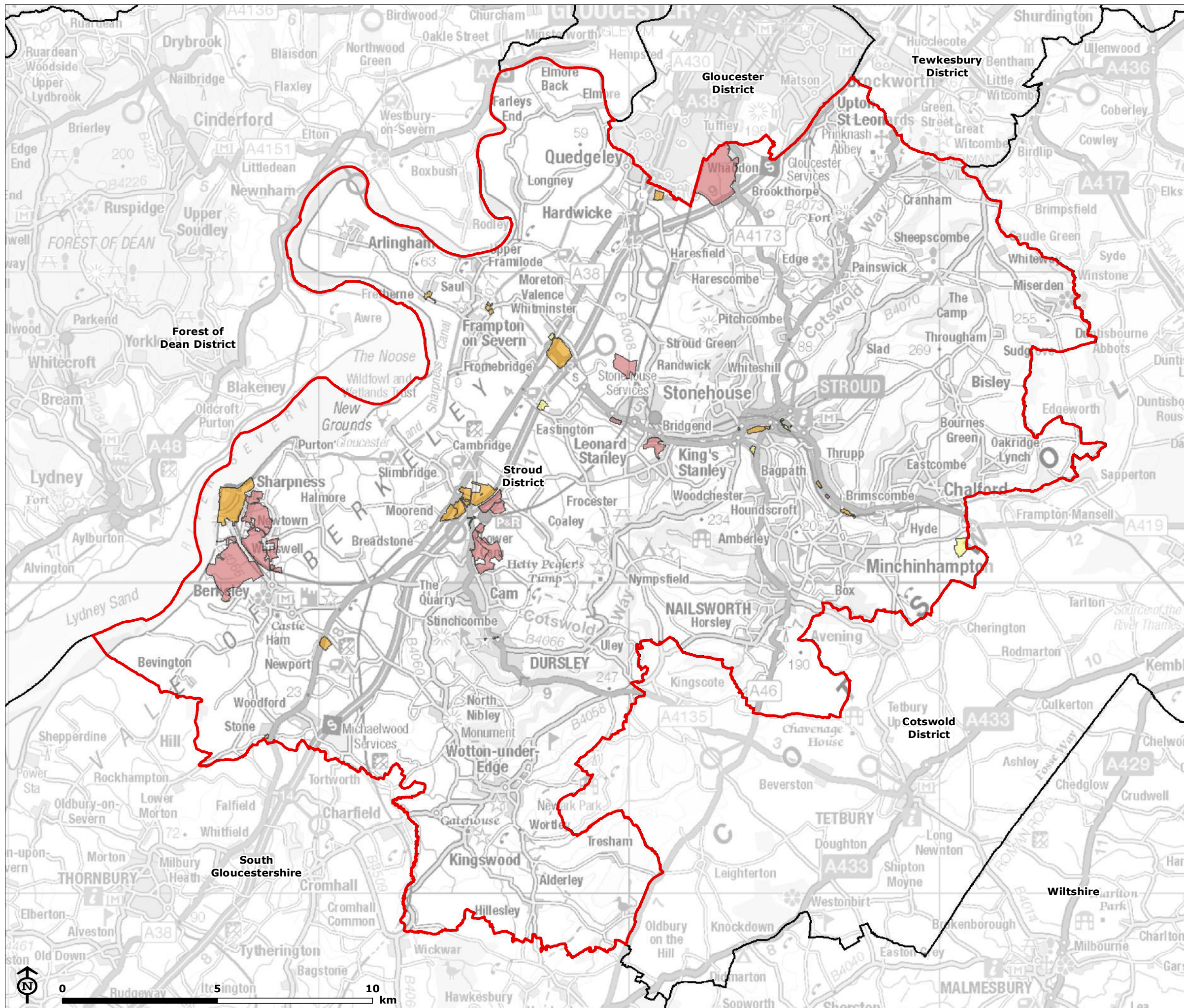
- ++
- +
- 0
- ?
-
-

Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 5.12: SA Scores for mixed use site options for SA objective 12: flooding



Stroud District
 Other local authority boundary
Score
 0
 -
 --

Map Scale @A3: 1:120,000



Community and retail site options

- 5.40 **Table 5.4** at the end of this section presents a summary of the SA scores for the four reasonable alternative community/retail site options. The likely effects of these options are strongly influenced by the specific proposals for each site, which are:
- EAS007: Football stadium for Forest Green Rovers
 - NAI003: Football stadium for Forest Green Rovers
 - STR009: Retail use
 - WUE009: Potential extension to Katharine Lady Berkeley's School
- 5.41 The two sites that are options for a football stadium (EAS007 and NAI003) would have broadly very similar effects on the SA objectives. This type of development would have negligible effects on many of the SA objectives, although in either location it could have minor positive effects on SA objectives 2: **health**, 16: **employment** and 17: **economic growth**. A new football stadium may offer some opportunities for public use of the associated sporting facilities and would create some jobs which may have associated opportunities for work-based learning and skills development. However, the development of a new football stadium could have a range of negative effects on the environmental objectives. Both site options could have significant negative effects on SA objective 8: **landscape**, although it is assumed that any detailed proposals would be subject to a site-level landscape assessment. Both sites could also have significant negative effects on SA objectives 11: **water quality** and 12: **flooding** as they are both within a Drinking Water Safeguarding Zone (NAI003 is also within a Source Protection Zone) and both are on greenfield land which is at least partly within flood zone 3. NAI003 could have a significant negative effect on SA objective 7: **biodiversity** as it is within 250m of Minchinhampton SSSI although this will depend on whether the habitats and species designated within the SSSI are likely to be disturbed by construction of the stadium and/or the noise and light pollution when it is in use. EAS007 could have a minor negative effect as it is within 250m of two Key Wildlife Sites (Stroudwater Canal - Stonehouse and River Frome Mainstream and Tributaries).
- 5.42 EAS007 could have significant negative effects on SA objectives 9: **historic environment** and 13: **efficient land use** as it scored 3 in the SALA heritage assessment and is within an area of Grade 3 agricultural land which would be lost to the development.
- 5.43 The retail development that could take place at site STR009 would have broadly negligible or positive effects on the social and economic SA objectives. Minor positive effects could occur in relation to SA objectives 16: **employment** and 17: **economic growth** due to associated employment opportunities and contribution to the local economy, although the number of jobs likely to be created through retail development is not expected to be significant. A significant positive effect is expected in relation to SA objective 6: **services and facilities**, due to the nature of the development proposed at the site, and the relatively central location of the site means that there could be minor positive effects on SA objective 10: **air quality** as opportunities to travel via sustainable transport should be good. However, potential significant negative effects are identified in relation to SA objectives 8: **landscape** and 11: **water quality** as the site is within an area assessed as being of high landscape sensitivity to employment development, and it is within a Drinking Water Safeguarding Zone. The site could also have minor negative effects in relation to SA objectives 7: **biodiversity**, 12: **flooding** and 13: **efficient land use**.
- 5.44 The potential school extension site (WUE009) would have negligible effects on many of the SA objectives but could have a significant negative effect on SA objective 13: **efficient land use** as the site is within an area of Grade 3 agricultural land. It could also have minor negative effects in relation to SA objectives 7: **biodiversity**, 8: **landscape**, 10: **air quality** and 12: **flooding**. However, it is recognised that the school is already in place and that this would be an extension to the existing site rather than an entirely new development, which may reduce the impacts. A significant positive effect is likely in relation to SA objective 17: **economic growth** (which incorporates education) due to the nature of the proposed development. A minor positive effect is

likely in relation to SA objective 6: **services and facilities**, as the extension of the school would improve education provision locally.

- 5.45 Should any of these four site options be taken forward, appropriate mitigation of the potential negative environmental effects identified will need to be considered within the Local Plan policies.

Table 5.4: Summary of SA findings for community and retail use site options

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
EAS007	0	+	0	0	0	0	-?	--?	--	-?	--?	--	--?	0	0	+	+
NAI003	0	+	0	0	0	0	--?	--?	?	?	--?	--	-	0	0	+	+
STR009	0	0	0	0	+	++	-?	--?	?	+	--?	-	-	0	0	+	+
WUE009	0	0	+	0	0	+	-?	-?	?	-?	0	-	--?	0	0	0	++

Open space site options

- 5.46 **Table 5.5** overleaf presents a summary of the SA scores for the six reasonable alternative open space site options.
- 5.47 In line with the assumptions set out in **Appendix 4**, there is very little variation in the scores between the open space site options. This is because the likely effects of allocating open space will not vary significantly based on the location of the sites, but will depend on the nature of the open space taken forward on the site such as how much greenspace is retained, creation of impermeable surfaces and erection of any structures e.g. play areas. Open space allocations in any location are considered likely to have minor positive effects on SA objectives 2: **health**, 5: **vibrant communities** and 7: **biodiversity**. Open space sites in any location could also have minor positive effects on SA objectives 8: **landscape** and 9: **historic environment** as securing areas of open space could protect or enhance the appearance of the wider area, including the setting of any nearby heritage assets.
- 5.48 All open space sites are likely to have positive effects on SA objective 12: **flood risk** as open space should secure areas of permeable surfaces and facilitate infiltration. Effects will be particularly significant where open space is allocated in areas of higher flood risk. Only one of the open space site options (BER001) is in an area of flood zone 3 and so could have a significant positive effect on this objective (depending on how much permeable surfaces are retained), while the other five options would have minor positive effects.

Table 5.5: Summary of SA scores for open space site options

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geo diversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
BER001	0	+	0	0	+	0	+	+?	+?	0	0	++	0	0	0	0	0
BER008	0	+	0	0	+	0	+	+?	+?	0	0	+	0	0	0	0	0
CHA002	0	+	0	0	+	0	+	+?	+?	0	0	+	0	0	0	0	0
STO005	0	+	0	0	+	0	+	+?	+?	0	0	+	0	0	0	0	0
STO011	0	+	0	0	+	0	+	+?	+?	0	0	+	0	0	0	0	0
STR028	0	+	0	0	+	0	+	+?	+?	0	0	+	0	0	0	0	0

Summary

- 5.49 The SA findings presented in this chapter have been taken into consideration by Stroud District Council when selecting which site options to take forward as potential sites proposed for allocation in the Local Plan Review. The SA findings have also influenced the consideration of mitigation measures to be built into the Local Plan Review.
- 5.50 The SA findings are not the only factor to consider when selecting site options and it is not necessarily the case that the sites with the most positive effects or the fewest negative effects should be allocated in the Local Plan. A range of other considerations have also been taken into account by the Council and the reasons for decision making are recorded in the audit trail in **Appendix 7** (some of these reasons do not relate to the SA findings (i.e. deliverability issues or other planning considerations)).

6 Sustainability Appraisal findings for the Emerging Strategy Paper

- 6.1 This chapter presents the SA findings for the Local Plan Review Emerging Strategy Paper. **Chapter 3** of this report has provided an overview of what the Emerging Strategy Paper contains and the order in which it is presented. This chapter presents the SA findings following the same order as the Emerging Strategy Paper.

Key Issues

- 6.2 The Emerging Strategy Paper within Chapter 1 sets out the key issues facing Stroud District and how the delivery of new development over the plan period will address these issues. The issues identified relate to the delivery of new housing development (Issue 1), the protection and enhancement of the countryside and biodiversity (Issue 2), the use of brownfield land to contribute to housing delivery (Issue 3), the protection of the natural environment (Issue 4) and the provision of affordable housing (Issue 5).
- 6.3 As shown in **Table 6.1** below, it is expected that the Council's approach to address the identified key issues for the district is likely to have mostly positive (and in many cases significant) effects in relation to the SA objectives.

Table 6.1 Summary of SA findings for the Council's approach to address the key issues identified in the Stroud Local Plan Review (Emerging Strategy)

SA Objective	Approach to address the key issues identified for the district
SA 1: Housing	++/-?
SA 2: Health	+
SA 3: Social inclusion	+
SA 4: Crime	0
SA 5: Vibrant communities	+
SA 6: Services and facilities	++
SA 7: Biodiversity/geodiversity	++
SA 8: Landscapes/townscapes	+?
SA 9: Historic environment	+?
SA 10: Air quality	++
SA 11: Water quality	0
SA 12: Flooding	+
SA 13: Efficient land use	++
SA 14: Climate change	+
SA 15: Waste	+?
SA 16: Employment	++/-?

SA Objective	Approach to address the key issues identified for the district
SA 17: Economic growth	++/-?

- 6.4 Negative effects have been identified in relation to SA objectives 2: **housing**, 16: **employment** and 17: **economic growth** because the use of defined settlement boundaries within the district may limit the potential for development beyond the boundaries, although this is uncertain dependent upon how stringently these are applied. However, the overall support in this section of the Emerging Strategy for the provision of new homes (including affordable homes) and employment growth means that a significant positive effect is likely in combination for these three SA objectives. Employment opportunities should be more accessible in the district due to being provided specifically within the A38/M5 corridor and in tandem with housing growth. Development is also to be provided to help transform existing access to services and infrastructure which should further benefit economic growth through improved access to important transport infrastructure in the district.
- 6.5 The Council is seeking to deliver new housing development at locations which currently provide best access to services, facilities, jobs and infrastructure and would help to transform existing access to services and infrastructure. As such, a significant positive effect is expected in relation to SA objective 6: **services and facilities** with associated minor positive effects in relation to SA objectives 2: **health**, 3: **social inclusion** and 5: **vibrant communities** considering that the services and facilities supported are likely to include health care, community and other provisions.
- 6.6 The approach in this section of providing development at locations which would make employment opportunities as well as services and facilities more accessible in the district should help to reduce the need to travel in the district particularly by private car. A significant positive effect is therefore expected in relation to SA objective 10: **air quality**. The positive effect expected in relation to SA objective 14: **climate change** is minor considering that although it would help to reduce greenhouse gas emissions from vehicular sources it would not directly support the provision of new low carbon energy sources in the district.
- 6.7 The Council's approach also supports the achievement of net gains to the natural environment as well as protecting and conserving the green network. As such a significant positive effect is expected in relation to SA objective 7: **biodiversity/geodiversity**. Uncertain minor positive effect are also expected in relation to SA objectives 8: **landscape/townscapes** and 9: **historic environment** given that this approach may help to protect the setting of such assets in the district dependent upon whether green links currently contribute to the settings in question.
- 6.8 A significant positive effect is also expected in relation to SA objective 13: **efficient land use** given that the Council's approach is to seek to maximise the potential of brownfield and underused sites for various types of development including housing, employment and canal related tourism. This approach combined with protection of green links in the district is likely to help limit the proliferation of impermeable surfaces which would be to the detriment of local flood risk. A minor positive effect is therefore expected in relation to SA objective 12: **flood risk**. Prioritising development at brownfield sites may also help to encourage the re-use of materials and buildings in the district already on site dependent upon the design of new development. An uncertain minor positive effect is therefore also expected in relation to SA objective 15: **waste**.

Needs of the district

- 6.9 Chapter 3 of the Emerging Strategy Paper sets out the needs of the district in relation to the local economy and jobs, town centres, local housing need and local green spaces and community facilities. It also provides details about how the Council is responding to these needs through the Emerging Strategy Paper. A summary of the SA findings relating to how the Council is to respond to each of these issues is presented in **Table 6.2** below.

Table 6.2 Summary of SA findings relating to the Council's approach to addressing the needs for the district

SA Objective	Local economy and jobs	Town centres	Local housing need	Local green spaces and community facilities
SA 1: Housing	+	+	++	-?
SA 2: Health	+/-	+/-	+/-	++
SA 3: Social inclusion	0	0	+	0
SA 4: Crime	0	0	0	0
SA 5: Vibrant communities	0	+	0	+
SA 6: Services and facilities	0	++	+/-	+
SA 7: Biodiversity/geodiversity	0	0	0	++
SA 8: Landscapes/townscapes	0	+	0	+
SA 9: Historic environment	0	0	0	+
SA 10: Air quality	+/-	++/-	+/-	++
SA 11: Water quality	0	0	0	0
SA 12: Flooding	+	0	+/-	+
SA 13: Efficient land use	++	+	+/-	0
SA 14: Climate change	+/-	++/-	+/-	+
SA 15: Waste	+?	0	+?	0
SA 16: Employment	++/-	+	0	0
SA 17: Economic growth	++	++	0	-?

Local economy and jobs

- 6.10 As the approach to addressing the requirement to support the delivery of new jobs within Stroud District is specific in nature, negligible effects are expected in relation to many of the SA objectives. It is expected that locating some of the future employment development in the district at the M5/A38 growth corridor could have a mixed overall effect (minor positive/minor negative) in relation to SA objectives 10: **air quality** and 14: **climate change** as this approach may result in higher levels of car use for employees commuting to and from the more inaccessible sites in this area, as well as potentially attracting less sustainable, vehicular transport-based commercial activities such as logistics. Development within the M5/A38 growth corridor would be some distance from settlements of Dursley and Stroud in particular. However, it would be well related to the settlements of Cam and Stonehouse and the approach supports the delivery of housing alongside new employment growth which should help to make jobs more accessible in the district.
- 6.11 The approach set out in the Emerging Strategy Paper would result in some employment development sites being provided at very accessible locations while others would be provided at locations which are less accessible. Therefore, the potential for residents to walk, cycle or use other modes of active transport to travel to work would be varied. As such a mixed effect (minor positive/minor negative) is also expected in relation to SA objective 2: **health**.
- 6.12 The inaccessibility of some of the growth corridor from particular parts of the district means that a minor negative effect is also expected in relation to SA objective 16: **employment**. However, this is mixed with a significant positive effect as providing new employment land within the growth corridor is likely to encourage large scale new employment growth in the district given that many of these sites will provide immediate access to important strategic transport infrastructure. This could also encourage inward investment in the district meaning that a significant positive effect is also expected in relation to SA objective 17: **economic growth**.

- 6.13 The approach to supporting the local economy and jobs in the district is to allow for the regeneration of underutilised or low value employment sites provided that key employment sectors are not undermined. As such it is expected that the re-use of vacant brownfield and currently unused employment sites would be promoted for development with a significant positive effect identified in relation to SA objective 13: **efficient land use**. A minor positive effect is also expected in relation to SA objective 12: **flood risk** and an uncertain minor positive effect in relation to SA objective 15: **waste**, as this approach may help to reduce a proliferation in the amount of impermeable surfaces in the district and encourage the re-use of materials and buildings currently on such sites, dependent upon the design of new schemes which come forward.

Town centres

- 6.14 In general, improving the District's town centres will have positive effects on SA objectives 5: **vibrant communities** and 6: **access to services**. The positive effect in relation to access to services would be significant given that retail, leisure and other uses which will help to improve the overall offer of services and facilities in the district are to be encouraged at various town centre locations. The approach set out for town centres will also provide some housing specifically at Stroud, Nailsworth and Dursley town centres which is likely to improve access to services and facilities at these locations. It is also likely that this type of provision would help to supplement the larger strategic scale sites in the district to help meet the overall housing need and therefore a minor positive effect is expected in relation to SA objective 1: **housing**.
- 6.15 There are also likely to be a significant positive effect in relation to SA objectives 10: **air quality** and 14: **climate change** given that improvements to the town centres may encourage more people to shop and spend time in those areas, which are generally more accessible via sustainable transport compared to out of town retail parks or other larger centres. Furthermore improvements supported across many of the town centre locations include pedestrian and cycling links, while providing housing at such locations will help reduce the need to travel in the district. The significant positive effects expected for these SA objectives however, are likely to be combined with a minor negative effect given that the provision of additional parking at Wotton-under-Edge town centre is likely to support the continued and potentially increased dependency on car use in the area. A mixed overall effect (minor positive/minor negative) is also likely in relation to SA objective 2: **health** considering the varied potential for increasing the number of residents who make use of more active modes of transport in the district on a daily basis.
- 6.16 The approach set out for meeting the needs of town centres in the district is likely to help maintain and enhance the vitality and viability of the District's town centres. Specific benefits which relate to economic investment in the district include allowing office uses which provide work spaces with flexible rental arrangements and supporting existing markets in town centre locations. A significant positive effect is therefore expected in relation to SA objective 17: **economic growth**. Allowing for housing use in close proximity to town centre office locations is expected to make employment opportunities more accessible and therefore a minor positive effect is expected in relation to SA objective 16: **employment**.
- 6.17 The support which the approach provides in relation to urban design, signage and public realm improvements at Dursley town centre and the redevelopment of brownfield sites specifically at Stroud town centre means that a minor positive effect is expected in relation to SA objectives 8: **landscapes/townscapes** and 13: **efficient land use**.

