

# West of England



## West of England Joint Spatial Plan

**Sustainability Appraisal  
Draft SA Report  
October 2017**

Bath and North East Somerset Council  
Bristol City Council  
North Somerset Council  
South Gloucestershire Council

## **Appendix C**

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### 1. Introduction

What the SEA Regulations states:

#### **Interpretation**

##### **2.—(1) In these Regulations—**

*“plans and programmes” means plans and programmes, including those co-financed by the European Community, as well as any modifications to them, which—*

- (a) are subject to preparation or adoption by an authority at national, regional or local level; or
- (b) are prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and, in either case,
- (c) are required by legislative, regulatory or administrative provisions;

#### **Environmental assessment for plans and programmes: first formal preparatory act on or after 21<sup>st</sup> July 2004**

##### **5.—(1) Subject to paragraphs (5) and (6) and regulation 7, where—**

*(a) the first formal preparatory act of a plan or programme is on or after 21st July 2004; and (b) the plan or programme is of the description set out in either paragraph (2) or paragraph (3), the responsible authority shall carry out, or secure the carrying out of, an environmental assessment, in accordance with Part 3 of these Regulations, during the preparation of that plan or programme and before its adoption or submission to the legislative procedure.*

##### **(2) The description is a plan or programme which—**

- (a) is prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, and
- (b) sets the framework for future development consent of projects listed in Annex I or II to Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC.

##### **(3) The description is a plan or programme which, in view of the likely effect on sites, has been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive.**

#### **Consultation procedures**

##### **13.—(1) Every draft plan or programme for which an environmental report has been prepared in accordance with regulation 12 and its accompanying environmental report (“the relevant documents”) shall be made available for the purposes of consultation in accordance with the following provisions of this regulation.**

##### **(2) As soon as reasonably practicable after the preparation of the relevant documents, the responsible authority shall—**

- (a) send a copy of those documents to each consultation body;
- (b) take such steps as it considers appropriate to bring the preparation of the relevant documents to the attention of the persons who, in the authority’s opinion, are affected or likely to be affected by, or have an interest in the decisions involved in the assessment and adoption of the plan or programme concerned, required under the Environmental Assessment of Plans and Programmes Directive (“the public consultees”);

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*(c) inform the public consultees of the address (which may include a website) at which a copy of the relevant documents may be viewed, or from which a copy may be obtained; and*

*(d) invite the consultation bodies and the public consultees to express their opinion on the relevant documents, specifying the address to which, and the period within which, opinions must be sent.*

*(3) The period referred to in paragraph (2)(d) must be of such length as will ensure that the consultation bodies and the public consultees are given an effective opportunity to express their opinion on the relevant documents.*

## **Purpose of the Report**

1.1 Sustainability Appraisal (SA) is a structured process for identifying and evaluating the likely significant effects – economic, environmental and social – of implementing a plan. It is a statutory requirement for all emerging Development Plan Documents, incorporating the separate requirements for Strategic Environmental Assessment (SEA).

1.2 The preparation of the West of England Joint Spatial Plan (JSP) has been subject to a fully integrated Sustainability Appraisal and Strategic Environmental Assessment in line with the requirements of:

- the Planning and Compulsory Purchase Act 2004 and National Planning Policy Framework which set out the requirement for SA of emerging Development Plan Documents;
- the SEA Regulations (*Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004*) which require an environmental assessment to be carried out on certain plans and programmes prepared by public authorities that are likely to have a significant effect upon the environment; and
- applicable Government guidance including Planning Practice Guidance.
- The 2005 guidance from the Office of the Deputy Prime Minister, *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents* ('the ODPM guide'), though no longer having formal status, remains a useful source of practical advice.

## **Components of the Report**

1.3 Work has been undertaken to accompany each stage of JSP production. Chapter 3 identifies all the documents produced. At this stage, to accompany the Publication Version of the JSP, the documents added are this covering report and the appraisal tables for each of the Strategic Development Locations (SDLs). This report is the main output of the SA.