Local need for housing

- 6.18 It is expected that the Council's approach to delivering new housing the district would have variable effects in relation to the SA objectives. The approach would support the delivery of at least 638 new homes per year for a 20 year period, including a proportion of affordable units. It would also support land to meet the requirements of gypsies and travellers and travelling showpeople, older people and those seeking custom-build accommodation. Housing delivered is to include a mix of dwelling types which will be in line with identified local needs. A significant positive effect is therefore expected in relation to SA objective 1: **housing**.
- 6.19 The approach would support the delivery of much of the new growth to meet local housing needs within or adjacent to existing communities. At the same time exception sites are to be supported

to meet local affordable needs and specifically the requirements of first time buyers and renters. As such many new homes would be provided with a high level of access to existing services and facilities. Although the provision of housing at more rural locations may stimulate an increased offer of services and facilities at the smaller villages, there are still likely to be areas of the district where access to services and facilities is low, which may promote a reliance on travel by private car. As such a mixed effect (minor positive/minor negative) is therefore expected in relation to SA objectives 2: **health**, 6: **services and facilities**, 10: **air quality** and 14: **climate change**.

- 6.20 The level of housing growth supported through this approach is likely to result in the development of a substantial amount of greenfield land in the district. The approach specifically states that greenfield sites are to be allocated for housing growth. However, it also supports the development of brownfield land to form a part of all sites which will come forward to help deliver the homes required over the plan period. A mixed effect (minor positive/minor negative) is therefore likely in relation to SA objective 13: **efficient land use**. A similar mixed effect is expected in relation to SA objective 12: **flooding** given that development of greenfield land could increase impermeable surfaces, while the use of brownfield sites would restrict growth of impermeable surfaces in the district. The minor positive effect expected in relation to SA objective 15: **waste** is uncertain considering that the opportunity to re-use materials onsite when brownfield land is put forward for development will be dependent upon the design of any scheme which comes forward.

Local green spaces and community facilities

- 6.21 The Council's approach to local green spaces and community facilities in the district as set out in the Emerging Strategy Paper is likely to help encourage travel by more active modes through improvements to local cycleways (including the route from Stonehouse to Nailsworth and the canal towpath between canal between Stonehouse and Saul Junction) and various greenways. In addition, the approach is to include policy protection for important open spaces within settlements as well as outdoor recreation facilities, playing fields or allotments within or relating to settlements. Significant positive effects are therefore expected in relation to SA objectives 2: **health** and 10: **air quality**. A minor positive effect is also expected in relation to SA objective 14: **climate change** given that this approach would help to reduce greenhouse gas emissions from private car journeys but would not address low energy sources in the district.
- 6.22 A significant positive effect is also expected in relation to SA objective 7: **biodiversity/geodiversity** as this approach would support the mapping of green infrastructure (GI) assets across the plan area as well as continuing protection for areas of biodiversity importance. It would also support the creation of a mitigation strategy for the Cotswold Beechwoods SAC. Areas of landscape and heritage importance are also to be protected through this approach and as such a minor positive effect is expected in relation to SA objectives 8: **landscapes/townscapes** and 9: **historic environment**.
- 6.23 This approach also supports the delivery of community facilities alongside housing growth which will help make these types of facilities more accessible to new residents and minor positive effects are therefore expected in relation to SA objectives 5: **vibrant communities** and 6: **services and facilities**.
- 6.24 The incorporation of green spaces as part of new development and the restoration and protection of various green corridors, greenspaces and the canal between Stonehouse and Saul Junction is likely to help accommodate flood waters in Stroud. A minor positive effect is therefore expected in relation to SA objective 12: **flood risk**.
- 6.25 Uncertain minor negative effects have however been recorded in relation to SA objectives 1: **housing** and 17: **economic growth**. The Council's approach is to make use of Community Infrastructure Levy (CIL) and s106 agreements to fund the delivery of infrastructure to address community needs in Stroud District. Dependent upon how onerous requirements placed on developers are, this may approach impact upon the viability of new development in the district.

Vision

- 6.26 The Emerging Strategy Paper presents an overall Vision for the district for the plan period as well as seven Strategic Objectives for the area. The Strategic Objectives are set out to provide a more tangible way of taking forward the overall Vision for the District. The SA findings for the Vision and Strategic Objectives presented in the Emerging Strategy Paper are described below.
- 6.27 As shown in **Table 6.3** below, minor positive effects are expected for most of the SA objectives in relation to the Vision. This reflects the Vision's aspirational and sustainable approach to development in Stroud, ensuring that it draws on the area's special environmental, social and economic qualities.

Table 6.3 Summary of sustainability effects for the Vision and Strategic Objectives for Stroud Local Plan Review (Emerging Strategy Paper)

SA Objective	Vision	Strategic Objectives						
		SO1	SO1a	SO2	SO3	SO4	SO5	SO6
SA 1: Housing	0	++	0	0	0	0	0	0
SA 2: Health	+	++	++	0	0	+	0	0
SA 3: Social inclusion	+	++	++	0	0	0	0	0
SA 4: Crime	+	0	++	0	+	0	0	0
SA 5: Vibrant communities	+	0	0	0	0	0	0	0
SA 6: Services and facilities	+	++	0	0	++	+	0	0
SA 7: Biodiversity/geodiversity	+	0	0	0	0	0	0	++
SA 8: Landscapes/townscapes	+	0	0	0	0	0	0	++
SA 9: Historic environment	+	0	0	0	0	0	0	++
SA 10: Air quality	+	0	0	0	0	+	+	0
SA 11: Water quality	+	0	0	0	0	0	++	0
SA 12: Flooding	0	0	0	0	0	0	++	0
SA 13: Efficient land use	+	0	0	0	0	0	++	0
SA 14: Climate change	+	0	0	0	0	++	++	0
SA 15: Waste	+	0	0	0	0	0	++	0
SA 16: Employment	+	0	0	++	+	0	0	0
SA 17: Economic growth	+	+	0	++	+	0	0	0

- 6.28 The Vision sets out that over the plan period, development in Stroud will respond to climate change by reducing CO₂ emissions and allowing for the adaption of residents' lifestyles to live within environmental limits. Minor positive effects are therefore likely in relation to SA objectives 10: **air quality**, 11: **water quality**, 13: **efficient land use**, 14: **climate change** and 15: **waste**.

- 6.29 The Vision also states that over the plan period the plan area will be one in which a high quality of life is enjoyed within safe, healthy, vibrant and diverse communities, which have a strong sense of their own identity and local distinctiveness and provide support for vulnerable people. As such minor positive effects are expected in relation to SA objectives 2: **health**, 3: **social inclusion**, and 4: **crime**.
- 6.30 In relation to the natural and built environments the Vision sets an aspiration of Stroud as a District in which its high quality landscapes, flourishing wildlife and historic and cultural heritage are nurtured. A minor positive effect is therefore expected in relation to SA objectives 7: **biodiversity/geodiversity**, 8: **landscapes/townscapes** and 9: **historic environment**.
- 6.31 Additional minor positive effects are expected in relation to SA objectives 5: **vibrant communities**, 6: **services and facilities**, 16: **employment** and 17 **economic growth**. It is envisaged that within the District the complementary role of the market towns, wider regional centres and rural hinterlands will contribute to the sustainable and thriving local economy. The Vision text furthermore makes specific reference to exploiting Stroud's position within the green technology and creative industries.
- 6.32 Due to the Vision's high level and general aspirations, it is not anticipated that any significant positive effects are to occur on the SA objectives. The Local Plan's more detailed policies will support the outcome of this Vision. These policies have been appraised separately in this chapter.

Strategic Objectives

- 6.33 Generally, the Local Plan Strategic Objectives are likely to have a negligible effect on many of the SA objectives as they are mainly unrelated. However, a number of significant and minor positive effects from the strategic objectives have been identified, where they relate to specific SA objectives.
- 6.34 Significant positive effects are identified when the aim of the Strategic Objective directly aligns with that of the SA objective, as outlined below:
- Strategic Objective SO1 addresses the maintenance and improvement of access to services and amenities in Stroud particularly in relation to healthcare provision, affordable and decent housing, recreation opportunities and learning opportunities. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objectives 1: **housing**, 2: **health**, 3: **social inclusion** and 6: **services and facilities**. A minor positive effect is also expected in relation to SA objective 17: **economic growth** given that the support for education facilities within the District is likely to help promote its attractiveness to potential investors.
 - Strategic Objective SO1a addresses the promotion of healthy, inclusive and safe communities in the District. This is to include support for healthy lifestyles, the promotion of social interaction, ensuring public safety and reducing the fear of crime in the District. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objectives 2: **health**, 3: **social inclusion** and 4: **crime**.
 - Strategic Objective SO2 addresses the local economy and provision of jobs in Stroud to include the enhancement of skills for residents. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objectives 16: **employment** and 17: **economic growth**.
 - Strategic Objective SO3 addresses the need to improve town centres in Stroud as well as linking them to their rural hinterlands. This is to include improving their safety, vitality and viability. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objective 6: **services and facilities** given that it should help to improve access to these types of provisions. Furthermore this strategic objective is expected to have minor positive effects in relation to SA objectives 16: **employment** and 17: **economic growth** given that it is likely to address the sub-objectives of supporting the prosperity of the District's rural economy and maintaining the economic vitality and vibrancy of the District's

town centres.

- Strategic Objective SO4 addresses the need to promote alternative modes of transport thereby reducing reliance on travel by private car while also seeking to reduce CO2 emissions by using new technologies. The move towards a more integrated transport system in this way is also to help improve access to local goods and services. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objective 14: **climate change**. This strategic objective is also expected to have minor positive effects in relation to SA objectives 2: **health**, 6: **services and facilities** and 10: **air quality**. It is likely that the move towards alternative and healthier modes of transport as part of a more integrated transport system would help to improve health and well-being in the District and reduce adverse impacts on air quality while also improving access to services and facilities as part of an overall trend towards increased connectivity in Stroud.
- Strategic Objective SO5 addresses the need to adapt to climate change and respect environmental limits within the District. This is to include securing more efficient design of buildings in Stroud, encouraging patterns of development which support the use of sustainable transport, promoting the re-use of buildings and brownfield land and minimising waste production as well as encouraging energy recovery from these sources. This strategic objective also addressed flood risk and the protection of water resources in Stroud. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objective 11: **water quality**, 12: **flooding**, 13: **efficient land use**, 14: **climate change**, and 15: **waste**. It is likely that encouraging the use of sustainable modes of transport in the District will help reduce adverse impacts that development over the plan period will have in terms of air quality and as such a minor positive effect is expected in relation to SA objective 10: **air quality**.
- Strategic Objective SO6 addresses the need to protect and enhance the distinctive qualities of the District, including those relating to landscape, heritage, townscape and biodiversity. Therefore this strategic objective is likely to have a significant positive effect in relation to SA objectives 7: **services and facilities**, 8: **landscapes/townscapes** and 9: **historic environment**.

Emerging growth strategy

- 6.35 The emerging growth strategy presented in Chapter 4 of the Local Plan Review document is to focus much of the development over the plan period at the main towns of Cam and Dursley, Stonehouse and Stroud while also allowing for a high level of growth at two new settlements at Sharpness and at Wisloe within the Severn Vale within close proximity to the A38/M5 corridor.
- 6.36 The detailed appraisal matrix for the emerging growth strategy is presented in **Appendix 6**. As shown in **Table 6.4** below, concentrating development at locations which currently provide access to the widest range of services and facilities or would provide critical mass to support the delivery of new services and facilities is likely to have significant positive effects in relation to SA objectives 2: **health**, 3: **social inclusion** and 6: **services and facilities**. These effects are expected to be combined within minor negative effects considering that the low level of development which is to be supported within the smaller and more rural settlements is unlikely to support the delivery of more substantial services and facilities at these locations.
- 6.37 The larger sites which are likely to come forward due to the concentrated approach to future growth are also likely to support the provision of new community facilities and therefore a minor positive effect is also expected in relation to SA objective 5: **vibrant communities**. The use of larger development sites to accommodate a high proportion of development may also support the delivery of new infrastructure to help promote recycling and sustainable on-site waste management in the district and as such a minor positive effect is expected in relation to SA objective 15: **waste**.

- 6.38 The emerging growth strategy would also help to provide development at locations where new residents would be less likely to be required to travel long distances to access to services and facilities on a regular basis and therefore minor positive effects are expected in relation to SA objectives 10: **air quality** and 14: **climate change**.
- 6.39 The emerging growth strategy would deliver over 12,800 homes over the plan period which would meet the housing need for the plan period. This is to include the use of a range of site sizes including those which are small, medium, large and very large. The delivery of new growth at larger sites may help to support the incorporation of affordable housing, as viability concerns would be less likely to emerge. The inclusion of some smaller sites as part of the strategy will allow for faster build completions and may help to encourage the delivery of new homes through self-build projects. The use of larger sites may also have the benefit of supporting the incorporation of strategic transport infrastructure to the benefit of inward economic investment. The emerging growth strategy would also place the majority of employment development in locations which will be accessible to a high number of residents, therefore significant positive effects have been identified in relation to SA objectives 1: **housing**, 16: **employment** and 17: **economic growth**. However the pattern of development supported through the emerging growth strategy would result in some residents having reduced levels of access to the proposed employment areas. Furthermore the more rural locations of the district would be have limited opportunities to deliver new economic growth and as such the positive effect expected in relation to SA objectives 16 and 17 is likely to be combined with a minor negative effect.
- 6.40 While the emerging growth strategy is to prioritise the use of brownfield sites across the district, the level of growth supported over the plan period will require development to proceed at a high number of greenfield sites. Development at the new settlement by Sharpness in particular would furthermore be in close proximity to the Severn Estuary SSSI, SAC, SPA and Ramsar site. A significant negative effect is expected in relation to SA objectives 7: **biodiversity/geodiversity** and 13: **efficient land use**. Considering the emphasis of the emerging growth strategy for prioritising the use of brownfield land, the negative effect expected in relation to SA objective 13 is likely to be combined with a minor positive effect. The development of a substantial amount of greenfield land in the district could also result in an increase in impermeable surfaces in the district which is likely to increase flood risk and therefore a minor negative effect is also expected in relation to SA objective 12: **flood risk**. While some locations proposed for development by Stroud and Stonehouse (at the River Frome and the Stroudwater Navigating Canal), by Cam and Dursley and also by the River Severn at the settlement towards Sharpness could potentially fall within areas of high flood risk, the majority of development would be delivered outside of such areas. Similarly most of the development set out through the emerging growth strategy is to be distributed outside of areas outside of Source Protection Zones in the district. However, land within Drinking Water Safeguarding Zones is likely to be impacted upon by development supported by the emerging growth strategy. A minor negative effect is therefore expected in relation to SA objective 11: **water quality**.
- 6.41 The emerging growth strategy would result in development mainly occurring away from the east of the district where the AONB is located. However, in addition to the development of a high amount of greenfield land, some growth would still occur around settlements such as Stroud which is noted to have high landscape sensitivity to new development. Development would also occur in close proximity to locations which are potentially sensitive in terms of heritage assets such the Industrial Heritage Conservation Area which runs through Stonehouse and Stroud. It is however recognised that the re-use of brownfield land across the district may result in beneficial effects in terms of the setting of heritage assets. As such a minor negative effect is expected in relation to SA objective 8: **landscape/townscape** and a mixed effect (significant positive/minor negative) is expected in relation to SA objective 9: **historic environment**.

Table 6.4 Summary of SA effects for emerging growth strategy

SA Objective	Emerging growth strategy
SA 1: Housing	++

SA Objective	Emerging growth strategy
SA 2: Health	++/-
SA 3: Social inclusion	++/-
SA 4: Crime	0
SA 5: Vibrant communities	+
SA 6: Services and facilities	++/-
SA 7: Biodiversity/geodiversity	--?
SA 8: Landscapes/townscapes	-?
SA 9: Historic environment	+?/--?
SA 10: Air quality	+
SA 11: Water quality	-
SA 12: Flooding	-
SA 13: Efficient land use	+/--
SA 14: Climate change	+
SA 15: Waste	+?
SA 16: Employment	++/-
SA 17: Economic growth	++/-

- 6.42 The supporting text of the emerging growth strategy identifies key challenges which are likely to influence its implementation. Changes to the emerging growth strategy set out in this text which may be incorporated as part of the next stage of the Local Plan Review are likely to result in sustainability effects in addition to those already set out in Table 6.4 and described previously in this section of the report.
- 6.43 The supporting text states that there may be a need to identify reserve sites for housing, should the potential sites not come forward at the rates envisaged. This approach would help to strengthen the significant positive effect expected in relation to SA objective 1: **housing** considering the greater certainty which would be provided in terms of meeting the district's housing needing. However, further negative effects might result in relation to SA objectives 7: **biodiversity and geodiversity**, 8: **landscapes/townscapes**, 9: **historic environment**, 12: **flooding** and 13: **efficient land use**, due to the additional land take that would be required. These effects would be dependent in part upon the precise location of any reserve sites which are included in the strategy in relation to sensitive receptors.
- 6.44 If the reserve sites included are not well related to the larger settlement of the district, which provide access to the strongest sustainable transport links and widest range of existing services and facilities and employment opportunities, further negative effects are also likely in relation to SA objectives 6: **services and facilities**, 10: **air quality**, 14: **climate change** and 16: **employment**. Again, this will mostly be dependent on the precise location of the reserve sites.
- 6.45 Further improvements to key transport network junctions within the district may also be required to support the high level of growth over the plan period, as explained in the supporting text to the emerging strategy. This may include major improvements at M5 junctions 12, 13 and 14, together with improvements along the A419 and A38 corridors. In addition to these improvements which might increase the potential for more cars being accommodated on the district's roads, the strategy may also be supported by improvements to public infrastructure including rail and bus services. The supporting text notes the Council's continuing support for an additional rail station on the Bristol-Birmingham main line, and states that sites at Bristol Road, Stonehouse and Hunts Grove, Haresfield are safeguarded in the current Local Plan to potentially provide new rail station facilities.

- 6.46 It is likely that these transport infrastructure improvements would have mixed effects particularly in relation to SA objectives 10: **air quality** and 14: **climate change**. Improvements to the strategic road network in the district are likely to alleviate congestion to the benefit of local air quality but the increased number of car journeys which could be accommodated on local routes would have adverse impacts in relation to these same issues. It is expected that improvements to public transport facilities in the district would help to promote modal shift and limit the potential for increased levels of traffic generated air pollutants and greenhouse gas emissions. All transport related improvements are likely to have further positive effects in relation to SA objectives 6: **services and facilities**, 16: **employment** and 17: **economic growth** given that they will help to increase the mobility of local residents and may help to make the district more attractive for further business growth.
- 6.47 Each transport infrastructure improvement may result in increased land take which would likely have further adverse effects in relation to SA objectives 8: **landscapes/townscapes**, 12: **flooding** and 13: **efficient land use** as a result of development of greenfield land and the potential for higher rates of surface water run-off. The locations at which the most significant infrastructure improvements are likely to occur (new rail stations and improvements to junctions along the M5) are not in close proximity to any national or international biodiversity designations. Any influence on the historic environment in the district will be dependent upon the precise location of these improvements and any mitigation which is incorporated as part of the design, however it is noted that the land safeguarded for a new rail station at Bristol Road, Stonehouse is in particularly close proximity to a number of Listed Buildings on the other side of the A-road. The requirement for improvement new rail station at this location to support the delivery of the Local Plan strategy may therefore result in further negative effects in relation to SA objective 9: **historic environment**.

Settlement boundaries

- 6.48 The Emerging Strategy Paper would continue the current approach of defining development limits at the settlements of the district. These have been updated to reflect physical changes since they were last reviewed and to better reflect their intended function. The Emerging Strategy Paper allows for a degree of flexibility with a limited amount of development to be supported beyond the defined settlement boundaries provided that detailed environmental and design criteria are satisfied. **Table 6.5** below presents a summary of the SA findings for the Emerging Strategy Paper's approach to settlement boundaries in the district.

Table 6.5 Summary of SA effects for Emerging Strategy Paper's approach to settlement boundaries

SA Objective	Emerging Strategy Paper's approach to settlement boundaries
SA 1: Housing	+/-
SA 2: Health	0
SA 3: Social inclusion	0
SA 4: Crime	0
SA 5: Vibrant communities	0
SA 6: Services and facilities	+
SA 7: Biodiversity/geodiversity	+
SA 8: Landscapes/townscapes	+
SA 9: Historic environment	0
SA 10: Air quality	+
SA 11: Water quality	0

SA Objective	Emerging Strategy Paper's approach to settlement boundaries
SA 12: Flooding	0
SA 13: Efficient land use	0
SA 14: Climate change	0
SA 15: Waste	0
SA 16: Employment	+/-
SA 17: Economic growth	0

- 6.49 Given that the majority of housing, employment and community uses are still to be provided within the boundaries of each settlement in the district, broadly positive effects on the environmental SA objectives are expected, as development outside of settlement limits will be very limited in most circumstances. Minor positive effects in relation to SA objectives 7: **biodiversity**, 8: **landscape** and 13: **land use and soils** are therefore expected considering the level of protection resulting from this approach. Minor positive effects are also expected to result in relation to SA objective 10: **air quality** as focussing development mainly within the defined settlement boundaries may encourage residents to make use of more sustainable modes of transport to undertake day to day journeys. In addition, defining settlement boundaries is likely to result in a minor positive effect in relation to SA objective 6: **access to services** by making services more accessible within existing settlements.
- 6.50 While this approach would limit development beyond the settlement boundaries, some housing and employment development may be permitted outside the settlements, subject to satisfying detailed environmental and design criteria. As such mixed effects (minor positive/minor negative) are expected in relation to SA objectives 1: **housing** and 16: **employment**, as enabling some growth outside the settlements would benefit housing and employment provision. However, it may also limit growth dependent upon the stringency of environmental and design criteria which development would be required to meet. Furthermore the re-establishing the settlement boundaries in the district are likely to result in the majority of new employment opportunities being provided at locations which are accessible to a higher number of residents.

'Mini-visions' for the parish clusters

- 6.51 The Emerging Strategy Paper contains eight 'mini-visions' which set out how the actions of the plan will shape the distinct parts of the district. The visions for each parish cluster area are expected to have mostly minor positive or negligible effects in relation to the SA objectives as shown in **Table 6.6** below. No significant effects are expected considering the aspirational and high level nature of the visions set out for each area.

Table 6.6 Summary of SA effects for 'mini visions' in the Stroud Local Plan (Emerging Strategy Paper)

SA Objective	'Mini vision' for each parish cluster							
	Stroud Valleys	Stonehouse cluster	Cam and Dursley	Gloucester Fringe	Berkeley cluster	Severn Vale	Wotton cluster	Cotswold cluster
SA 1: Housing	+	+	+	+	+	0	0	+
SA 2: Health	+	+	+	0	+	+	0	0
SA 3: Social inclusion	+	0	+	+	+	0	+	+
SA 4: Crime	0	0	0	0	0	0	0	0
SA 5: Vibrant communities	+	+	+	+	+	0	+	+
SA 6: Services and facilities	+	+	+	+	+	+	+	+
SA 7: Biodiversity/geodiversity	+	+	0	0	+	+	0	0
SA 8: Landscapes/townscapes	+	+	+	+	+	+	+	+
SA 9: Historic environment	+	0	+	+	+	+	+	+
SA 10: Air quality	+	+	+	+	+	+	+	0
SA 11: Water quality	0	0	0	0	0	0	0	0
SA 12: Flooding	0	0	0	0	+	+	0	0
SA 13: Efficient land use	0	0	0	+	0	0	0	0
SA 14: Climate change	+	+	+	+	+	+	+	0
SA 15: Waste	0	0	0	0	0	0	0	0
SA 16: Employment	+	+	+	+	+	0	+	+
SA 17: Economic growth	+	+	+	+	+	+	+	+

The Stroud Valleys

- 6.52 The vision for the Stroud Valleys states that access to public modes of transport will be improved which may be of benefit in terms of reducing CO₂ emission and improving air quality. As such minor positive effects are expected in relation to SA objectives 10: **air quality** and 14: **climate change**.
- 6.53 The vision also states that Stroud Town will act as a focal point for communities and visitors, and that the Stroud Valleys will cater for growth in residential capacity in the region. Walking and cycling links are to be improved as part of the vision up to 2040 which is likely to help encourage more active lifestyles among residents. Minor positive effects are therefore expected in relation to SA objectives 1: **housing**, 2: **health**, 3: **social inclusion** and 5: **vibrant communities**.
- 6.54 Reference is made in the vision to creating a thriving environment for businesses and industry as well as for leisure and retail facilities. Future development of this type is likely to be supported by increased transport links in the area which is set out in the text. In light of this, minor positive effects are expected in relation to SA objectives 6: **services and facilities**, 16: **employment** and 17: **economic growth**.
- 6.55 Minor positive effects are also to be expected in relation to SA objectives 7: **biodiversity/geodiversity**, 8: **landscapes/townscapes** and 9: **historic environment**. The vision text states that Minchinhampton and the smaller villages within the Cotswolds AONB will continue to flourish set within a valued and protected landscape. Furthermore it is highlighted that regeneration of the industrial valley bottoms and the restoration of the Cotswold Canals will enhance the valleys' rich architectural heritage while habitats along river corridors will be enhanced and better connected.

The Stonehouse Cluster

- 6.56 The vision for the Stonehouse cluster states that development to the west of Stonehouse will expand the existing Oldends/Stroudwater employment area. It is envisaged that improvement to transport infrastructure in the region also will contribute to the sustainability of this employment area, which is likely to help improve access to services and facilities in the area. Therefore, minor positive effects are expected in relation to SA objectives 6: **services and facilities** and 16: **employment**.
- 6.57 Minor positive effects are also expected in relation to SA objectives 1: **housing**, and 5: **vibrant communities**. This is because the vision states that communities are to have the chance to help shape their neighbourhoods to ensure that valued characteristics of the area are protected and enhanced. It is also set out that residential areas will continue to be well balanced.
- 6.58 The vision also sets out that enhancement of the river corridor and canal will boost the tourist economy in the region whilst also providing valuable amenities to local residents. The vision suggests this will be supported by an increased presence of transport links between the town centre and these more rural areas. As such minor positive effects are expected in relation to SA objectives 7: **biodiversity/geodiversity**, 8: **landscapes/townscapes** and 17: **economic growth**.
- 6.59 It is envisaged that there will be greater opportunities for all residents to access 'green links' for walking or cycling between the town centre and the surrounding area. It is expected that this approach may help to promote healthier lifestyle choices among residents and encourage travel by more sustainable modes of transport. Minor positive effects are therefore expected in relation to SA objectives 2: **health**, 10: **air quality** and 14: **climate change**.

Cam and Dursley

- 6.60 The vision for Cam and Dursley explains that the role of these settlements in the southern part of the Stroud District will be enhanced by developing improved infrastructure and increasing the offer of employment opportunities, as well as facilities and services. It is also set out in the vision that there will be greater access to the countryside for the leisure, recreation and amenities it provides local residents. The close links of the area to the Cotswold Way National Trail and to other visitor attractions will help to increase levels of tourism. As such, minor positive effects can

be expected in relation to SA objectives 2: **health**, 3: **social inclusion**, 5: **vibrant communities**, 6: **services and facilities**, 16: **employment** and 17: **economic growth**.

- 6.61 Minor positive effects are also expected in relation to SA objectives 2: **health**, 10: **air quality** and 14: **climate change**. The vision states that there will be an increased provision of walking and cycling routes between Cam, Dursley and Uley which may be of benefit in terms of reducing CO₂ emissions and air quality and also encourage more active lifestyles choices among residents.
- 6.62 Minor effects are also expected in relation to SA objectives 8: **landscapes/townscapes** and 9: **historic environment**. The vision sets out that within Cam and Dursley the special qualities of the area will be conserved and the heritage assets of the local area are to be promoted.

The Gloucester Fringe

- 6.63 The vision for the Gloucester Fringe sets out that to the east of Hardwicke village there will be continued housing and employment development alongside improvements to transport and infrastructure to enhance the quality of life for local residents and those working in the area. It is also envisaged that Hunts Grove village will grow to allow easy and convenient access to nearby jobs in the area. Minor positive effects are therefore expected in relation to SA objectives 1: **housing**, 5: **vibrant communities**, 6: **services and facilities**, 16: **employment** and 17: **economic growth**. The provision of a new village centre at Hunts Grove which is expected to encourage the growth of a sustainable new community is likely to help reduce the need to travel in the district and therefore minor positive effects are also expected in relation to SA objectives 10: **air quality** and 14: **climate change**. It is also stated in the vision that the distinctive characteristics of rural settlements in the area will be maintained to reflect the Cotswold's AONB status and protect its setting. It is suggested this will mean minimal development will occur beyond the motorway which is to represent a distinct and defensible limit to southerly expansion. As such minor positive effects are expected in relation to SA objectives 8: **landscapes/townscapes** and 13: **efficient use of land**. The preservation of local and more rural parishes in their current state may result in a minor positive effect in relation to 9: **historic environment**.

The Berkeley Cluster

- 6.64 The vision for the Berkeley Cluster sets out that development of new communities at Sharpness and Wisloe Green will achieve housing and employment targets in the area. It is also stated in the vision that transport links at these settlements and Berkeley town will be improved to support the growth of new communities. Development at Sharpness and Wisloe is also to be supported by the provision of new services and facilities. As such minor positive effects are expected in relation to SA objectives 1: **housing**, 3: **social inclusion**, 5: **vibrant communities** and 6: **services and facilities**.
- 6.65 Minor positive effects are also expected in relation to SA objectives 7: **biodiversity/geodiversity**, 8: **landscapes/townscapes** 9: **historic environment** and 12: **floodings**. It is envisaged that the new communities at Sharpness and at Wisloe Green are to be delivered in line with the principles of Garden Cities which is to incorporate new design set within a green setting. It is also stated in the vision text that the protection of the area's distinct built heritage, estuarine landscape and habitats will remain a priority. Specific reference is included relating to a variety of attractions which may help to raise the profile of this part of the district. While the vision text identifies that the conservation of these features will be a priority, resilience to climate change and associated flood risk will also form part of the approach to the management of the area.
- 6.66 It is stated in the vision that there will be enhancement of walking and cycling routes in the region to link settlements together which is expected not only to be to the benefit of air quality and greenhouse gas emissions but also health and wellbeing in the district. Small scale local businesses will also be encouraged across the area and this type of growth will be supported by farm diversification and low-impact tourism related activities. As such, minor positive effects are expected in relation to SA objectives 10: **air quality**, 14: **climate change**, 16: **employment** and 17: **economic growth**.

The Severn Vale

- 6.67 It is stated in the vision for Severn Vale that the relationship with the River Severn is to remain a key aspect when making land use decisions. The important contribution this feature makes to the region's special character is also recognised. In light of this, it is set out that growth within this area will not be 'strategic' with development of a smaller scale to be supported. Public transport, accessibility and services will remain key aims for these communities while the vision also sets out that conservation of heritage assets will also be a high priority. Minor positive effects are therefore expected in relation to SA objectives 6: **services and facilities**, 8: **landscapes/townscapes**, 9: **historic environment**, 10: **air quality**, 12: **flooding** and 14: **climate change**.
- 6.68 The vision also sets out that the network of walking and cycling routes around the Saul Junction will be enhanced which will be instrumental in supporting access to a restored Stroudwater canal. The vision text suggests that the restoration of the canal will be of environmental and economic benefit to local residents. Protection of estuarine habitats, resilience to climate change and the associated flood risk in these areas are also included as priorities in the vision text. As such, it is expected that there will be minor positive effects in relation to SA objectives 2: **health**, 7: **biodiversity/geodiversity**, 12: **flooding**, 14: **climate change** and 17: **economic growth**.

The Wotton Cluster

- 6.69 The vision for the Wotton Cluster is expected to have minor positive effects in relation to SA objectives 5: **vibrant communities**, 6: **services and facilities**, 10: **air quality**, 14: **climate change**, 16: **employment** and 17: **economic growth**. The vision includes a key objective for the area to improve access to services and facilities and jobs for residents in parishes in the Wotton-under-Edge area, which will be supported by improving public transport links and the revitalisation of Dursley and its town centre.
- 6.70 Due to restrictions on further outward growth, the vision explains that development of Wotton-under-Edge will be limited mainly to meeting the needs of the surrounding rural communities. Furthermore development within the smaller settlements is to be limited to being of a small scale and will be in response to local needs. The vision also states that meeting local needs will also involve strong community engagement in the planning of events, festivals and leisure amenities. The settlements of Wotton-under-Edge and Kingswood will continue to be set within attractive landscapes with the former maintained as a noted historic town. It is therefore expected that there will be minor positive effects in relation to SA objectives 3: **social inclusion**, 8: **landscapes/townscapes** and 9: **historic environment**.

The Cotswold Cluster

- 6.71 The vision for the Cotswold Cluster states that development will be limited mainly to Painswick to meet the housing needs of the area as well as improve the vitality of the town centre and local services. Smaller scale development is also to be supported at the smaller villages in this part of the district to respond to locally-identified needs. It is also set out in the vision that the Cotswold 'brand' is of key importance economically to the region making it important to cater to high quality tourism needs that are in line with the relative affluence of the region. However, the vision also explains that inclusiveness in this area is important so that all residents feel the benefits of increased tourism. As such, minor positive effects are expected in relation to SA objectives 1: **housing**, 3: **social inclusion**, 5: **vibrant communities**, 6: **services and facilities**, 16: **employment** and 17: **economic growth**.
- 6.72 The vision states that preservation of the area's landscape and heritage assets will be of great importance and that it will be necessary to find a balance in the region between the needs of residents, tourists and the area's role as a 'protected landscape'. As part of this balance the preservation and enhancement of the area's landscape, character and built heritage is considered to be great importance. As such minor positive effects are expected in relation SA objectives 8: **landscapes/townscapes** and 9: **historic environment**.

Potential sites

- 6.73 The Emerging Strategy Paper includes 41 potential sites and 2 other possible sites (sites G1 and G2 at the edge of Gloucester which may potentially be required to meet Gloucester's housing needs beyond 2028). From here on in this SA Report, for ease of reference, these sites are referred to together as potential sites.
- 6.74 The Emerging Strategy Paper presents each site relative to the settlement it is located at or in closest proximity to and the SA findings for the potential sites in this section are presented in this same order.
- 6.75 The potential sites have been taken forward by the Council for inclusion in the Emerging Strategy Paper for a variety of reasons. **Appendix 7** details the reasons for the inclusion of each site taken forward (as well as the reasons for discounting the other alternative sites not included). Each site relates to land which was already subject to SA as part of the Stroud Local Plan Review Site Options appraisal work, the findings of which have been presented in **Chapter 5** of this report. **Table 6.7** below lists all sites which have been appraised as potential sites as part of the SA of the Emerging Strategy Paper. The table also indicates how the potential sites relate to those sites previously appraised as part of the Stroud Local Plan Review Site Options work and where any updates have been made to the site boundaries.

Table 6.7 Relationship between potential sites appraised as part of the Emerging Strategy Paper and sites appraised as part of the Stroud Local Plan Review Site Options appraisal work

Emerging Strategy Paper ref and name	Proposed use from Emerging Strategy Paper	Site ref and name from options appraisal work	What was the site appraised for as part of the options appraisal work?	Any boundary changes?
PS01 Brimscombe Mill	40 dwellings and employment uses	Includes: BRI008 Brimscombe Mills & Mill Pond and BRI022 Lakeside Depot	BRI008 and BRI022 previously appraised separately for residential use only	No - site is equivalent to merging of BRI008 and BRI022
PS02 Brimscombe Port	150 dwellings, canal related tourism and employment	BRI009 Brimscombe Port Industrial Estate	BRI009 appraised for mixed use	No - site equivalent to BRI009
PS03 Land at Hope Mill	Up to 40 dwellings and open space	BRI003 Land at Hope Mill Lane	BRI003 appraised for mixed use	No - site equivalent to BRI003
PS04 South of Cirencester Road	Up to 50 self-build/custom dwellings	MIN004 Field 0013	MIN004 appraised for residential use	No - site equivalent to MIN004
PS05 East of Tobacconist Road	Up to 100 dwellings, doctors surgery/community uses and open space	MIN005 Land at Glebe Farm	MIN005 appraised for residential use only	No - site equivalent to MIN005
PS06 The New Lawn, Nailsworth	Up to 80 dwellings and community uses subject to relocation of football ground	NAI008 The New Lawn	NAI008 appraised for residential use only	No - site equivalent to NAI008
PS07 North of Nympsfield Road/Nortonwood Junction	25 dwellings and open space	NAI012 Land north of Nympsfield Road/Nortonwood junction	NAI012 appraised for residential use only	No - site equivalent to NAI012
PS08 North of Avening Road	Garden centre or 1.5 ha employment	NAI002 Nailsworth Garden Centre	NAI002 appraised for employment	No - site equivalent to NAI002
PS09 Rooksmoor Mill	Planning permission for 54 dwellings and employment	Not included at the previous stage	N/A	N/A
PS10 Railway Land/car parks, Cheapside	Up to 75 dwellings and town centre uses	STR014 Railway Land/car parks	STR014 appraised for mixed use	No - site equivalent to STR014
PS11 Merrywalks Arches, Merrywalks	Up to 25 dwellings and town centre uses	STR015 Merrywalks Arches (former Cotswold Indoor Bowls)	STR014 appraised for mixed use	No - site equivalent to STR015
PS12 Police station/Magistrates Court, Parliament St	Up to 45 dwellings and town centre uses	STR018 Police station/Magistrates Court	STR018 appraised for residential use only	No - site equivalent to STR018