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1.4 The documents produced meet the requirements for an environmental report set out in the SEA Regulations. Appendix X signposts the relevant elements of the SA Report in relation to the contents required.

1.5 This chapter introduces the SA process. The rest of this report is structured as follows:

- Chapter 2 describes the content and main objectives of the JSP;
- Chapter 3 outlines the methodology used in the SA;
- Chapter 4 describes the plan's relationship with other plans, programmes and environmental / sustainability objectives;
- Chapter 5 describes the sustainability baseline;
- Chapter 6 sets out the reasons for selecting the alternatives dealt with and the results of the appraisal of options considered in the development of the draft JSP;
- Chapter 7 sets out the results of the appraisal of the policies within the draft JSP;
- Chapter 8 outlines initial proposals for monitoring the sustainability effects of the options; and
- Chapter 9 describes the next steps.

### **How to comment on this Report**

1.6 The Draft SA will be published for consultation alongside the Publication Version from 22<sup>nd</sup> November 2017 to 10th January 2018. During the consultation period statutory environmental bodies and other interested parties, will have the opportunity to review the draft SA Report. The SA Report will then be finalised for submission along with the plan to the Secretary of State.

1.7 If you have comments, please send these to:

West of England Joint Planning Consultation  
c/o South Gloucestershire Council  
PO Box 299  
Corporate Research and Consultation Team  
Civic Centre, High Street, Kingswood  
Bristol  
BS15 0DR

Email: [comment@jointplanningwofe.org.uk](mailto:comment@jointplanningwofe.org.uk)

### **Other assessments undertaken**

1.8 The JSP has been subject to a parallel Habitats Regulations Assessment (HRA). The HRA of plans is a requirement of the Habitats Regulations 2010 and relates to the protection of European designated nature conservation sites. European sites are collectively termed Natura 2000 sites and comprise Special Areas

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for Conservation (SACs) and Special Protection Areas (SPAs) together with Ramsar sites. The potential effect of the JSP on these sites will be considered in detail as part of the assessments carried out under the Habitat Regulations.

1.9 The full HRA report will be published alongside the SA for consultation on the 22nd November 2017.

1.10 An Equalities Impact Assessment has also been produced. The Equality Impact Assessment and SA are two separate processes. The EqIA has been carried out alongside the SA to assess the impact on equality on emerging policies and documents.

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### 2. West of England Joint Spatial Plan

What the SEA Regulations say...

***Information for environmental reports (Schedule 2):***

- 1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.***

#### Process

2.1 The Joint Spatial Plan (JSP) is a formal development plan document being prepared by the four West of England (WoE) unitary authorities of Bath and North East Somerset Council, Bristol City Council, North Somerset Council and South Gloucestershire Council. It will cover the period 2016-2036.

2.2 The JSP identifies two Housing Market Areas that operate across the West of England. One focussed on the wider Bristol HMA, which includes Weston-Super-Mare as a sub housing market area, and the other focussed on Bath. The Bath SHMA has been updated to provide consistent information to 2036.

2.3 The Spatial Strategy has been formulated to deliver the Objectively Assessed Need of 97,800 new homes and the Housing Requirement of 102,200 new homes. The SHMA prepared for the West of England evidenced an Objectively Assessed Need (OAN) for housing of 97,800 dwellings for the plan period 2016-2036. This comprises 85,000 dwellings for Wider Bristol Housing Market Area (HMA) & 12,800 dwellings for the Bath HMA. It identifies an overall supply of 105,500 new homes to enable flexibility.

2.4 The JSP will provide the framework to deliver up to 105,500 additional new homes between 2016 and 2036 of which, around 32,200 (30%) should be affordable homes. The housing target supports the planned job growth of 82,500 jobs for the period 2016-2036 (or 125,900 jobs between the period from 2010-2036).

2.5 Once adopted, the JSP will form the strategic framework for Local Plans and Neighbourhood Plans. It is through these that the JSP policies will be put into effect. These plans will make site-specific allocations and include other detail not available at this stage and will, where required, be subject to SA and/or SEA in their own right.

#### Content

2.6 The JSP is a strategic plan, focused on provision to meet identified housing and employment needs over the plan period, through area-wide policies and through the identification of SDLs.

2.7 The plan's objectives – its 'strategic priorities' – are:

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- "...1. To meet in full the identified needs for housing, as far as possible, in a sustainable way. In particular to make a substantial step change in the supply of affordable housing across the plan area.*
- 2. To accommodate the economic growth objectives of the LEP Strategic Economic Plan, particularly growth of existing employment centres such as the Enterprise Zones and Enterprise Areas and economic rebalancing to help address inequality and improve accessibility to jobs.*
- 3. To ensure a spatial strategy where new development is properly aligned with infrastructure and maximises opportunities for sustainable and active travel.*
- 4. Substantially improve the quality and sustainability of new development by;*
- Incorporating a Placemaking approach*
  - Facilitating health, social and cultural well-being*
  - Integrating high quality, multi-functional green infrastructure*
  - Reducing greenhouse gas emissions and ensure resilience to the impacts of climate change.*
- 5. To protect and enhance the sub-region's diverse and high quality natural, built and historic environment and secure a net gain in biodiversity.*
- 6. To retain the overall function of the Bristol & Bath Green Belt."*

These plan objectives are important in the development of options to be appraised (see Chapter 6) because 'reasonable alternatives' are defined "taking into account the objectives and the geographical scope of the plan or programme".

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### 3. Methodology

What the SEA Regulations say...

**Preparation of environmental report:**

**12.—(1) Where an environmental assessment is required by any provision of Part 2 of these Regulations, the responsible authority shall prepare, or secure the preparation of, an environmental report in accordance with paragraphs (2) and (3) of this regulation.**

**(2) The report shall 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.**

**(3) The report shall include such of the information referred to in Schedule 2 to these Regulations as may reasonably be required, taking account of—**

**(a) current knowledge and methods of assessment;**

**(b) the contents and level of detail in the plan or programme;**

**(c) the stage of the plan or programme in the decision-making process; and**

**(d) the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.**

**(4) Information referred to in Schedule 2 may be provided by reference to relevant information obtained at other levels of decision-making or through other Community legislation.**