Emerging Strategy Paper ref and name	Proposed use from Emerging Strategy Paper	Site ref and name from options appraisal work	What was the site appraised for as part of the options appraisal work?	Any boundary changes?
PS13 Central river/canal corridor	c. 120 dwellings, canal related tourism and employment	Includes: STR004 Land to the rear of Avocet Business Park; STR006 Lodgemore/ Fromehall Mills; and STR007 Lower Wharf Industrial Estate	PS13 boundary was not appraised in its own right. STR004, STR006 and STR007 were appraised separately for mixed use (STR004 and STR006) or residential (STR007)	PS13 - equivalent to STR004, STR006 and STR007
PS14 Stanley Mills	Planning permission for 146 dwellings	Not included at the previous stage	N/A	N/A
PS15 North of Kings Stanley Primary School	15 dwellings and open space	KST001 Land to the north of Kings Stanley Primary School	KST001 appraised for residential use only	No - site equivalent to KST001
PS16 South of Leonard Stanley Primary School	Up to 30 dwellings and open space	LEO007 Land at Leonard Stanley	LEO007 appraised for residential use only	No - site equivalent to LEO007
PS17 Magpies site, Oldends Lane	10 dwellings, community uses and open space	STO002 Magpies site, Oldends Lane	STO002 appraised for residential use only	No - site equivalent to STO002
PS18 Land to rear of Regent Street	Up to 20 dwellings and open space	STO004 Land to rear of Regent Street	STO004 appraised for residential use only	No - site equivalent to STO004
PS19 North/northwest of Stonehouse	a - up to 500 dwellings, open space and 5 ha employment and b - up to 150 dwellings and open space	Includes: STO015 Land at Stagholt Farm, west of B4008 (part) and STO016 Land north west of Stonehouse	STO015 appraised for residential and STO016 appraised for mixed use	Yes - boundary of STO015 has been adjusted for PS19
PS20 M5 Junction 13	a - 10 ha employment, canal and open space and b - 18 ha sports stadium and community uses	Includes: EAS007 D1 Land at Junction 13 of the M5 (south) and EAS007 D2 Land at Junction 13 of the M5 (north)	EAS007 previously appraised for employment, residential and for a football stadium	No -site equivalent to EAS007
PS21 Land adjacent to Tilsdown House (northern part)	up to 15 dwellings	CAM008 Land adjacent to Tilsdown House	CAM008 appraised for residential only	No - site equivalent to CAM008
PS22 Coaley Junction	40 dwellings and open space	CAM014 Coaley Junction	CAM014 appraised for mixed use	No - site equivalent to CAM014
PS23 Rear of 4-60 Draycott	1 ha employment	CAM020 Rear of 4-60 Draycott	CAM020 appraised for employment use	No - site equivalent to CAM020
PS24 West of Draycott	Up to 700 dwellings and open space	Includes: CAM013 Land west of Draycott Crescent; CAM025 Land NW Cam; and CAM026 Land west of A4135 Draycott)	CAM013, CAM025, CAM026 all appraised previously for residential only	No - site equivalent to CAM013, CAM025 and CAM026
PS25 East of River Cam	Up to 180 dwellings and open space	Includes: CAM018 (part) Land north of Upthorpe and CAM021 Land east of Court House Gardens	CAM018 appraised for mixed use and CAM021 appraised for residential use only	Yes - site boundary for CAM018 has been adjusted
PS26 Land off Acacia Drive/ Oak Drive, Kingshill	Up to 15 dwellings	DUR002 Land off Acacia Drive/ Oak Drive	DUR002 appraised for residential use only	No - site equivalent to DUR002
PS27 1-25 Long Street	Town centre uses	DUR003 1-25 Long Street	DUR003 appraised for mixed use	No - site equivalent to DUR003
PS28 The Old Dairy/ Land off Prospect Place	10 dwellings and town centre uses	DUR017 The Old Dairy/ Land off Prospect Place	DUR017 appraised for residential use only	No - site equivalent to DUR017
PS29 North of Ganzell Lane	80 dwellings and open space	Previously called DUR A and includes: DUR010 (part) Land	DUR A appraised for residential use only	Yes - site boundary for DUR A (which is equivalent to PS29)

Emerging Strategy Paper ref and name	Proposed use from Emerging Strategy Paper	Site ref and name from options appraisal work	What was the site appraised for as part of the options appraisal work?	Any boundary changes?
		south and east of Downham View; DUR011 (part) Land at Castle Stream Farm; DUR012 Castle Stream Farm; and DUR013 Land east of Shakespeare Road		has been adjusted
PS30 Hunts Grove extension	750 dwellings, community uses and open space	HAR004 SA4 Hunts Grove Extension	HAR004 appraised for residential use only	No - site equivalent to HAR004
PS31 Quedgeley East	13 ha employment	HFD008 SA4a Quedgeley East	HFD008 appraised for employment use	No - site equivalent to HFD008
PS32 South of M5/J12	5 ha employment	HFD009 Quedgeley East Extension	HFD009 appraised for employment use	No - site equivalent to HFD009
G1 South of Hardwicke	Potential to meet Gloucester's unmet housing needs subject to being considered against all reasonable alternatives on the edge of Gloucester	Includes: HAR001 Land at Hardwicke and HAR002 Land at Church Lane, Hardwicke	HAR001 and HAR002 appraised for residential use only	No - equivalent to boundaries of HAR001 and HAR002
G2 Whaddon	Potential to meet Gloucester's unmet housing needs subject to being considered against all reasonable alternatives on the edge of Gloucester	BRO002 Land at Whaddon	BRO002 appraised for mixed use	No - equivalent to boundaries of BRO002
PS33 Northwest of Berkeley	Up to 120 dwellings and open space	BER006 Land north of Berkeley and south west of bypass	BER006 appraised for residential use only	No - equivalent to site BER006
PS34 Sharpness Docks	Up to 300 dwellings, 7 ha employment, tourism, leisure and recreation use	NEW001 Sharpness Docks	NEW001 appraised for mixed use	No - equivalent to site NEW001
PS35 Land at Focus School, Wanswell	Up to 70 dwellings, community uses and open space	NEW006 Land at Focus School-Berkeley Campus, Station Road	NEW006 appraised for residential use only	No - equivalent to site NEW006
PS36 Land south and east of Sharpness Docks and Newtown	Up to 2400 dwellings by 2040, 10 ha employment, retail, community and open space	Includes: part of NEW002 Land at Sharpness (Sanigar Farm); NEW003a Land south of Sharpness Primary School; NEW003b Land at Sanigar Lane; and NEW005 Land north of Oakfield Way. Land to the south of site SA5A South of Severn Distribution Park now removed.	NEW002 appraised for mixed use, NEW003a, NEW003b and NEW005 appraised for housing	The boundary of NEW002 has been adjusted
PS37 Land at Wisloe	At least 1500 dwellings by 2040, 5 ha employment, retail, community and open space	Includes: SLI002 Land at Cambridge/Coaley A; SLI004 Lane east of Gossington and SLI005 Land south of Cambridge	SLI002, SLI004 and SLI005 have been appraised together for mixed use previously	No - equivalent to sites SLI002, SLI004 and SLI005
PS38 South of Wickwar Road	Up to 50 dwellings and open space	Includes: KIN005 Land at Cloverlea Barn and KIN011 Land south of Westfield House	KIN005 and KIN011 appraised for residential use only	No - equivalent to sites KIN005 and KIN011
PS39 South of	Up to 50 dwellings and	KIN010 (part) Land	KIN010 appraised for	The boundary of

Emerging Strategy Paper ref and name	Proposed use from Emerging Strategy Paper	Site ref and name from options appraisal work	What was the site appraised for as part of the options appraisal work?	Any boundary changes?
Walkmill Lane	open space	and yard at Walkmill Lane	residential use only	KIN010 has been adjusted
PS40 North of Katharine Lady Berkeley's School	3.5 ha school and/or community, open space uses	WUE009 Field north east of KLB School, Wotton Road	WUE009 appraised for potential school extension	No - equivalent to site WUE009
PS41 Washwell Fields	20 dwellings and open space	PAI004 (part) Washwell Fields	PAI004 appraised for residential use only	The boundary of PAI004 has been adjusted

- 6.76 Two of the potential sites (PS09 Rooksmoor Mill and PS14 Stanley Mills) at North Woodchester and Kings Stanley respectively have not been appraised given that development at these sites has already been assessed through the planning application process and been granted planning permission.
- 6.77 The Emerging Strategy Paper states that at the settlement of Kingswood sites PS38 or PS39 are to be included as potential sites both to provide 50 dwellings and open space. Adopting a precautionary approach the appraisal of the Emerging Strategy Paper includes both sites.
- 6.78 The detailed matrices for each of the potential sites are presented in **Appendix 6. Table 6.8** below presents a summary of the SA findings for potential sites by settlement.
- 6.79 The majority (35 sites) of the 41 potential sites subject to SA are expected to have positive effects in relation to SA objective 1: **housing**. Of these sites seven including those at Stonehouse (PS19), Cam (PS24), Hardwicke (PS30 and G1), Whaddon (G2), Newtown and Sharpness (PS36) and Wisloe (PS37) respectively are expected to have significant positive effects given that they would allow for the delivery of at least 600 homes.
- 6.80 Ten sites include a recreation feature (for example an area of green space or cycle route) which might be lost to development dependent upon its specific design and might otherwise be used by residents to the benefit of public health and therefore an uncertain significant negative effect has been identified in relation to SA objective 2: **health**. Of these ten sites the sites at Stroud (PS13), Stonehouse (PS17 and PS20) and Newtown and Sharpness (PS34, PS35 and PS36) would also allow for an area of open space to be incorporated as part of the development meaning a significant positive effect has also been recorded in relation to SA objective 2 for those sites. Twenty-two additional sites are expected to have a significant positive effect in relation to this SA objective as they would either incorporate an area of open space as part of the development or are located within close proximity of a doctor's surgery and an area of open space and a cycle route.
- 6.81 In total thirteen sites are located on brownfield land which is expected to have a minor positive effect in relation to SA objective 5: **vibrant communities**. These sites are located at Brimscombe and Thrupp (PS01 and PS02), Nailsworth (PS06 and PS08), Stroud (PS10, PS11, PS12 and PS13), Stonehouse (PS17), Dursley (PS27 and PS28) and Newtown and Sharpness (PS34 and PS35) and it is expected that use of brownfield land at these locations is likely to help promote regeneration in the area. These sites are also expected to have a minor positive effect in relation to SA objectives 13: **efficient land use** and 15: **waste**. The re-use of brownfield is likely to prevent the loss of higher value agricultural soils thereby representing more efficient land use in the district and may allow for the re-use of materials already onsite. The remaining potential sites are located on greenfield land with a significant negative effect expected in relation to SA objective 15 for those 25 sites which are large in size and/or take in Grade 1, 2 or Grade 3 agricultural soils.
- 6.82 Sites which are at the Tier 1 settlements in the district (Stroud – PS10, PS11, PS12 and PS13; Stonehouse – PS17 and PS18; Cam – PS21, PS22, PS24 and PS25, Dursley – PS26, PS27, PS28 and PS29) and site G2 which is at the Gloucester fringe are likely to provide a good level of access to existing services and facilities. A significant positive effect is therefore expected in relation to SA objective 6: **services and facilities**. One site at Cam (PS23) is likely to have a negligible effect in relation to this SA objective given that it would provide employment development and not dwellings or new services and facilities at this Tier 1 settlement. Considering that those sites which would provide new community or town centre uses at

Minchinhampton (PS05), Nailsworth (PS06), Stonehouse (PS20), Hardwicke (PS30), Newtown and Sharpness (PS35 and PS36), Wisloe (PS37) and Wotton-under-Edge (PS40) would not be provided at a Tier 1 settlement or within a town centre the positive effect expected in relation to this element of the SA objective is likely only to be minor. A number of sites with addresses which are related to the settlements of Stonehouse (PS19 and PS20), Hardwicke (PS30) and Newtown and Sharpness (PS35) are expected to have a significant negative effect in relation to SA objective 6 given that they are not directly adjacent to the development limits at the settlements in question.

- 6.83 Those sites which would provide development other than only employment (i.e. residential, mixed-use, etc.) and are located in close proximity to the large settlements are amongst those which scored most favourably as part of the SALA Transport Assessment and are likely to help reduce the dependency upon journeys by private car in the district. The SALA Transport Assessment rated the accessibility of sites by walking, by car and by bus in the district to town/district/local centres, employment sites and services and facilities that people may be required to access on a regular basis. The findings have informed the sustainability effects identified in relation to SA objective 10. A lower SALA score indicates lower likely overall emissions from traffic, and therefore more positive effects in terms of this SA objective. A significant positive effect is expected in relation to SA objective 10: **air quality** for three of the four sites at Stroud (PS10, PS11 and PS12) while the remaining site (PS13) is likely to have a minor positive effect. Furthermore, one of the four sites (PS28) at Dursley is likely to have a significant positive effect in relation to SA objective 10, with two sites (PS26 and PS27) likely to have a minor positive effect and site DUR A likely to have a significant negative effect. Two of five sites (PS25 and PS23) at Cam are expected to have a minor positive effect in relation to this SA objective with two sites (PS24 and PS25) at this settlement also expected to have a significant negative effect. Only one site (PS20) of four at Stone is expected to have a minor positive effect with site PS19 expected to have a significant negative effect. Considering the findings of the SALA Transport Assessment no further sites containing development other than employment (i.e. residential, mixed-use, etc.) in the district are expected to have a significant positive effect in relation to SA objective 10, with a further eleven sites beyond those at Tier 1 settlements expected to have a significant negative effect. All four sites which would provide employment only are located within close proximity to a bus stop but not in close proximity to a rail station and therefore are expected to have only a minor positive effect in relation to this SA objective. **Figure 6.3** at the end of this section presents the likely sustainability effects relating to air quality for all sites included in the Emerging Strategy Paper.
- 6.84 Of the four sites that would deliver only employment development two (Cam – PS23 and Hardwicke – PS31) are expected to have an uncertain significant negative effect in relation to SA objective 12: **flooding** while the remaining two sites (Nailsworth – PS08 and Hardwicke – G4) are expected to have a minor negative effect. Those employment sites expected to have a significant negative effect in relation to this SA objective fall on greenfield land within Flood Zone 3. Of those sites which provide development which is not only employment, nine (including sites at Brimscombe and Thrupp, Stonehouse, Cam, Hardwicke, Whaddon, Berkeley, Newtown and Sharpness) are expected to have a significant negative effect in relation to SA objective 12 for similar reasons. Seven sites at Nailsworth, Stroud, Stonehouse, Dursley, Newtown and Sharpness lie on brownfield land and outside of Flood Zone 3 and therefore a negligible effect in relation to SA objective 12 has been recorded. The likely sustainability effects for each site included in the Emerging Strategy Paper in relation to flooding are detailed in **Figure 6.4** at the end of this section.
- 6.85 Drinking Water Safeguarding Zones or Source Protection Zones cover much of the area at the settlements Brimscombe and Thrupp, Minchinhampton, Nailsworth, Stroud, Kinds Stanley, Stonehouse, Cam, Dursley, Wisloe and Painswick. As such a total of 29 sites which are at or in close proximity to these settlements have the potential to have adverse impacts in terms of protecting water sources in the district and a significant negative effect has been recorded in relation to SA objective 11: **water quality**.
- 6.86 The close proximity of Nailsworth and sites PS07 and PS08 in particular to Woodchester Park SSSI and Minchinhampton Common SSSI respectively means that a significant negative effect has been recorded for these sites in relation to SA objective 7: **biodiversity/geodiversity**. All three sites at Newtown and Sharpness (PS34, PS35 and PS36) are also expected to have a

significant negative effect in relation to this SA objective given the close proximity of Severn Estuary SAC/SPA/Ramsar site and SSSI and considering that some of these sites contain a GI asset which may be lost to development. Further sites at Brimscombe and Thrupp (PS02), Stroud (PS13), Stonehouse (PS18), Dursley (PS26) and Hardwicke (G1) are also expected to have significant negative effects on this SA objective for similar reasons. Twenty-six additional potential sites are expected to have a minor negative effect in relation to SA objective 7. These sites are located between 250m and 1km of one or more internationally or nationally designated biodiversity or geodiversity sites, or are within 250m of a locally designated site. Some of these sites are within 3km of Rodborough Common SAC or within 7.7km of Severn Estuary SAC/SPA/Ramsar site which are the respective catchment zones established around these designated sites within which new residential development may contribute to recreational pressure. The likely sustainability effects of the sites included in the Emerging Strategy Paper in relation to SA objective 7 are presented in **Figure 6.1** at the end of this section. In all cases, the potential negative effects are uncertain depending on the detailed proposals that eventually come forward at each site and the types of habitats and species present at the nature conservation sites. In addition, mitigation of potentially significant effects is provided by requirements in other policy approaches in the Local Plan Review (see **Table 6.10** below).

- 6.87 Areas around the settlements of Brimscombe and Thrupp, Minchinhampton, Nailsworth, Kingswood, Stonehouse, Cam, Berkeley, Newtown and Sharpness and Painswick have been identified as have high sensitivity to employment or residential development. As such ten sites at these settlements are expected to have significant negative effects in relation to SA objective 8: **landscape/townscape**. Some of the land which contains the potential sites around Stroud, Stonehouse, Cam, Hardwicke, Newtown and Sharpness and Wisloe has not been assessed as part of the landscape sensitivity assessment for the district and do not lie within close proximity of the Cotswolds AONB and therefore an uncertain effect has been recorded in relation to SA objective 8. The remaining 22 potential sites lie on land which has been identified as having medium/low or medium sensitivity to development or lie within close proximity of the AONB and as such a minor negative effect is expected in relation to this SA objective. **Figure 6.2** at the end of this section presents the likely sustainability effects of all sites included in the Emerging Strategy Paper in relation to SA objective 8.
- 6.88 Work as part of the SALA has also been undertaken to assess sites in relation to their potential to impact upon the setting of heritage assets and other elements of historic environment. This work identified that at ten sites opportunities exist to achieve potential heritage benefits at the settlements of Brimscombe and Thrupp, Nailsworth, Stroud, Cam, Dursley, Newtown and Sharpness meaning that an uncertain minor positive effect is expected in relation to SA objective 9: **historic environment**. All of these effects are expected as part of an overall mixed effect with the negative effect expected in relation to the six sites at Brimscombe and Thrupp (PS01 and PS02), Stroud (PS10, PS11 and PS13) and Newtown and Sharpness (PS34) likely to be significant given the particular sensitivity of these locations as per the findings of the SALA. Sites PS05, PS20 and PS21 at Minchinhampton, Stonehouse and Cam respectively are expected to have a significant negative effect alone in relation to this SA objective considering the SALA heritage findings.
- 6.89 Of the potential sites four are expected to have a significant negative effect in relation to SA objective 16: **employment**. These sites (PS12, PS35, PS39 and PS41) at Stroud, Newtown and Sharpness, Kingswood and Painswick respectively take in land which is currently in employment use and as such may result in a loss of employment opportunities in the district. The significant negative effect expected for site PS12 is likely to be combined with a significant positive effect given that this site is located within close proximity of a key employment site and is at a Tier 1 settlement. A mixed overall effect is also expected in relation to site PS39 considering that it is located in close proximity to a key employment site but is not at a Tier 1 or Tier 2 settlement. Sites at Stonehouse (PS17, PS18 and PS20), Cam (PS24 and PS25) Dursley (PS26 and PS28), Hardwicke (PS31), Whaddon (G2), Berkeley (PS33) and Newtown and Sharpness (PS36) are expected to have a significant positive effect in relation to SA objective 16: employment. The majority of these sites are those which would provide residential uses within close proximity to a key employment site and within a Tier 1 or Tier 2 settlement. Sites PS20, PS31 and PS36 are also expected to have a significant positive effect in relation this SA objective as they would however involve the delivery of at least 10ha of employment land.

6.90 Sites at Stroud (PS13), Stonehouse (PS17 and PS20), Dursley (PS26), Hardwicke (PS31), Newtown and Sharpness (PS36), and Wotton-under-Edge (PS40) would provide new development which would allow for ease of access to primary and secondary educational facilities or would deliver at least 10ha of employment land. It is expected that these sites would have a significant positive effect in relation to SA object 17: **economic growth**. An additional 28 sites are expected to have a minor positive effect in relation to this SA objective given that they are located either within close proximity of a primary or secondary school or would provide employment land which is less than 10ha in size. It is expected that improved access to educational facilities in the district is likely to benefit the range of skills residents have which may encourage investment in the local economy. Only sites at Minchinapton (PS04), Cam (PS22 and PS24), Hardwicke (PS30), Whaddon (G2) are expected to have a minor negative effect in relation to SA objective 17. These sites would provide new residential development in areas which would not provide easy access to existing primary schools or secondary schools.

Table 6.8 Summary of SA findings for potential sites by settlement

SA Objectives	SA 1	SA 2	SA 3	SA 4	SA 5	SA 6	SA 7	SA 8	SA 9	SA 10	SA 11	SA 12	SA 13	SA 14	SA 15	SA 16	SA 17
Brimscombe and Thrupp																	
PS01	+	-/+	0	0	+	+	-?	-?	--/+?	0	--?	-	+	0	+	+	+
PS02	+	+/--?	0	0	+	+	--?	--?	--/+?	0	--?	-	+	0	+	+	+
PS03	+	-/+	0	0	0	+	-?	-?	-	+	--?	--	-	0	0	+	+
Minchinhampton																	
PS04	+	-/+	0	0	0	+	-?	--?	0	--	--?	-	--?	0	0	+	-?
PS05	+	++	0	0	0	+	-?	--?	--	--	--?	-	--?	0	0	+	+
Nailsworth																	
PS06	+	+/--?	0	0	+	+	-?	-?	0	0	--?	0	+	0	+	+	+
PS07	+	-/+	0	0	0	+	--?	--?	0	0	--?	-	--?	0	0	+	+
PS08	0	++	0	0	+	0	--?	--?	-/+?	+	--?	-?	+	0	+	+	+
Stroud																	
PS10	+	-/+	0	0	+	++	-?	-?	--/+?	++	--?	0	+	0	+	+	+
PS11	+	++	0	0	+	++	-?	-?	--/+?	++	--?	-	+	0	+	+	+
PS12	+	++	0	0	+	++	-?	-?	-/+?	++	--?	0	+	0	+	++/--	+
PS13	+	++/--?	0	0	+	++	--?	?	--/+?	+	--?	-	+	0	+	+	++?
Kings Stanley																	
PS15	+	-/+	0	0	+	0	-?	--?	0	--	--?	-	--?	0	0	-	+
Leonard Stanley																	
PS16	+	-/+	0	0	+	0	-?	-?	0	0	--?	-	--?	0	0	-	+
Stonehouse																	
PS17	+	++/--?	0	0	+	++	--?	?	0	-	--?	0	+	0	+	++	++?
PS18	+	++	0	0	0	++	-?	?	0	-	--?	-	-	0	0	++	+

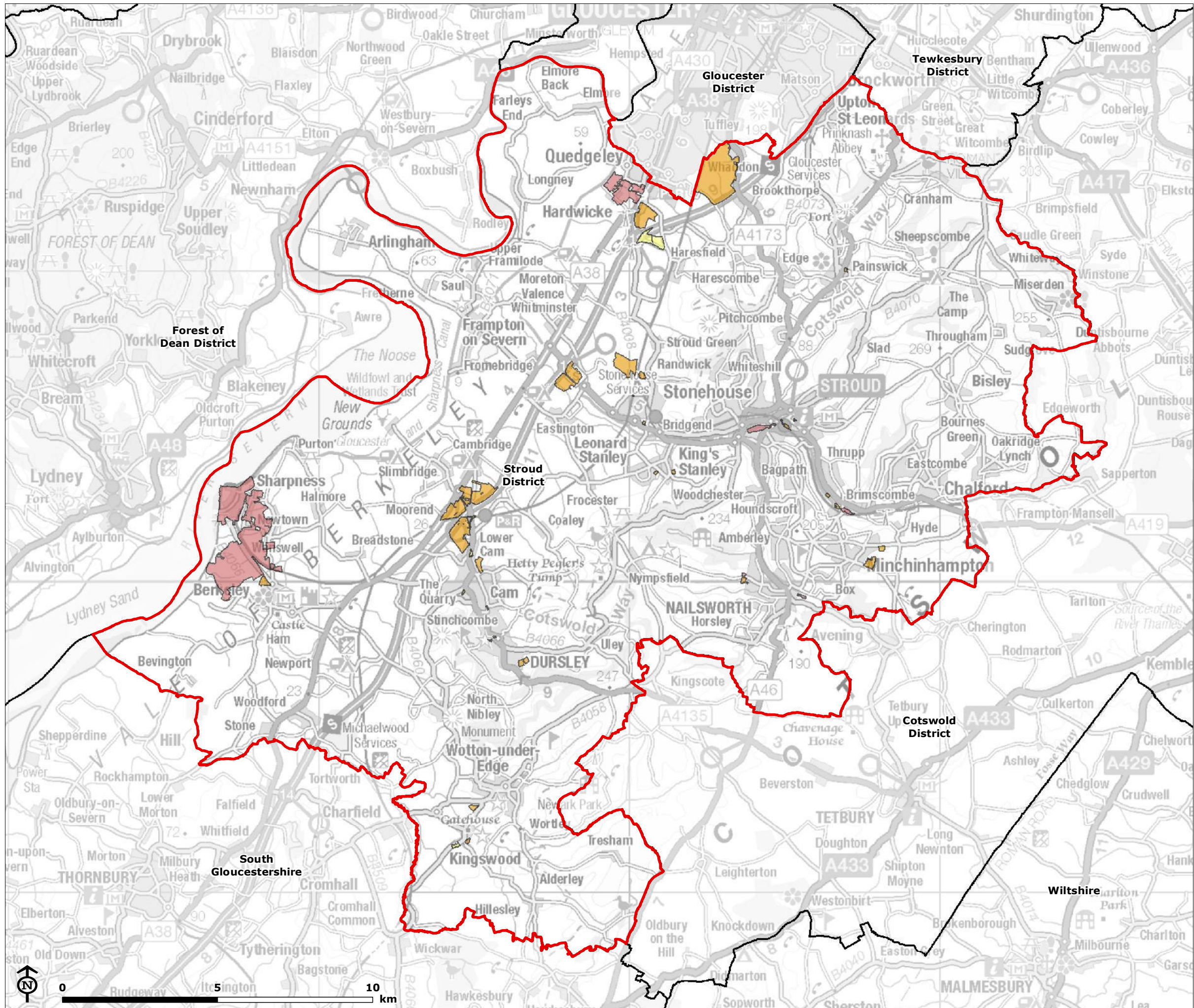
SA Objectives	SA 1	SA 2	SA 3	SA 4	SA 5	SA 6	SA 7	SA 8	SA 9	SA 10	SA 11	SA 12	SA 13	SA 14	SA 15	SA 16	SA 17
PS19	++	-/++	0	0	0	--	-?	-?	0	--	--?	--	--?	0	0	+	+
PS20	0	-- ?/++	0	0	0	--/+	-?	--?	--	+	--?	--	--	0	0	++	++
Cam																	
PS21	+	-/+	0	0	0	++	-?	-?	--	+	--?	-	-	0	0	+	+
PS22	+	-/++	0	0	0	++	-?	--?	-/+?	0	--?	-	--	0	0	+	-?
PS23	0	+	0	0	0	0	0?	?	0	+	--?	--?	--?	0	0	+	+
PS24	++	-/+	0	0	0	++	-?	-?	?	--	--?	-	--	0	0	++	-?
PS25	+	-/++	0	0	0	++	-?	-?	0	--	--?	--	--?	0	0	++	+
Dursley																	
PS26	+	+/--?	0	0	0	++	--?	-?	0	+	--?	-	-	0	0	++	++?
PS27	0	++	0	0	+	++	-?	-?	-/+?	+	--?	0	+	0	+	+	+
PS28	+	++	0	0	+	++	-?	-?	-	++	--?	0	+	0	+	++	+
PS29	+	-/++	0	0	0	++	-?	-?	0	--	--?	-	--?	0	0	+	+
Hardwicke																	
PS30	++	-/++	0	0	0	--/+	-?	?	0	--	0	--	--	0	0	+	-?
PS31	0	+	0	0	0	0	0?	?	0	+	0	--?	--?	0	0	++	++
PS32	0	+	0	0	0	0	0?	?	0	+	0	-?	--?	0	0	+	+
G1	++	+/--?	0	0	0	+	--?	-?	--	--	0	--	--	0	0	+	+
Whaddon																	
G2	++	-/+	0	0	0	++	-?	-?	-	--	0	--	--	0	0	++	-?
Berkeley																	
PS33	+	++	0	0	0	+	-?	-?	0	-	0	--	--?	0	0	++	+
Newtown and Sharpness																	
PS34	+	++/--	0	0	+	+	--?	-?	--/+?	--	0	-	+	0	+	+	+

SA Objectives	SA 1	SA 2	SA 3	SA 4	SA 5	SA 6	SA 7	SA 8	SA 9	SA 10	SA 11	SA 12	SA 13	SA 14	SA 15	SA 16	SA 17
		?															
PS35	+	++/-- ?	0	0	+	--/+	--?	?	0	-	0	0	+	0	+	--	+
PS36	++	++/-- ?	0	0	0	+	--?	--?	-	--	0	--	--?	0	0	++	++?
Wisloe																	
PS37	++	-/++	0	0	0	+	-?	?	0	--	--?	-	--?	0	0	+	+
Kingswood																	
PS38	+	-/++	0	0	+	0	0?	-?	0	--	0	-	--?	0	0	+	+
PS39	+	-/++	0	0	+	0	-?	-?	-	0	0	-	--?	0	0	+/--	+
Wotton-under-edge																	
PS40	0	++	0	0	0	+	-?	-?	?	-?	0	-	--?	0	0	0	++
Painswick																	
PS41	+	++	0	0	0	+	-?	--?	0	--	--?	-	--?	0	0	--	+

**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 6.1: SA Scores for the potential sites for SA Objective 7: Biodiversity/geodiversity

Stroud District
 Other local authority boundary
Score
 0?
 -?
 --?

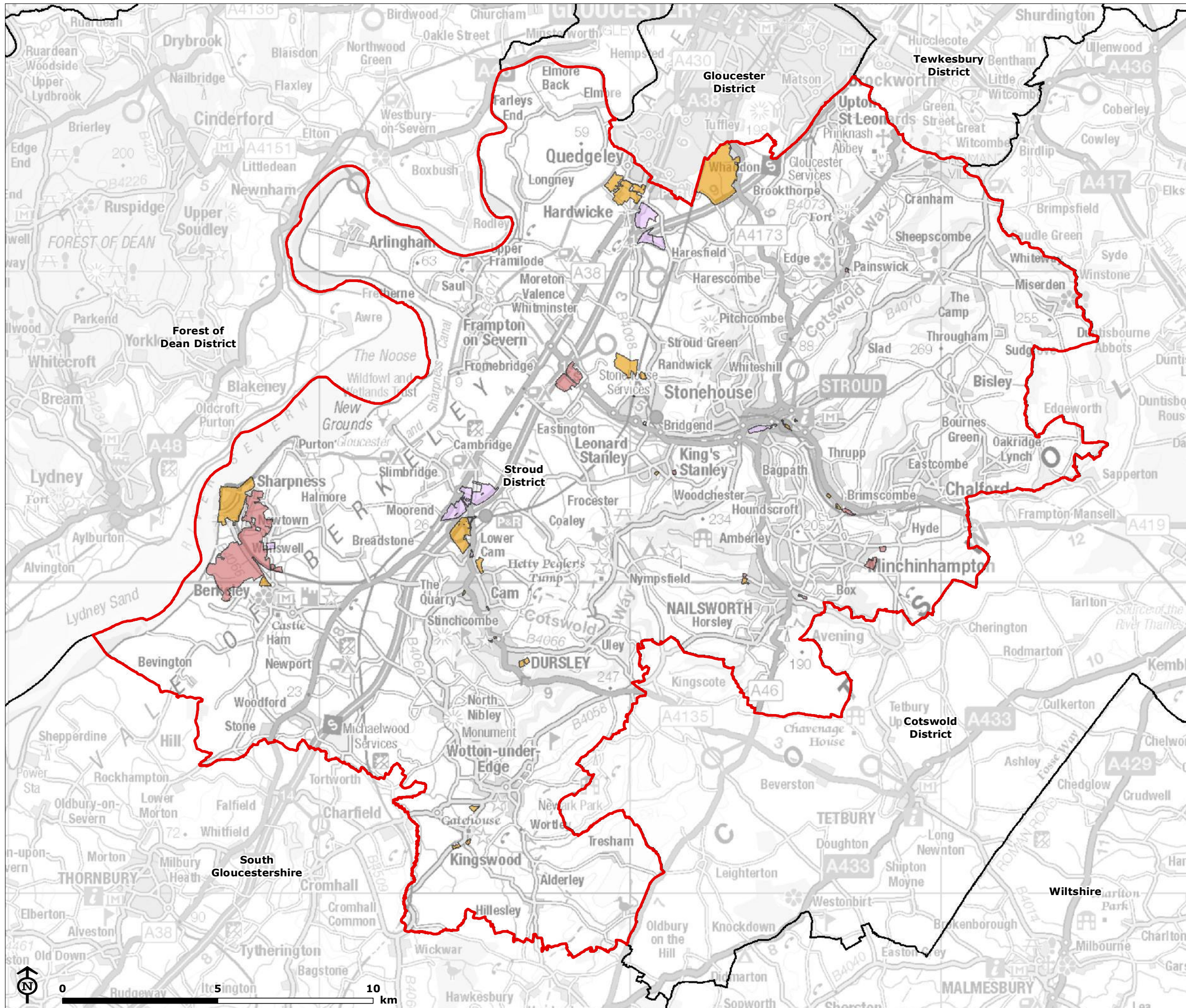
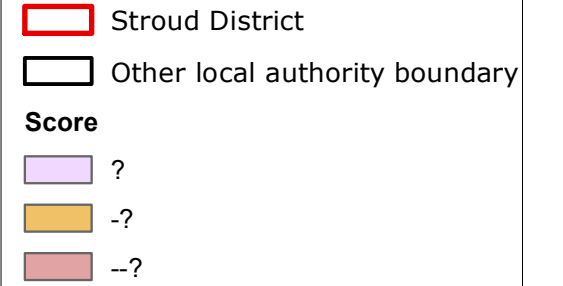


Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 6.2: SA Scores for the potential sites for SA Objective 8: landscapes/townscapes

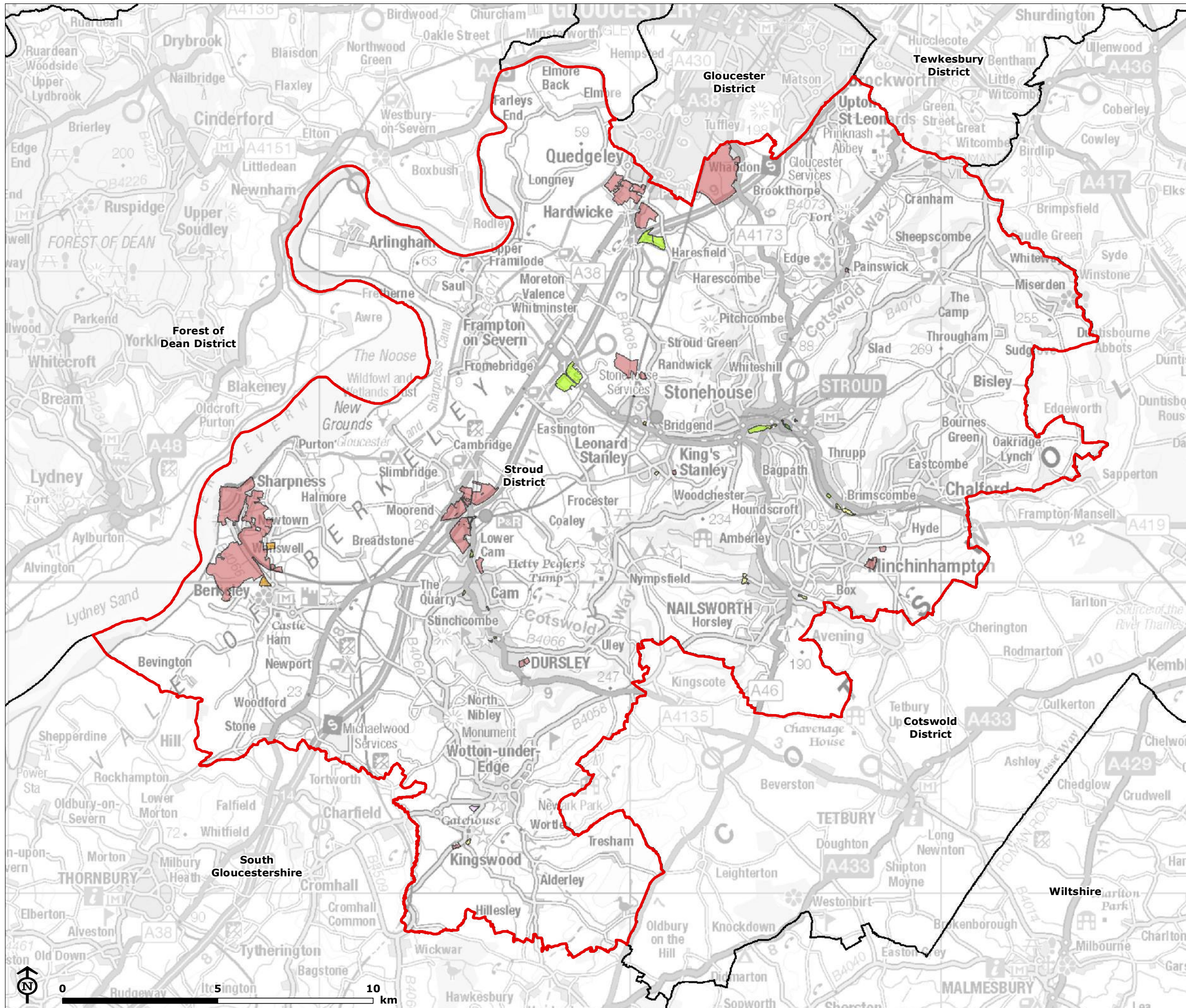
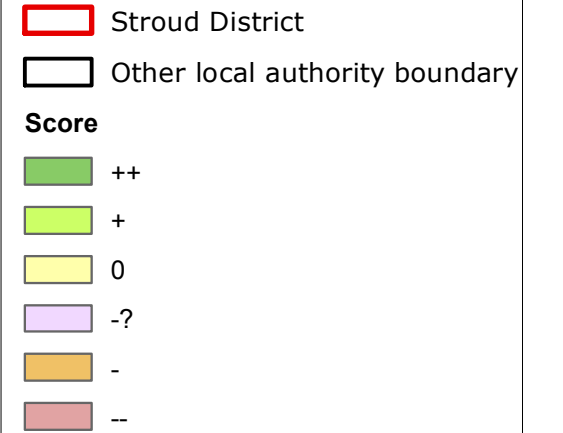


Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 6.3: SA Scores for the potential sites for SA Objective 10: air quality