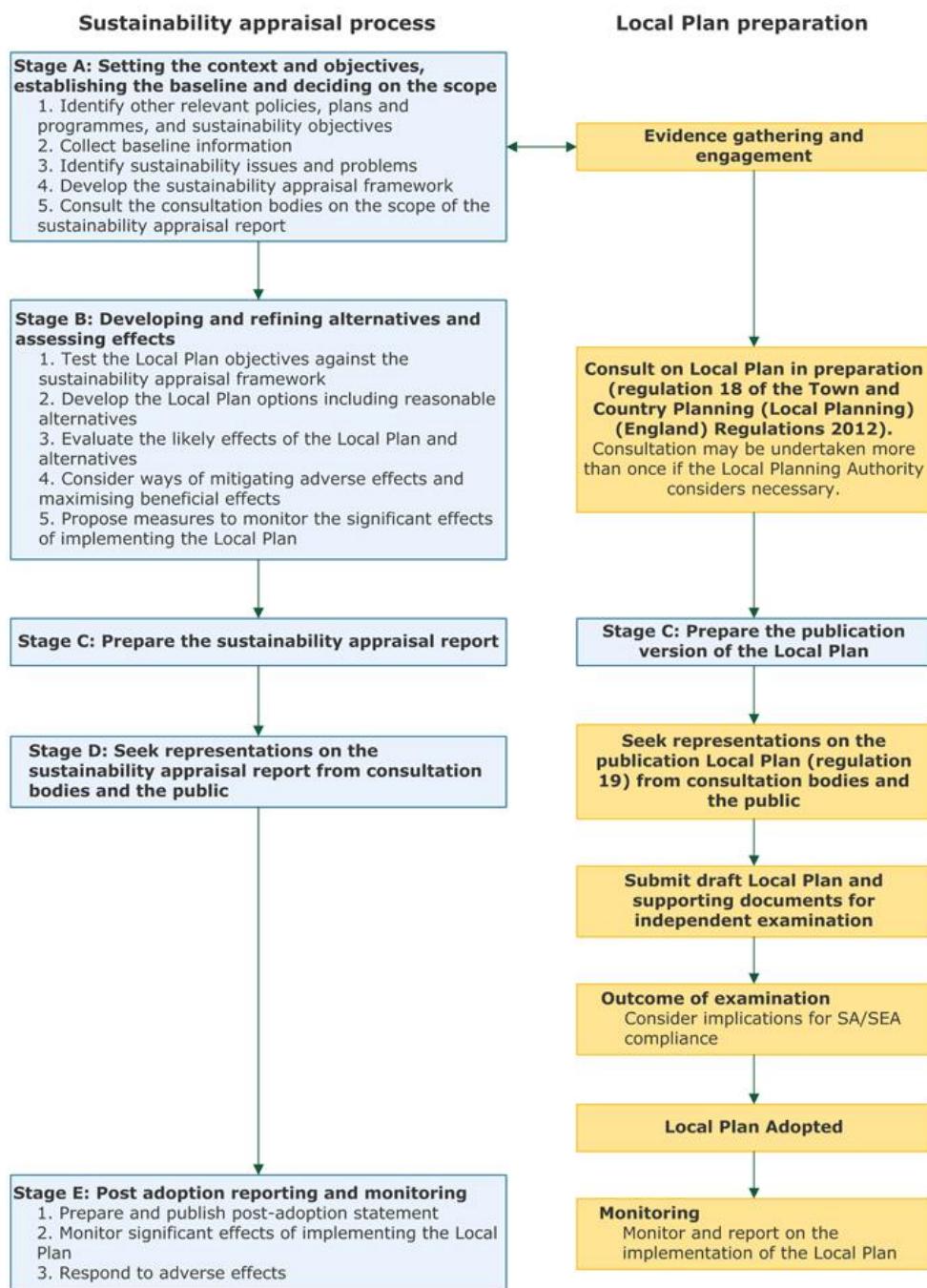
**(5) When deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies.**

### Developing the SA approach

3.1 The methodology for this appraisal was developed in accordance with the ODPM guide as outlined in Table 1 below.

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**Table 1:** SA process and Local Plan preparation



3.2 This chapter outlines the work undertaken on the SA at each stage of plan-making. Previously published SA reports for the Issues and Options (November 2015) and Towards the Emerging Spatial Strategy (November 2016) should be read as component parts of this report. Table 2 below outlines the documents produced at each stage.

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**Table 2:** SA iterations

Iteration and publication date	Stage	Documents	Weblinks
0 – June 2015	A	<ul style="list-style-type: none"> <li>Draft Scoping Report</li> </ul>	
1 – November 2015	A/B	<ul style="list-style-type: none"> <li>Revised Scoping Report</li> <li>Interim SA report: Issues &amp; Options</li> </ul>	<a href="https://www.jointplanningwofe.org.uk/consult.ti/JSP2015/view?objectId=274387#274387">https://www.jointplanningwofe.org.uk/consult.ti/JSP2015/view?objectId=274387#274387</a> <a href="https://www.jointplanningwofe.org.uk/consult.ti/JSP2015/view?objectId=274387#274387">https://www.jointplanningwofe.org.uk/consult.ti/JSP2015/view?objectId=274387#274387</a>
2 – November 2016	A/B	<ul style="list-style-type: none"> <li>Methodology Paper</li> <li>Towards an Emerging Spatial Strategy SA</li> </ul>	<a href="https://www.jointplanningwofe.org.uk/consult.ti/JSPEmergingSpatialStrategy/view?objectId=295187#295187">https://www.jointplanningwofe.org.uk/consult.ti/JSPEmergingSpatialStrategy/view?objectId=295187#295187</a>
3 – November 2017	B/C	<ul style="list-style-type: none"> <li>Draft SA Report</li> </ul>	<a href="https://www.jointplanningwofe.org.uk/consult.ti">https://www.jointplanningwofe.org.uk/consult.ti</a>