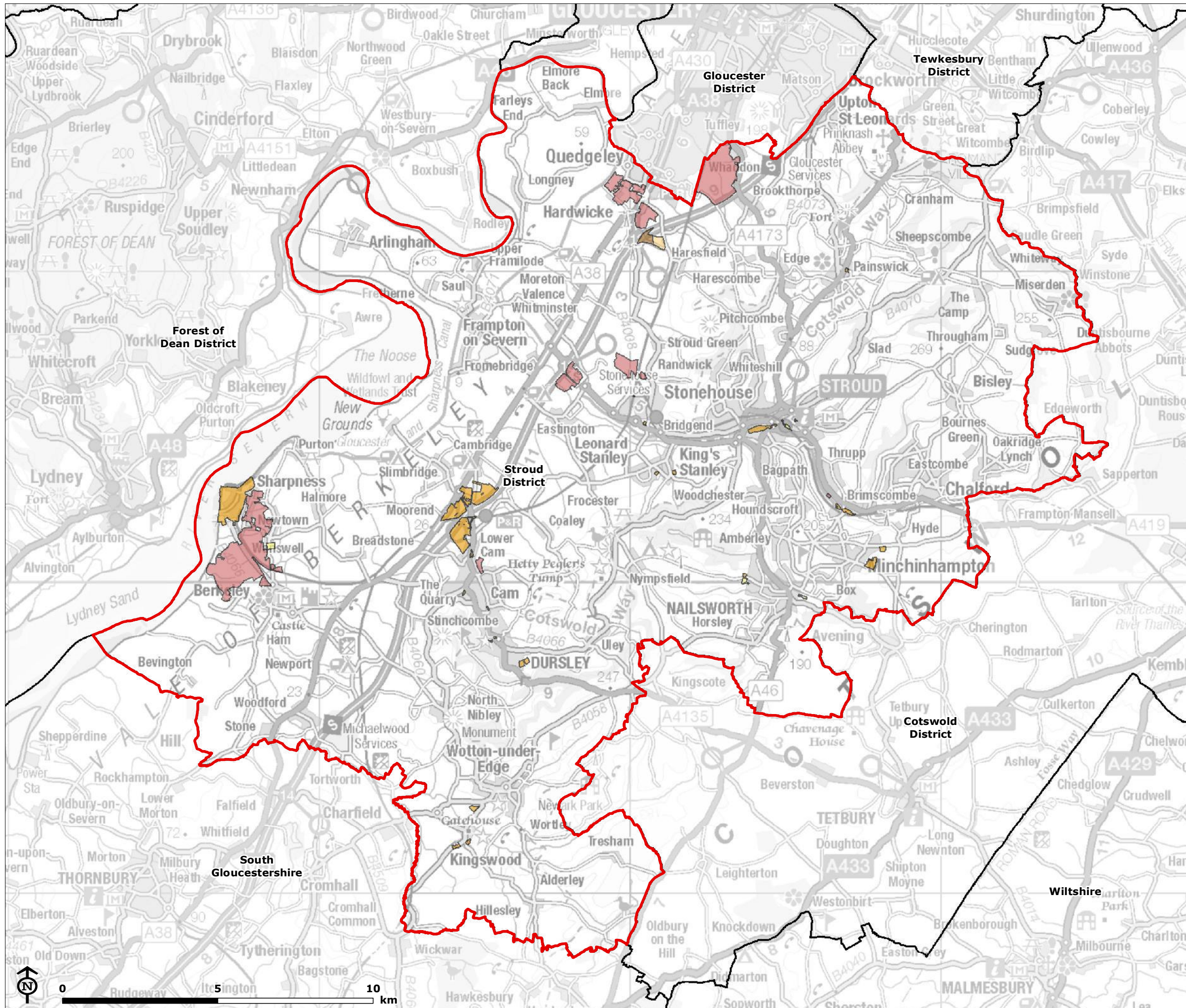
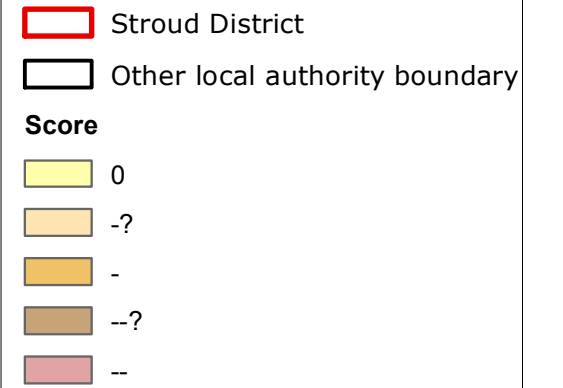


Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

Figure 6.4: SA Scores for the potential sites for SA Objective 12: flooding



Map Scale @A3: 1:120,000



Cumulative effects

- 6.91 **Table 6.9** below presents a summary of all of the potential sustainability effects identified for Stroud District Local Plan Review Emerging Strategy Paper. This enables an assessment to be made of the likely significant effects of the emerging Local Plan Review as a whole (including the potential sites for development) on each of the SA objectives, i.e. an assessment of cumulative effects as required by the SEA Regulations.

Table 6.9 Summary of cumulative effects of Stroud District Local Plan Review Emerging Strategy Paper

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
Key issues	++/- ?	+	+	0	+	++	++	+?	+?	++	0	+	++	+	+?	++/- ?	++/- ?
Needs: local economy and jobs	+	+/-	0	0	0	0	0	0	0	+/-	0	+	++	+/-	+?	++/-	++
Needs: town centres	+	+/-	0	0	+	++	0	+	0	++/-	0	0	+	++/-	0	+	++
Needs: housing	++	+/-	+	0	0	+/-	0	0	0	+/-	0	+/-	+/-	+/-	+?	0	0
Needs: green spaces and community facilities	-?	++	0	0	+	+	++	+	+	++	0	+	0	+	0	0	-?
Vision for the district	0	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+	+
Strategic Objective SO1	++	++	++	0	0	++	0	0	0	0	0	0	0	0	0	0	+
Strategic Objective SO1a	0	++	++	++	0	0	0	0	0	0	0	0	0	0	0	0	0
Strategic Objective SO2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	++	++
Strategic Objective SO3	0	0	0	+	0	++	0	0	0	0	0	0	0	0	0	+	+
Strategic Objective SO4	0	+	0	0	0	+	0	0	0	+	0	0	0	++	0	0	0
Strategic Objective SO5	0	0	0	0	0	0	0	0	0	+	++	++	++	++	++	0	0

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
Strategic Objective SO6	0	0	0	0	0	0	++	++	++	0	0	0	0	0	0	0	0
Emerging growth strategy	++	++/-	++/-	0	+	++/-	--?	-?	+?/--?	+	-	-	+/--	+	+	++/-	++/-
Settlement boundaries	+/-	0	0	0	0	+	+	+	0	+	0	0	0	0	0	+/-	0
Vision for the Stroud Valleys	+	+	+	0	+	+	+	+	+	+	0	0	0	+	0	+	+
PS01	+	-/+	0	0	+	+	-?	-?	--/+?	0	--?	-	+	0	+	+	+
PS02	+	+/--?	0	0	+	+	--?	--?	--/+?	0	--?	-	+	0	+	+	+
PS03	+	-/+	0	0	0	+	-?	-?	-	+	--?	--	-	0	0	+	+
PS04	+	-/+	0	0	0	+	-?	--?	0	--	--?	-	--?	0	0	+	-?
PS05	+	++	0	0	0	+	-?	--?	--	--	--?	-	--?	0	0	+	+
PS06	+	+/--?	0	0	+	+	-?	-?	0	0	--?	0	+	0	+	+	+
PS07	+	-/+	0	0	0	+	--?	--?	0	0	--?	-	--?	0	0	+	+
PS08	0	++	0	0	+	0	--?	--?	-/+?	+	--?	-?	+	0	+	+	+
PS10	+	-/+	0	0	+	++	-?	-?	--/+?	++	--?	0	+	0	+	+	+
PS11	+	++	0	0	+	++	-?	-?	--/+?	++	--?	-	+	0	+	+	+
PS12	+	++	0	0	+	++	-?	-?	-/+?	++	--?	0	+	0	+	++/--	+
PS13	+	+/--?	0	0	+	++	--?	?	--/+?	+	--?	-	+	0	+	+	++?
Vision for the Stonehouse	+	+	0	0	+	+	+	+	0	+	0	0	0	+	0	+	+

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
cluster																	
PS15	+	-/++	0	0	0	+	-?	--?	0	--	--?	-	--?	0	0	-	+
PS16	+	-/++	0	0	0	+	-?	-?	0	0	--?	-	--?	0	0	-	+
PS17	+	++/--?	0	0	+	++	--?	?	0	-	--?	0	+	0	+	++	++?
PS18	+	++	0	0	0	++	-?	?	0	-	--?	-	-	0	0	++	+
PS19	++	-/++	0	0	0	--	-?	-?	0	--	--?	--	--?	0	0	+	+
PS20	0	--?/++	0	0	0	--/+	-?	--?	--	+	--?	--	--	0	0	++	++
Vision for Cam and Dursley	+	+	+	0	+	+	0	+	+	+	0	0	0	+	0	+	+
PS21	+	-/+	0	0	0	++	-?	-?	--	+	--?	-	-	0	0	+	+
PS22	+	-/++	0	0	0	++	-?	--?	-/+?	0	--?	-	--	0	0	+	-?
PS23	0	+	0	0	0	0	0?	?	0	+	--?	--?	--?	0	0	+	+
PS24	++	-/+	0	0	0	++	-?	-?	?	--	--?	-	--	0	0	++	-?
PS25	+	-/++	0	0	0	++	-?	-?	0	--	--?	--	--?	0	0	++	+
PS26	+	+/--?	0	0	0	++	--?	-?	0	+	--?	-	-	0	0	++	++?
PS27	0	++	0	0	+	++	-?	-?	-/+?	+	--?	0	+	0	+	+	+
PS28	+	++	0	0	+	++	-?	-?	-	++	--?	0	+	0	+	++	+
PS29	+	-/++	0	0	0	++	-?	-?	0	--	--?	-	--?	0	0	+	+
Vision for the Gloucester Fringe	+	0	+	0	+	+	0	+	+	+	0	0	+	+	0	+	+

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
PS30	+	-/++	0	0	0	--/+	-?	?	0	--	0	--	--	0	0	+	-?
PS31	0	+	0	0	0	0	0?	?	0	+	0	--?	--?	0	0	++	++
PS32	0	+	0	0	0	0	0?	?	0	+	0	-?	--?	0	0	+	+
G1	++	+/--?	0	0	0	+	--?	-?	--	--	0	--	--	0	0	+	+?
G2	++	-/+	0	0	0	++	-?	-?	-	--	0	--	--	0	0	++	-?
Vision for the Berkeley Cluster	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	+	+
PS33	+	++	0	0	0	+	-?	-?	0	-	0	--	--?	0	0	++	+?
PS34	+	++/--?	0	0	+	+	--?	-?	--/+?	--	0	-	+	0	+?	+?	+?
PS35	+	++/--?	0	0	+	--/+	--?	?	0	-	0	0	+	0	+?	--	+?
PS36	++	++/--?	0	0	0	+	--?	--?	-	--	0	--	--?	0	0	++	++?
PS37	++	-/++	0	0	0	+	-?	?	0	--	--?	-	--?	0	0	+	+?
Vision for the Severn Vale	0	+	0	0	0	+	+	+	+	+	0	+	0	+	0	0	+
Vision for the Wotton Cluster	0	0	+	0	+	+	0	+	+	+	0	0	0	+	0	+	+
PS38	+	-/++	0	0	0	+	0?	-?	0	--	0	-	--?	0	0	+	+?
PS39	+	-/++	0	0	0	+	-?	-?	-	0	0	-	--?	0	0	+/--	+?
PS40	0	++	0	0	0	+	-?	-?	?	-?	0	-	--?	0	0	0	++
Vision for the Cotswold Cluster	+	0	+	0	+	+	0	+	+	0	0	0	0	0	0	+	+

SA Objectives	SA 1: Housing	SA 2: Health	SA 3: Social inclusion	SA 4: Crime	SA 5: Vibrant communities	SA 6: Services and facilities	SA 7: Biodiversity/geodiversity	SA 8: Landscapes/townscapes	SA 9: Historic environment	SA 10: Air quality.	SA 11: Water quality	SA 12: Flooding	SA 13: Efficient land use	SA 14: Climate change	SA 15: Waste	SA 16: Employment	SA 17: Economic growth
PS41	+	++	0	0	0	+	-?	--?	0	--	--?	-	--?	0	0	--	+

SA objective 1: To provide affordable, sustainable and decent **housing** to meet local needs.

- 6.92 The Emerging Strategy Paper includes the Council's approach to addressing local housing need in the district. It would deliver at least 638 homes per year over a 20 year period thereby providing enough housing to meet local requirements during this time. A proportion of this housing would be provided as affordable homes. New housing delivery over the plan period is also to include a mix of dwelling types which responds to identified local needs. The approach of the Council to this issue is also considerate of the specific housing requirements of older people as well as gypsies and travellers and travelling showpeople.
- 6.93 The emerging growth strategy supports the provision of at least 12,800 additional dwellings to meet needs for the next 20 years. The delivery of the emerging growth strategy is to be achieved partly through the development of the potential sites identified in the Emerging Strategy Paper. It is expected that sites at Stonehouse (PS19), Cam (PS24), Harwicke (PS30, OSP01 and OSP02), Sharpness and Newtown (PS36) and Wisloe (PS37) would have a particularly significant positive effect in relation to this SA objective considering their capacity to accommodate a high level of housing growth.
- 6.94 Overall, a cumulative **significant positive** effect is likely in relation to housing.

SA objective 2: To maintain and improve the community's **health** with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.

- 6.95 The Emerging Strategy Paper includes the Council's approach to providing access to local greenspaces and community facilities in the district. The approach of the Council in relation to this issue is to include policy support for the protection of important open spaces, outdoor recreation facilities, playing fields or allotments. It would also support the improvement of cycle networks in the district and the provision of community facilities alongside housing growth through master planning of strategic and other major developments. As such it is expected that this approach could help to provide opportunities for residents to partake of more active and healthier lifestyles.
- 6.96 The emerging growth strategy set out in the Emerging Strategy Paper would result in development being concentrated at locations which currently provide access to the widest range of services and facilities, or would provide critical mass at the new settlements by Sharpness and Wisloe which is likely to support the delivery of new services and facilities. As such, the emerging growth strategy is likely to be of particular benefit in terms of access to healthcare facilities and facilities which would support more active lifestyle choices among residents. It is noted however that this approach may be detrimental in terms of supporting the delivery of services and facilities of a more substantial nature at more rural locations.
- 6.97 Of the potential sites included in the Emerging Strategy Paper, 28 are likely to have a significant positive effect in relation to health as they are located in close proximity to healthcare facilities as well as features which might encourage more active styles among residents, or they would incorporate an area of open space as part of the development. However, a further 10 sites are likely to have significant negative effect in relation to health given that they are not located within close proximity of healthcare facilities and assets which could help promote more active lifestyles or they contain such an asset which might be lost dependent upon the design of development at the site.
- 6.98 Overall, a cumulative **minor positive** effect is likely in relation to health.

SA objective 3: To encourage **social inclusion**, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population

- 6.99 Strategic objectives 1 and 1a of the Emerging Strategy Paper directly seek to maintain and improve accessibility to services and amenities including active social, leisure and recreation opportunities and communities that promote social interaction in the district. It is therefore expected that this section of the Emerging Strategy Paper would be of particular benefit to this SA objective.
- 6.100 The emerging growth strategy would result in the provision of a large proportion of new development at locations which allow for access to the widest range of services and facilities. It

would also help the delivery of new services and facilities through the provision critical mass at the new settlements at Sharpness and Wisloe. The support the emerging growth strategy provides in terms of improved levels of access to services and facilities across the district is likely to be of particular benefit in terms of facilitating improved levels of social inclusion. This approach is however noted to have the potential to result in detrimental impacts in terms of supporting the delivery of similar services and facilities of a more substantial nature at locations which are beyond the larger settlements of the district.

6.101 Overall, a cumulative **minor positive** effect is likely in relation to social inclusion.

SA objective 4: To reduce **crime**, anti-social behaviour and disorder and the fear of crime.

6.102 Most of the Emerging Strategy Paper including all of the potential sites will not have a direct effect on this objective. Strategic objectives 3 and 1 in particular however are supportive of encouraging the creation of safe town centres and communities in which public safety is prioritised and the fear of crime is reduced respectively. The vision for the district furthermore sets out an aspirational image for 2040 in Stroud District where all communities in the area are safe and secure places.

6.103 In general, however, this SA objective will be affected by the design and layout of new development (e.g. the incorporation of lighting and overlooked spaces) which will not be detailed until the planning application stage.

6.104 Overall a cumulative **minor positive** effect is likely in relation to crime.

SA objective 5: To create and sustain **vibrant communities**.

6.105 Most of the policies in the Local Plan will not have a direct effect on this SA objective. It is however expected that the Council's approach to addressing the district's need for greenspaces and community facilities which is set out in the Emerging Strategy document would be of benefit in terms of achieving this objective through contributing to local integration. The Council's approach to addressing the district's needs in terms of town centres is also expected to play a similar role in terms of vibrant community given that it is expected to help improve the offer of services at these locations.

6.106 The emerging growth strategy for Stroud District would allow for a concentrated approach to future growth in the district. It is likely that this approach would help to support the provision of new community facilities through the creation new critical mass in the district. Thirteen of the potential sites are also expected to have a beneficial impact in terms of promoting more vibrant communities in the district. These sites take in mostly brownfield land and therefore are expected to help support opportunities for regeneration in Stroud District.

6.107 Overall a cumulative **minor positive** effect is likely in relation to the creation of vibrant communities.

SA objective 6: To maintain and improve access to all **services and facilities**.

6.108 The Councils approach to addressing key issues for the district as set out in the Emerging Strategy Paper includes concentrating housing development at locations which provide the best level of access to services. The approach contained in the document relating to addressing town centre needs in the district is also expected to be of particular benefit in terms of strengthening access to services and facilities. Within the district, service and facility provision is to be encouraged at various town centre locations which are by and large considered to be amongst the most accessible locations to the highest number of residents.

6.109 The Council's approach to these issues is carried through into the emerging growth strategy for the district. The majority of new development is to be provided at the main settlements which provide access to the high number of services and facilities. It is accepted however that this approach would limit the potential for new substantial services and facilities to be supported at the smaller and more rural settlements of the district.

6.110 The 15 potential sites which would provide an element of residential development at Tier 1 settlements (Stroud, Stonehouse, Cam and Dursley). While those sites (PS05, PS06, PS17, PS20, PS30 and PS35) which would provide new services and facilities would help to improve access to

such provisions in the district, none are located at town centre locations meaning that the positive effect for these sites is unlikely to be significant.

- 6.111 Overall a cumulative **minor positive** effect is likely in relation to the improving access to services and facilities.

SA objective 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.

- 6.112 The Emerging Strategy Paper includes the conservation and enhancement of the countryside and biodiversity in the district as part of its proposals to address the key issues identified over the duration of plan period. This is to include the achievement of net gains in the natural environment. The Council's approach relating to greenspaces and community facilities is also likely to be of particular benefit in terms of protecting and enhancing biodiversity over the plan period. As well as incorporating policy protection for important open spaces in the district, the Emerging Strategy Paper states that areas of biodiversity importance (with specific reference to the Cotswold Beechwoods SAC) are to continue to benefit from policy protection as part of the Local Plan.
- 6.113 The high level of development supported over the plan period particularly through the emerging growth strategy is likely to result in habitat loss, disturbance and fragmentation as well as the potential for increased recreational pressures where new residential development is delivered.
- 6.114 The majority of the potential sites included in the Emerging Strategy Paper are also likely to have a negative effect on this SA objective given that they would be within close proximity of a designated biodiversity site. Ten potential sites which are located at Brimscombe and Thrupp (PS02), Nailsworth (PS07 and PS08), Stroud (PS13), Stonehouse (PS17), Dursley (PS26), Hardwicke (G1) and Newtown and Sharpness (PS34, PS35 and PS36) are located in particularly close proximity of a national or international designated site or take in an identified green infrastructure asset which might be lost as part of the development. Therefore the impact at these sites is expected to be significant negative.
- 6.115 Overall a cumulative **mixed (minor positive and significant negative)** effect is likely in relation to biodiversity and geodiversity.