3.3 The SA has been developed alongside other workstreams. It does not consider the Green Belt status of potential development locations, nor does it consider in detail whether proposed developments are viable and deliverable. Scoring reflects the assumptions on deliverability and phasing made by the plan itself. However, where further work is needed to confirm these, the scoring and potential for mitigation also reflects this uncertainty.

### Stage A: Scoping

3.4 Stage A has been completed. A SA Scoping Report, to help ensure that the SA process for the JSP covers the key sustainability issues for spatial planning in the West of England, was produced and consulted on from 15th June to 20th July 2015. The ‘consultation bodies’ for the purposes of the SEA Regulations – Historic England, Natural England and the Environment Agency – were consulted. The Scoping Report was revised, responding to the comments received during the consultation, and republished in November 2015.

3.5 The Scoping Report presents the outputs of all the tasks in Stage A (the scoping phase of the SA) and includes baseline information, review of relevant plans and identification of significant sustainability issues for the JSP. From the information collected, an “SA Framework”, or set of sustainability objectives, was developed, against which the various components of the JSP have been appraised.

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The SA framework provides a way in which sustainability effects can be described, analysed and compared. The process of undertaking a SA involves the identification of sustainability objectives which are used to measure and monitor the success of the plan. These can differ from the plan's own objectives; they are designed to document the full range of relevant economic, environmental and social effects rather than to define what the plan aims to achieve. A draft SA Framework was included in the Scoping Report and has been updated following consultation on the Scoping Report. This updated version of the SA Framework has been used to appraise the sustainability of the JSP at each stage of its preparation.

3.6 The starting point for this SA framework are the Scoping Reports prepared for WoE authorities' Development Plans. These were reviewed and amended to ensure their relevance to the scope of the JSP. The policy context and baseline information have since been reviewed to ensure that they remain up-to-date. The revised policy context and a summary of the baseline information are provided as Appendices A and B respectively. Appendix C reproduces the current SA Framework. This includes the 21 objectives against which the plan's policies have been scored.

### **Stage B: Assessing Options**

3.7 The integration of sustainability into the plan starts formally at the stage of Issues and Options. The effects of the options have been assessed in broad terms with the aim of assisting in the selection of the preferred options. The interim SA report was produced and published and subject to public consultation alongside the JSP Issues and Options document from 9th November 2015 to 29th January 2016.

3.8 Through the process of preparing the draft Plan options were further reviewed due to changes in circumstances such as market change, site availability and changes in national guidance. Therefore, relevant options were reviewed taking into account the objectives of the JSP.

3.9 Therefore, Alternative Options appraisals (as reported in Appendix C) helped to inform the draft Plan. The appraisals of the draft Plan policies are presented in Appendix D.

3.10 Matrices have been used to identify the sustainability effects of the options. These matrices are designed to help identify the potential impacts of the plan on each SA topic (guided by the SA Questions). The matrix for the assessment of the options is a relatively simple matrix. It allows for a discussion and comparison of each of the options under consideration. The simplicity of the matrix is designed to reflect the fact that strategic options should (and in many cases can only be) assessed in broad terms due a lack of spatial expression. A combination of expert judgement and analysis of baseline data has been used to judge the effects of the issues and options.

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3.11 The Sustainability appraisal process relies on expert judgement, which is guided by knowledge of the likely impacts of the plan, the baseline data available and responses and information provided by consultees and other stakeholders. The assessment has been carried out and reported using a matrix enabling an expert, judgement-led qualitative assessment to be made in most cases. The assessment does not seek to identify the likely level of influence of other strategies or policy documents and represents a ‘face value’ assessment of the likely effects of the JSP proposed policy options.