SA objective 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.

- 6.116 The landscape of Stroud District is influenced greatly by the large areas of rural countryside which surround the main and more peripheral settlements. The AONB to the east plays an important role in defining the character of this portion of the district and is noted to potentially be particularly sensitive to new development.
- 6.117 The Council's approach in relation to the needs of the district for greenspace and community facilities and the Strategic Objective SO6 of the Emerging Strategy Paper in particular are expected to be beneficial in terms of this SA objective. The Council's approach would seek to continue the protection of identified areas of landscape importance as part of its response to addressing the provision of required greenspace. Furthermore Strategic Objective SO6 of the Emerging Strategy Paper sets out the aim of conserving and enhancing Stroud District's distinctive qualities with reference to its landscape qualities.
- 6.118 The emerging growth strategy seeks to deliver much of the development over the plan period at the main settlements of the district thereby limiting the level of development which would be supported at the smaller and more rural settlements. Although much of the new growth would potentially avoid the more sensitive locations of the district particularly within the AONB, the high level of development required over the plan period will result in the loss of large areas of greenfield land and potential encroachment on the open countryside. Furthermore development supported through the emerging growth strategy is to occur around some settlements such as Stroud which are noted to have high landscape sensitivity to new development.
- 6.119 The majority of potential sites set out for development in the Emerging Strategy Paper are expected to have an adverse impact in terms of enhancing the local distinctiveness and character of landscapes in the district. These sites have been assessed as having at least medium/low or medium sensitivity to development as set out in the Landscape Sensitivity Assessment for Stroud

District or are located within 500m of the AONB. Ten sites at Brimscombe and Thrupp (PS02), Minchinhampton (PS04 and PS05), Nailsworth (PS07 and PS08), Kinds Stanley (PS15), Stonehouse (PS20), Cam (PS22), Newton and Sharpness (PS36) and Painswick (PS41) are located at locations which have been identified as having medium/high or high sensitivity to development. Development at these locations could have particularly adverse impacts on landscape character in the district.

- 6.120 Overall a cumulative **mixed (minor positive and significant negative)** effect is likely in relation to landscape.

SA objective 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's **historic environment**.

- 6.121 The scale of development included as part of the emerging growth strategy in the Emerging Strategy Paper could adversely affect heritage assets and their settings, particularly where development is to occur on a larger scale at greenfield sites. Loss of greenfield land is likely to significantly alter the setting of nearby heritage assets and may disturb archaeological assets on site. Development would also occur in close proximity to locations which are potentially sensitive in terms of heritage assets such the Industrial Heritage Conservation Area which runs through Stonehouse and Stroud, as the emerging growth strategy focusses much of the growth towards the main settlements. However, the Emerging Strategy Paper does encourage the re-use of brownfield land across the district, which may result in beneficial effects in terms of the setting of heritage assets.
- 6.122 The Council's approach in relation to the needs of the district for greenspace and community facilities and the Strategic Objective SO6 of the Emerging Strategy in particular are expected to be beneficial in terms of this SA objective. The response of the Council to the needs of the district would seek to continue the protection of identified areas of heritage importance as part of its approach to addressing the provision of required greenspace. Furthermore Strategic Objective SO6 of the Emerging Strategy sets out the aim of conserving and enhancing Stroud District's distinctive qualities with reference to heritage in the district.
- 6.123 A number of the potential sites included in the Emerging Strategy Paper are likely to have significant negative effects in relation to this SA objective. Sites at Brimscombe and Thrupp (PS01 and PS02), Minchinhampton (PS05), Stroud (PS10, PS11 and PS13), Stonehouse (PS20), Cam (PS21), Hardwicke (OSP02) and Newtown and Sharpness (PS34) have been identified as having significant or very significant heritage constraints as per the findings of the SALA heritage assessment. These sites are noted to have the greatest potential to have significantly adverse impacts in terms of the setting of identified heritage assets in the heritage assessment. However, it is also noted that at the sites PS01, PS02, PS10, PS11, PS13 and PS34 potential opportunities to achieve enhancements in terms of the historic enhancement have been identified through this heritage assessment work.
- 6.124 Overall a cumulative **mixed (minor positive and significant negative)** effect is likely in relation to the historic environment.

SA objective 10: To ensure that **air quality** continues to improve.

- 6.125 The high level of development supported over the plan period through the Emerging Strategy is expected to result in an increase in the number of journeys being made on a daily basis in Stroud District. This is expected to have an adverse impact on local air quality. However, the approach of the Council in relation to the key issues of the district as well as its approach to the specific issues of town centres and greenspaces and community facilities is expected to be of particular benefit in terms of improving air quality. A general theme of concentrating housing development at locations where there is currently the best access to services, facilities, jobs and infrastructure is carried through these elements of the Emerging Strategy. The Council's approach to addressing the issues of town centres and greenspaces and community facilities in Stroud District is also considerate of the need to improve cycling and walking links. As such it is expected a general trend towards modal shift would be encouraged in the district.
- 6.126 The emerging growth strategy for the district also supports the delivery of new growth mostly at locations which provide access to services and facilities or at locations which will provide the

critical mass to support the delivery of new provisions of this type. It is therefore expected that there will be a reduced need for residents to travel long distances on a regular basis.

- 6.127 Many of the potential sites have been identified as having the potential to require new residents or employees to travel greater distances on a regular basis as set out through the findings of the SALA Transport Accessibility Assessment. While sites PS10, PS11 and PS12 at Stroud and site PS28 at Dursley (all of which would provide an element of residential development) are particularly well related to existing services and facilities by more active modes of transport, an additional 15 potential sites are expected to have particularly adverse impacts on air quality in the district considering the poor level of access they would provide to similar features.
- 6.128 Overall a cumulative **mixed (minor positive and minor negative)** effect is likely in relation to air quality.

SA objective 11: To maintain and enhance the **quality of ground and surface waters** and to achieve **sustainable water resources management** in the District.

- 6.129 The emerging growth strategy would result in the majority of development occurring by settlements which have been identified as containing land which mostly falls outside of Source Protection Zones. The pattern of development set out through this approach, however, would include large areas of land which fall within Drinking Water Safeguarding Zones. Of the 41 potential sites included in the Emerging Strategy Paper 28 are expected to have particularly adverse impacts in terms of water quality given that they lie within Drinking Water Safeguarding Zones and Source Protection Zones.
- 6.130 The vision for the district and Strategic Objective SO5 in particular are likely to be of benefit in terms of protecting water quality in the district. The vision for the district is one of an area which lives within its environmental limits and protects its rich estuarine landscape. The achievement of this element of the vision is to be supported by Strategic Objective SO5 which specifically relates to the protection and enhancement of the quality of the district's surface and groundwater resources.
- 6.131 Overall a cumulative **mixed (minor positive and significant negative)** effect is likely in relation to water quality.

SA objective 12: To manage and reduce the risk of **flooding** and resulting detriment to public wellbeing, the economy and the environment.

- 6.132 The Council's overarching approach to addressing the key issues identified for the district seeks to prioritise the use of brownfield land. The approach to address the needs of the district relating to the local economy and job provision is expected to have a similar effect given that it would promote the regeneration of underutilised or low value employment sites. The Council is to address the need for greenspace and community facilities partly by protecting important open spaces in the area. It is expected that these elements of the Emerging Strategy would help to preserve the area of the district which is capable of allowing for the safe infiltration of surface water thereby limited the potential for any increase in flood risk. Furthermore Strategic Objective SO5 in the Emerging Strategy seeks to promote the use of appropriately located brownfield land and most importantly seeks to promote the aim of minimising and mitigating future flood risks.
- 6.133 The emerging growth strategy supports development which is to occur on large areas of greenfield land in the district and this is likely to result in an increased level of flood risk, due to increasing the area of impermeable surfaces. Development sites at Brimscombe and Thrupp (PS03), Stonehouse (PS19 and PS20), Cam (PS23 and PS25), Hardwicke (PS30, PS31 and G1), Whaddon (G2), Newtown and Sharpness (PS34 and PS36) and Wisloe (PS37), Kingswood (PS38) and Painswick (PS41) lie on mostly greenfield land and are within Flood Zone 3a or 3b. As such it is expected that the development of these sites would have particularly adverse effects in terms of flood risk in the district. However, the majority of sites are only likely to have minor negative effects because they are outside of the high risk flood zones.
- 6.134 Overall a cumulative **mixed (minor positive and minor negative)** effect is likely in relation to flooding.

SA objective 13: To improve efficiency in **land use** and protection of soil quality through the re-use of previously developed land and existing buildings and encouraging urban renaissance.

- 6.135 The Council's approach in the Emerging Strategy Paper to address the key issues for the district and local economy and job needs seeks to maximise the potential of brownfield and underused sites to support the delivery of housing and employment growth respectively. Strategic Objective SO5 in the Emerging Strategy Paper also seeks to promote the use of appropriately located brownfield land.
- 6.136 The high level of development allowed for through the emerging growth strategy however will result in large areas of greenfield land being developed although it does support the regeneration of brownfield sites within the settlements of Cam, Dursley, Stonehouse and Stroud.
- 6.137 Many of the potential sites set out in the Emerging Strategy Paper to assist with the delivery of the emerging growth strategy are on greenfield land. Sites at Minchinhampton (PS04 and PS05), Nailsworth (PS07), Kings Stanley (PS15), Leonard Stanley (PS16), Stonehouse (PS19 and PS20), Cam (PS22, PS23, PS24 and PS25), Dursley (PS29), Hardwicke (PS30, PS31, PS32 and G1), Whaddon (G2), Berkeley (PS33), Newtown and Sharpness (PS36), Wisloe (PS37), Kingswood (PS38 and PS39), Wotton-under-edge (PS40) and Painswick (PS41) are expected to have a particularly detrimental impact in terms of promoting efficient land use and preserving higher value agricultural soils in the district. These greenfield sites are large and/or contain Grades 1, 2 or 3 agricultural soils which are likely to be lost as a result of development.
- 6.138 Overall a cumulative **mixed (minor positive/significant negative)** effect is likely in relation to the efficient use of land and preservation of higher value soils.

SA objective 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable **climate change** within the District.

- 6.139 The scale of development set out in the Emerging Strategy Paper will inevitably result in an increase in the number of journeys undertaken locally which will be to the detriment of local contribution to climate change. Development may particularly affect emissions during the initial construction phase due to transport to and from construction sites. The district's contribution to climate change for the most part however will be impacted upon by the number of day-to-day journeys undertaken and how these journeys are made.
- 6.140 The Council's approach to the issues of need in the district relating to the local economy and jobs and also housing would deliver high levels of growth which would result in increased levels of travel locally. Some of the economic growth would take place at the M5/A38 corridor which would provide varying levels of access to employment opportunities for residents within the main settlements in the district. At the same time the Council's approach to these issues would provide much of the new housing at or adjacent to existing communities which would give new residents a good level of access to services and facilities and potentially reduce the need to travel long distance regularly in the district.
- 6.141 The Emerging Strategy is supportive of many improvements (including those relating to transport and an improved offer of services and facilities) at town centre locations in the district through the Council's approach to addressing the key town centre issues. Improvements which encourage people to access these locations more regularly to make use of services and facilities may promote the use and viability of sustainable transport in the district. Furthermore pedestrian and cycling links are to be improved through the Council's approach as set out in Section 2.2 of the Emerging Strategy Paper. Providing housing at town centre locations through this approach is expected to help reduce the need to travel in the district. The approach to town centres in the district however includes the provision of improved car parking facilities in Wotton-under-Edge town centre which could result in an increase in the number of car journeys being made to this location.
- 6.142 Strategic Objective SO4 directly seeks to address modal shift towards healthier travel choices and the reduction of CO2 emissions by using new technologies. Strategic Objective SO5 seeks to promote changes which would result in climate change adaptation such as encouraging increased energy recovery and patterns of development that facilitate the use of sustainable modes of transport. The incorporation of both strategic objectives as part of the Emerging Strategy is likely

to be of particular benefit in terms of helping to mitigate climate change and reducing greenhouse gas emissions in the district.

- 6.143 While the emerging growth strategy supports the delivery of a high level of growth over the plan period, the pattern of growth supported would result in the majority of residents being provided with a good level of access to nearby services and facilities. This is to be achieved by providing much of the development by the main towns of Cam and Dursley, Stonehouse and Stroud. Further high levels of development would be provided at two new settlements at Sharpness and at Wisloe within the Severn Vale within close proximity to the A38/M5 corridor which would provide critical mass to support the delivery of new services and facilities. This approach to future growth across the district would furthermore provide residential growth at locations where sustainable transport links are currently strongest and it is also likely the new settlements at Sharpness and Wisloe would be able to support new infrastructure required to facilitate new links of this type.
- 6.144 It is expected that concentrating much of the development at a smaller number of locations by the main settlements could also potentially allow for the incorporation of infrastructure to support low carbon energy production and energy recovery. Constraints relating to viability and site capacity are less likely at these types of locations than if a higher number of smaller sites were to be taken forward. Viewed as a whole this strategy for the future growth of the district is likely to help reduce the need to regularly travel long distances despite the high level of growth required over the plan period and may also promote a shift towards sourcing energy from more sustainable providers.
- 6.145 Overall a cumulative **mixed (minor positive/minor negative)** effect is likely in relation to climate change and reducing greenhouse gas emissions.

SA objective 15: To minimise the amount of **waste** produced, maximise the amount that is reused or recycled, and seek to recover energy from the largest proportion of the residual material, and achieve the sustainable management of waste.

- 6.146 It is expected that the level of growth provided for within the district over the plan period would result in increases in local waste production. However, new development may help to encourage sustainable waste management or recycling practices dependent upon whether new infrastructure to support changes in the behaviour of local people is provided. Furthermore the delivery of high levels of development will not adversely impact upon rates of recycling and re-use in the district.
- 6.147 Strategic Objective SO5 sets out that the development strategy for the district should be respectful of environmental limits, which includes minimising the amount of waste produced. Furthermore, prioritising the use of brownfield land to provide future growth in the district is a theme which runs through much of the Emerging Strategy Paper. This is particularly the case for the Council's approach to addressing the key issues of the district and specifically needs relating to the local economy and jobs as well as housing. It is expected that this approach to new development in the district may help to encourage the re-use of onsite buildings and materials thereby limiting construction and demolition waste. The emerging growth strategy sets out that development is mostly to be concentrated at a small number of locations in the district. Where larger development sites are made use of to accommodate a high level of development the delivery of new infrastructure to help promote recycling and sustainable onsite waste management may become more viable.
- 6.148 Thirteen of the potential sites located at Brimscombe (PS01 and PS02), Nailsworth (PS06), Stroud (PS10, PS11, PS12 and PS13), Stonehouse (PS17), Dursley (PS27 and PS28) and Newtown and Sharpness (PS34 and PS35) are located on brownfield land and these locations may promote the re-use of onsite buildings and materials dependent upon the design of proposals which come forward.
- 6.149 Overall a cumulative **minor positive** effect is likely in relation to waste.

SA objective 16: To deliver, maintain and enhance sustainable and diverse **employment opportunities**, to meet both current and future needs.

- 6.150 An important part of the Council's approach to the district's need in terms of the local economy and jobs is to provide a clear economic strategy to support sustainable economic growth for the

next 20 years. This approach in the Emerging Strategy Paper is to provide economic growth and additional jobs on and adjacent to existing high value employment sites and within the M5/A38 growth corridor. Adopting this approach will have positive effects as it will provide support for a high level of new employment opportunities. However, this growth will be at locations which are within variable distances of the main settlements of the district. The Council's overall response to the key issues identified for the district would concentrate employment growth within the A38/M5 corridor and at locations in tandem with housing growth. As such it would result in the delivery of employment land which provides access to strategic scale transport infrastructure and would be attractive in terms of inward investment and the provision of new employment opportunities. This new economic growth and the resultant employment opportunities provided may however be less accessible to some people in the district; particularly those at the larger settlements of Stroud and Dursley. This approach to the provision of new employment land in the district is carried through to the emerging growth strategy. The emerging growth strategy would furthermore allow for sufficient new employment land to meet needs for the next 20 years.

- 6.151 Support for some limited employment uses at town centre locations (including providing work spaces with flexible rental arrangements) and helping to maintain the vitality and viability of these locations should help to further encourage local economic growth and new employment opportunities in the district. This is to be achieved through the Council's approach to the town centre needs of the district as set out in the Emerging Strategy Paper. Strategic Objectives SO2 and SO3 support the vitality and viability of town centres in the district and the more the direct aim of a strong, diverse, vibrant local economy coupled with enhancing skills of residents and job opportunities respectively.
- 6.152 It is expected that the updates to the settlement boundaries contained within the Emerging Strategy Paper would have both positive and negative effects in relation to the provision of accessible employment opportunities in the district. It is likely that the re-establishment of these boundaries would result in the majority of new employment opportunities being provided at locations which are in close proximity to a large number of residents. The boundaries would also allow for a compact pattern of development which may help to promote vitality and viability resulting in inward investment and job creation. However, the restriction of development beyond the boundaries of the settlements may mean that areas which might otherwise be viable in terms of the provision of new employment opportunities will be less likely to come forward, dependent upon how stringently any policy relating to this issue is to be applied.
- 6.153 A number of the potential sites are expected to be of particular benefit in terms of providing accessible employment opportunities in the district. This includes sites at Stroud (PS12), Stonehouse (PS17, PS18 and PS20), Cam (PS24 and PS25), Dursley (PS26 and PS28) Hardwicke (PS31), Whaddon (G2), Berkeley (PS33) and Newtown and Sharpness (PS36). These are sites which would deliver a large amount of employment land or would provide new homes in close proximity to a key employment site and within a Tier 1 or 2 settlement where further employment opportunities are likely to be located.
- 6.154 Sites at Stroud (PS12), Newtown and Sharpness (PS35), Kingswood (PS39) and Painswick (PS41) have been identified as containing a current employment use, and therefore have the potential to have a negative effect.
- 6.155 Overall a cumulative **mixed (significant positive/minor negative)** effect is likely in relation to employment opportunities.

SA objective 17: To allow for sustainable **economic growth** within environmental limits and innovation, an educated/ skilled workforce and support the long term competitiveness of the District.

- 6.156 The Council's approach to addressing the key issues for the district as well as the district's needs relating to local economy and job as well as town centres is expected to be of particular benefit with regarding to encouraging inward investment. The Council's approach would focus employment growth within the A38/M5 corridor and create new sustainable communities at locations where development can transform existing access to services and infrastructure. As such it is expected that economic growth in the district would benefit from access to strategic transport infrastructure with the potential to enhance infrastructure in the district through the provision of new development. The use of settlement boundaries as part of the Council's

approach to addressing key issues for the district however has the potential to limit economic growth and could have a negative impact in terms of inward investment dependent upon how stringently policy requirements of this type are to be enforced.