3.12 A ‘precautionary approach’ is taken, especially where qualitative judgements and mitigation is suggested if there is any doubt as to the effect of the plan.

### **Stage C: Preparing the SA Report**

3.13 This document is the main part of the SA Report. It outlines the significant effects on the environment, social and economic factors of the Publication Version and the reasonable alternatives considered as part of the options assessment. It outlines the reasons for selecting the preferred option and the measures envisaged to prevent, reduce and as fully as possible offset any significant effects of implementing the plan.

### **Stage D: Consulting on the SA Report**

3.14 The draft SA Report has been produced for consultation alongside the Publication Version of the JSP. The consultation period for the draft plan and SA Report is 22nd November 2017 to 10th January 2018. The next stages of the production of the JSP are:

Spring 2018	: Submission to the Secretary of State
Mid 2018	: Examination in Public; and
Late 2018	: Adoption

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### 4. Planning context

What the SEA Regulations state:

**Information for environmental reports (Schedule 2):**

- 1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.**
- 5. The environmental protection objectives, established at international, Community or Member State 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.**

4.1 As identified in Chapter 3, the purpose of this stage is to document how the plan is affected by outside factors and suggest ideas for addressing any constraints. In order to fulfil the requirements of the SEA Regulations (above), a review has been undertaken of other relevant plans, policies, programmes (PPPs) and objectives.

4.2 Reviews of relevant plans and programmes were presented in the Scoping Report. The review has been updated to take account of publications since the last update of the review undertaken in June 2015 and this is presented in Appendix A.

4.3 Many of the plans, policies and programmes that have been reviewed pick up on some aspect of the “sustainable development” agenda but this may not be their primary purpose. Some of the key “sustainable development” messages coming out of the review of plans, policies and programmes are presented in Table X.

**Table X: Sustainable Development Messages Identified in the Review of Plans, Policies and Programmes**

Topic	Sustainable Development Messages
Air quality and noise	<ul style="list-style-type: none"><li>• Improve air quality and reduce air, noise and light pollution;</li></ul>
Biodiversity	<ul style="list-style-type: none"><li>• Protect and enhance biodiversity;</li></ul>
Climate change and flood risk	<ul style="list-style-type: none"><li>• Flood risk is increasing with climate change and there is a need to adapt to all predicted consequences of climate change;</li></ul>
Community, health and well-being	<ul style="list-style-type: none"><li>• Improve peoples' health and reduce health inequalities;</li><li>• Improve access to health and well-being facilities</li><li>• Protect and provide access to appropriate levels of open space and community facilities;</li><li>• Create mixed, safe communities and promote social inclusion;</li></ul>
Employment	<ul style="list-style-type: none"><li>• Promote high quality and sustainable tourism;</li><li>• Ensure a resilient and economically sustainable food system;</li><li>• Facilitate building competitive economy and improve access to employment and training opportunities</li></ul>

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Energy and carbon emissions	<ul style="list-style-type: none"> <li>• Support low carbon economies;</li> <li>• Achieve successful and competitive businesses both urban and rural;</li> <li>• Promote energy efficiency;</li> <li>• Promote and provide for renewable energy;</li> </ul>
Historic environment	<ul style="list-style-type: none"> <li>• Protect and enhance the historic environment;</li> <li>• Promote good design and sustainable construction;</li> </ul>
Housing	<ul style="list-style-type: none"> <li>• Meet strategic housing requirements for the district;</li> <li>• Provide affordable housing to meet identified needs;</li> <li>• Promote good design and sustainable construction;</li> <li>• Incorporate the principles of sustainable development;</li> </ul>
Natural resources	<ul style="list-style-type: none"> <li>• Make the best use of previously developed land;</li> <li>• Promote higher densities of development in accessible locations;</li> <li>• Protect soil resources including high quality agricultural land;</li> <li>• Promote water efficiency;</li> <li>• Promote local food production</li> </ul>
Landscape	<ul style="list-style-type: none"> <li>• Protect and provide access to appropriate levels of open space;</li> <li>• Protect and enhance landscape settings</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Reduce the need to travel</li> <li>• Promote a sustainable way of travelling</li> <li>• Encourage walking and cycling and public transport</li> </ul>

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### 5. Baseline information

What the SEA Regulations say...