- 6.157 The council's specific approach to addressing local economy and jobs in the district would provide an economic strategy to support sustainable economic growth for the next 20 years and furthermore allow for economic growth at and adjacent to existing high value employment sites and within the M5/A38 growth corridor. Its approach to town centres would help to encourage inward economic investment in Stroud District by promoting the vitality and viability of these locations. This is to include improvement of the retail, leisure, business and tourism offer at various town centre locations where it has been deemed most appropriate.
- 6.158 Strategic Objective SO2 would be of particular benefit to this SA objective given that it directly seeks to address the local economy and provision of jobs in Stroud and also presents the aim of delivering enhancement of skills for local people. The emerging growth strategy would support the delivery of sufficient new employment land to meet the identified need over the plan period. It would focus much of the economic growth towards the A38/M5 corridor at a small number of locations, which would provide access to important transport links and may allow for the incorporation of further infrastructure improvements considering that viability constraints are less likely to emerge. It is expected that the emerging growth strategy could therefore help to make sites more attractive in terms of further inward investment. However, the strategy is less likely to promote economic growth or the vitality and viability of the town centres of those smaller and more rural settlements which have not been identified to accommodate new growth.
- 6.159 The potential sites in the Emerging Strategy Paper which would allow for residential growth in close proximity to both a primary school and a secondary school (and therefore education opportunities) or would allow for a high level of employment development are expected to be of particular benefit in terms of achieving this SA objective. This includes potential sites at Stroud (PS13), Stonehouse (PS17 and PS20), Dursley (PS26), Hardwicke (PS31), Sharpness and Newtown (PS36), and Wotton-under-edge (PS40).
- 6.160 Overall a cumulative **significant positive effect** is likely in relation to economic growth.

Recommendations

- 6.161 The findings relating to the emerging future growth strategy and the site options for the district as presented in Chapter 4 and Chapter 5 of this report were initially presented as internal notes to the Council in late summer 2018. This work included a summary of the sustainability effects for the four potential growth strategy options as well as the site options considered for allocation by the Council.
- 6.162 As part of this work a recommendation was made to the Council that the growth strategy option which would result in a more concentrated pattern of development had been appraised as performing slightly better overall than the other options considered in terms of potential positive effects as well as having slightly fewer negative effects. Furthermore it was recommended that a hybrid option which resembles the concentrated development option but also includes growth at the one or two growth points and/or one or two of the smaller towns and larger villages as well might be taken forward. This approach could achieve the potential growth, uplift and funding for the provision of new infrastructure of including a small number of large growth points within the district while also avoiding the areas of the district which are most constrained by sensitive features. The recommendation of this portion of work also set out there would be a need to avoid settlements where negative environmental effects on biodiversity/geodiversity, landscape/townscape, historic environment, water quality and flooding are more likely.
- 6.163 The Council has considered the evidence from these elements of the sustainability appraisal work as part of the production of the Emerging Strategy Paper.

Mitigation

- 6.164 The Emerging Strategy Paper would facilitate a high level of development over the plan period. As this Chapter describes, negative effects have been identified in relation to many of the SA objectives. The SEA Regulations advocate an approach that negative effects should be addressed in line with the mitigation hierarchy: avoid effects where possible, reduce the extent or magnitude of effects, then seek to mitigate any remaining effects.
- 6.165 **Table 6.10** summarises the elements of the Emerging Strategy Paper which could mitigate potential negative effects of delivering a high level of growth over the plan period in relation to each of the SA objectives.

Table 6.10 Potential mitigation measures to the effects identified for the Local Plan Review: Emerging Strategy Paper

SA Objective	Mitigation
SA 1: Housing	<p>The Council’s policy response to the issue of the lack of affordable housing, its response to the general need for increased levels of housing, the emerging growth strategy and the sites allocated to include housing development will all help deliver homes to meet need in the district. These elements of the plan will also help to deliver an appropriate level of affordable housing.</p> <p>Furthermore Strategic Objective SO1 seeks to provide affordable and decent housing for local needs.</p>
SA 2: Health	<p>The Council’s policy response to the provision of local green spaces and community facilities, the emerging growth strategy and the sites allocated to provide new open space and services and facilities will all help to deliver new provisions which promote healthier lifestyle choices and are to the benefit of wider public health in the district.</p> <p>Furthermore Strategic Objective SO1a seeks to support healthcare provision for all residents and Strategic Objective SO1 seeks to support healthy lifestyles in the district.</p>
SA 3: Social inclusion	<p>The Council’s policy response to the issue of ensuring housing development is supported by the right services and infrastructure and the emerging growth strategy will help deliver to deliver new development which will allow access to wider range of services and facilities. The delivery of new growth through the emerging growth strategy is also expected to support the delivery of new services and facilities in the district.</p> <p>Furthermore Strategic Objective SO1 seeks to support access to services with active social opportunities and Strategic Objective SO1a seeks to promote social interaction in the district.</p>
SA 4: Crime	<p>Strategic Objective SO1a seeks to ensure public safety and reduce the fear of crime</p>
SA 5: Vibrant communities	<p>The Council’s policy response to the issue of maximising the use of brownfield land and the provision of local green spaces and community facilities and the emerging growth strategy will help to deliver new provisions which would help to foster more vibrant communities in the district. It would also help to improve the aesthetic of the district.</p> <p>Furthermore Strategic Objective 3 seeks to improve the vitality and viability of Stroud District’s town centres.</p>
SA 6: Services and facilities	<p>The Council’s policy response to the issue of ensuring housing development is supported by the right services and infrastructure, the provision of local green spaces and community facilities, the distribution of housing in the district, the emerging growth strategy and the sites allocated to provide new services and facilities will all help to deliver new provisions which improve the offer and accessibility of services and facilities for residents in the district.</p> <p>Furthermore Strategic Objective SO1a seeks to support improved access to local goods and services.</p>
SA 7: Biodiversity/geodiversity	<p>The Council’s policy response to the issue of conserving and enhancing Stroud District’s countryside and biodiversity and the provision of local green spaces and community facilities is expected to help protect species from potential habitat loss, disturbance and fragmentation and protect geodiversity features in the district.</p> <p>Furthermore Strategic Objective SO6 seeks to conserve and enhance Stroud District’s distinctive qualities, based on landscape, heritage, townscape and biodiversity.</p>
SA 8:	<p>The Council’s policy response to the issue of conserving and enhancing Stroud District’s countryside and biodiversity and</p>

SA Objective	Mitigation
Landscapes/townscapes	<p>the provision of local green spaces and community facilities is expected to help protect the openness of the countryside and existing landscape character in the district. The emerging growth strategy delivers much of the growth over the plan period at locations which are away from the extent of the AONB designation.</p> <p>Furthermore Strategic Objective SO6 seeks to conserve and enhance Stroud District's distinctive qualities, based on landscape, heritage, townscape and biodiversity.</p>
SA 9: Historic environment	<p>The Council's policy response to the provision of local green spaces and community facilities is expected to help protect the setting of heritage assets in the district.</p> <p>Furthermore Strategic Objective SO6 seeks to conserve and enhance Stroud District's distinctive qualities, based on landscape, heritage, townscape and biodiversity.</p>
SA 10: Air quality	<p>The emerging growth strategy would deliver new growth in locations of the district that should limit the need to travel in the district.</p> <p>Furthermore Strategic Objective SO4 seeks to promote healthier alternatives to the use of the private car, while Strategic Objective SO5 promotes a development strategy which respects the environmental limits of the district.</p>
SA 11: Water quality	<p>Strategic Objective SO5 promotes a development strategy which respects the environmental limits of the district. This includes minimising and mitigating future flood risks, recycling water resources and protecting and enhancing the quality of the district's surface and groundwater resources</p>
SA 12: Flooding	<p>The Council's policy response to the issue of maximising the potential for a green infrastructure network across the district and the emerging growth strategy would help to promote the safe infiltration of surface water and guide development away from locations of higher flood risk.</p> <p>Furthermore Strategic Objective SO5 promotes a development strategy which respects the environmental limits of the district. This includes minimising and mitigating future flood risks, recycling water resources and protecting and enhancing the quality of the district's surface and groundwater resources</p>
SA 13: Efficient land use	<p>The Council's policy response to the issue of maximising the use of brownfield land seeks to regenerate large scale brownfield sites and prioritise the use of brownfield, under used and infill land through the use of settlement boundaries.</p>
SA 14: Climate change	<p>The emerging growth strategy would deliver new growth in locations of the district as to limit the need to travel in the district.</p> <p>Furthermore Strategic Objective SO4 seeks to promote healthier alternatives to the use of the private car, while Strategic Objective SO5 promotes a development strategy which respects the environmental limits of the district and adapts to climate change.</p>
SA 15: Waste	<p>The Council's policy response to the issue of maximising the use of brownfield land is expected to promote the re-use of vacant sites and buildings in the district.</p> <p>Furthermore Strategic Objective SO5 promotes a development strategy which respects the environmental limits of the district and minimises the amount of waste produced.</p>
SA 16: Employment	<p>The Council's response to the needs of the economy and jobs in the district is to provide a clear economic strategy to</p>

SA Objective	Mitigation
	<p>support sustainable economic growth for the next 20 years and provide this type of growth at existing high value employment sites and within the M5/A38 growth corridor. The plan also allocates employment sites which will help deliver the supply of land required over the plan period to support this type of growth. This should help give a high number of residents access to employment opportunities in the district.</p> <p>Furthermore Strategic Objective SO2 seeks to provide a strong, diverse, vibrant local economy and enhance skills and job Opportunities in the district.</p>
SA 17: Economic growth	<p>The Council's response to the needs of the economy and jobs in the district is to provide a clear economic strategy to support sustainable economic growth for the next 20 years and provide this type of growth at existing high value employment sites and within the M5/A38 growth corridor. The plan also allocates employment sites which will help deliver the supply of land required over the plan period to support this type of growth. This should help ensure economic growth of a level which can be sustained will be optimised in the district.</p> <p>Furthermore Strategic Objective SO2 seeks to provide a strong, diverse, vibrant local economy and enhance skills and job Opportunities in the district.</p>

7 Monitoring

- 7.1 The SEA Regulations require that *“the responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action”* and that the environmental report should provide information on *“a description of the measures envisaged concerning monitoring”*. Monitoring proposals should be designed to provide information that can be used to highlight specific issues and significant effects, and which could help decision-making.
- 7.2 Monitoring should be focused on the significant sustainability effects that may give rise to irreversible damage (with a view to identifying trends before such damage is caused) and the significant effects where there is uncertainty in the SA and where monitoring would enable preventative or mitigation measures to be taken. In line with a precautionary approach, those SA objectives against which no significant adverse effects have been identified but uncertainty is recorded have been included in the monitoring framework. Significant adverse effects and/or uncertain effects have been identified against all SA objectives with the exception of SA objective 5: Vibrant communities
- 7.3 **Table 7.1** overleaf sets out a number of suggested indicators for monitoring the potential sustainability effects of the Emerging Strategy. Where possible, this draws from the proposed monitoring framework for the adopted Stroud District Local Plan (2015) that has been prepared by Stroud District Council. Monitoring indicators have been updated to take account of representations received in relation to the SA Scoping Report during consultation. Note that the indicators proposed are included as suggestions at this stage may change when Stroud District Council prepares its monitoring framework.
- 7.4 The data used for monitoring in many cases will be provided by outside bodies. Information collected by other organisations (e.g. the Environment Agency) can also be used as a source of indicators. It is therefore recommended that the Council continues the dialogue with statutory environmental consultees and other stakeholders that has already been commenced, and works with them to agree the relevant sustainability effects to be monitored and to obtain information that is appropriate, up to date and reliable.

Table 7.1 : Proposed Monitoring Framework for the Stroud Local Plan Review

SA objectives	Proposed monitoring indicators
<p>Housing SA 1: To provide affordable, sustainable and decent housing to meet local needs.</p>	<ul style="list-style-type: none"> • Net additional dwellings • Percentage of Affordable housing • Percentage reduction of unfit/non-decent homes • Net additional transit and residential pitches (gypsy, traveller and travelling showpeople) permitted and completed to meet identified requirement. • Number of small scale housing applications permitted. • Quantum of new self build housing. • Number of permitted schemes for rural housing.
<p>Health SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.</p>	<ul style="list-style-type: none"> • Capacity of health services. • Percentage of people who regularly take 30 minutes exercise more than three times a week. • Number of playgrounds to NPFA standard. • Health inequality indicators. • Net change in floorspace of sports centres. • Quantity of public open space lost. • Quantity of public open space provided. • Percentage of the city's population having access to a natural greenspace within 400 metres of their home. • Length of greenways constructed. • Hectares of accessible open space per 1000 population
<p>Social Inclusion SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population</p>	<ul style="list-style-type: none"> • Number of leisure facilities per 1,000 people. • Percentage in fuel poverty.

SA objectives	Proposed monitoring indicators
<p>Crime SA 4: To reduce crime, anti-social behaviour and disorder and the fear of crime.</p>	<ul style="list-style-type: none"> • Percentage of population concerned about crime. • Incidences of crime per 1,000 population.
<p>Vibrant Communities SA 5: To create and sustain vibrant communities.</p>	<p><i>No likely significant or uncertain effects identified that require monitoring.</i></p>
<p>Services and Facilities SA 6: To maintain and improve access to all services and facilities.</p>	<ul style="list-style-type: none"> • Number of libraries per 1,000 people. • Number of visits to libraries in Stroud per annum. • Number of visits to leisure facilities in Stroud per annum. • Quantity of community facilities lost through development. • Quantity of new community facilities. • Net change in floorspace of cultural uses in the town centres.
<p>Biodiversity/Geodiversity SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.</p>	<ul style="list-style-type: none"> • Number of planning applications involving a BAP habitat being created or managed as a result of new development. • Number of trees with preservation orders in place. • Number of planning applications with conditions to ensure works to manage or enhance the condition of SSSI features of interest. • Percentage area of SSSIs in adverse condition as a result of development. • Percentage of granted planning permissions within areas of biodiversity and geodiversity value. • Area of net biodiversity gain. • Number of planning approvals that generated any adverse impacts on sites of acknowledged biodiversity importance. • Percentage of major developments generating overall biodiversity enhancement. • Hectares of biodiversity habitat delivered through strategic site allocations.
<p>Landscapes/Townscapes SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.</p>	<ul style="list-style-type: none"> • Percentage of development approved in areas where there is a need to take account of landscape character. • Number of applications permitted within the AONB. • Amount of new development in AONB with commentary on likely impact.

SA objectives	Proposed monitoring indicators
<p>Historic Environment SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.</p>	<ul style="list-style-type: none"> • Number of Listed Buildings (all grades) in the district. • Number and percentage of Listed Buildings at Risk (all grades). • Number of listed buildings. • Number of non-designated heritage assets (these can be, but are not always, "locally listed"). • Number of conservation areas with an up to date appraisal and heritage at risk survey. • Number of instances of substantial harm to non-designated heritage assets. • Amount of development permitted on land safeguarded for the canals. • Total distance (metres) of restored canal.
<p>Air Quality SA 10: To ensure that air quality continues to improve.</p>	<ul style="list-style-type: none"> • Percentage of residents driving a car or van. • Percentage of trips made using walking or cycling. • Number of applications that do not provide a travel plans and / or transport assessment that is contrary to transport advice. • Percentage of new residential development within 800 metres of public transport facilities. • Number of applications located within 800 metres of a District, Local or Neighbourhood Centre. • Number of permitted schemes with accompanying public transport facilities included within 400 metres. • Level of air pollution recorded through Air Quality Strategy.
<p>Water Quality SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.</p>	<ul style="list-style-type: none"> • Percentage increase in use of recycled water. • Number of developments in Drinking Water Safeguarding Zones and Source Protection Zones. • Number of planning permissions granted contrary to the advice of the Environment Agency on water quality grounds. • Percentage of the District's main water bodies achieving 'good' status.
<p>Flooding SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the economy and the environment.</p>	<ul style="list-style-type: none"> • Number of planning permissions granted contrary to the advice of the Environment Agency on flood risk grounds.

SA objectives	Proposed monitoring indicators
<p>Efficient Land Use SA 13: To improve efficiency in land use and protection of soil quality through the re-use of previously developed land and existing buildings and encouraging urban renaissance.</p>	<ul style="list-style-type: none"> • Percentage of new development built on previously developed land • Percentage of dwellings completed at between 30 and 50 dwellings per hectare. • Percentage of new development at Tier 1 settlements.
<p>Climate Change SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.</p>	<ul style="list-style-type: none"> • Percentage of buildings classed A-C in energy efficiency. • Number of renewable energy developments. • Renewable energy capacity installed (by type) (measured in kW). • Percentage of trips made using green modes of transport.
<p>Waste SA 15: To minimise the amount of waste produced, maximise the amount that is reused or recycled, and seek to recover energy from the largest proportion of the residual material, and achieve the sustainable management of waste.</p>	<ul style="list-style-type: none"> • Amounts of household, construction and demolition and commercial and industrial waste produced. • Percentage increase in waste recycled. • Percentage reduction in production of hazardous waste.
<p>Employment SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.</p>	<ul style="list-style-type: none"> • Percentage increase in employment • Amount of new employment floorspace within identified employment areas. • Number of business registrations and de-registrations. • Quantum of land developed by employment type and location. • Quantum of employment land lost to non-employment development • Quantum of land developed by employment type and location (key employment areas).

SA objectives	Proposed monitoring indicators
<p>Economic SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/ skilled workforce and support the long term competitiveness of the District.</p>	<ul style="list-style-type: none"> • Increase in GVA of the region • Increase in investment in region • Increase in education facilities in region • The percentage of young people aged 16 to 18 not in education, training or employment. • Proportion of vacant shops in all centres. • Number of non-retail uses on primary & secondary frontages. • Percentage class A1 retail use in primary frontage. • Percentage class A1 retail use in secondary frontage. • Number of applications granted contrary to advice in relation to retail impact assessment.

8 Conclusions

- 8.1 The Stroud District Local Plan Review Emerging Paper has been subject to a detailed appraisal against the Sustainability Appraisal (SA) objectives which were developed at the Scoping stage of the SA process. Alternative development site options and policy approaches relating to how the key issues and needs of the district have also been appraised. Similarly alternatives relating to the future growth strategy for the district and settlement boundaries have also been appraised.
- 8.2 The Emerging Strategy Paper proposes a reasonably large amount of housing, employment and other development within Stroud District to meet its future needs. Therefore, alongside the more overtly positive effects identified in relation to providing new homes and sites for employment and other uses (including community development and open space), the SA has identified the potential for negative effects on many of the environmental objectives including biodiversity, the historic environment and landscape.
- 8.3 The Emerging Strategy Paper however also includes the Council's approach to addressing the key issues and needs of the district which include local economy and jobs, town centres, local need for housing and local green spaces and community facilities. The approach to addressing these issues seeks in part to protect and enhance the economic, social and environmental conditions of the Borough. The Council's approach to addressing these issues as set out in the Emerging Strategy will guide the future development of policy requirements in the next stage of the Local Plan Review to help mitigate the potential negative effects of the overall scale of development proposed. It is expected that as these policies are worked up in greater detail by the Council, the specific requirements set out to mitigate potential adverse effects will more directly help to address significant effects identified through this SA.
- 8.4 The likely cumulative effects of the Emerging Strategy were described in **Chapter 6** of this report. Potentially significant positive cumulative effects were identified in relation to SA objectives 1: housing, 16: employment and 17: economic growth, although for SA objective 16: employment it is expected that the significant positive effect identified would be in combination with a minor negative effect for an overall mixed cumulative effect. Potentially significant negative cumulative effects were identified in relation to SA objective 7: biodiversity/geodiversity, 8: landscape/townscape, 9: air quality, 11: water quality and 13: efficient land use, in combination with a minor positive effect for an overall mixed cumulative effect.

Next steps

- 8.5 This SA Report will be available for consultation between 16th November 2018 and 18th January 2019. Following the consultation on the SA of the Local Plan Review Emerging Strategy Paper, the responses received and the findings of the SA will be considered and incorporated into the next iteration of the Stroud Local Plan Review.

LUC

November 2018