**Information for environmental reports (Schedule 2):**

- 2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.**
- 3. The environmental characteristics of areas likely to be significantly affected.**
- 4. 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 Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.**

5.1 The comprehensive baseline information which describes the WoE area is presented in the Scoping Report [weblink]. Key baseline data has been updated and presented in Appendix B and Table 3 below provides a summary. In addition, trend information reported in the Scoping Report has been used to identify the “future baseline”, the potential evolution of the baseline in the absence of the plan.

**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<b>Air quality</b>	
Clean air is a basic requirement for health and wellbeing. Road transport is the primary source of urban air pollution. A number of different air-borne particulates are antagonistic to the sensitive lining of airways and act as irritants, causing difficulties and discomfort. The incidence of asthma has been increasing, particularly among children. There is a clear association between long-term exposure to particulate air pollution (PM <sub>2.5</sub> and sulphate and sulphur dioxide) and a reduction in life-expectancy caused by cardiovascular disease. The interaction between particulates, nitrogen dioxide and ozone can aggravate these issues.  <b>Individual AQMAs</b> <b>Bristol City Council</b> - in the City Centre where nitrogen dioxide (NO <sub>2</sub> ) and fine particles (PM <sub>10</sub> ) are being monitored. <b>Bath &amp; North East Somerset Council</b> - in Bath, Keynsham and Saltford. <b>South Gloucestershire Council</b> - in the district: Kingswood, Staple Hill and Cribbs Causeway (adjacent to M5 Junction 17). The main air pollutant of concern locally is nitrogen dioxide (NO <sub>2</sub> ), which originates primarily from road traffic emissions.	There are parts of the West of England, particularly the central urbanised areas, where on average over the course of a year air quality is unlikely to achieve national objectives. Nitrogen oxides like nitric oxide (NO) and nitrogen dioxide (NO <sub>2</sub> ) can react in the air to produce ozone and other harmful pollutants that lead to smog. Nitrogen dioxide emissions can also be further oxidised in air to acid gases, which contribute to the production of acid rain.  Particulate matter, especially very fine particles, is thought to have a very large impact on human health and is one of the major problems facing environmental professionals. PM <sub>10</sub> particles and even smaller fractions (PM <sub>2.5</sub> ) can reach deep into our lungs and can cause severe respiratory problems as well as possibly

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**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan				
No AQMA in <b>North Somerset</b> . However the council has a duty to monitor and manage air quality within the District.	<p>contributing to many other conditions and diseases.</p> <p>The WoE Transport Strategy is a major transport programme designed to provide an improved public transport system, relieve traffic congestion and improve emissions.</p>				
<b>Noise</b>					
Bristol City Council mapped noise levels from traffic across the city. However there is a gap in the baseline data regarding noise levels in other areas.	<p>Noise problems related to traffic may increase. There is uncertainty over what will happen to neighbourhood noise in the future.</p>				
<b>Biodiversity</b>					
	B&NES	Bristol	North Somerset	South Glos	<p>The region's biodiversity is at threat from development; human activities such as pollution, roads, disturbance, farming practices; loss of habitat; loss of food sources and a changing climate.</p> <p>Climate change is likely to disadvantage some species through altering seasons, changing habitats, causing habitat fragmentation (e.g. through drought) and introducing new species which could compete with others for space or could prey on them. However, climate change may also benefit some species for the same reasons.</p>
Wildlife Site of International Importance (Ramsar)		1 (Severn Estuary)	1 (Severn Estuary)	1 (Severn Estuary)	
Special Areas of Conservation (SAC)	2 (Bath & Bradford-on-Avon Bats; North Somerset and Mendip Bats)	2 (Avon Gorge Woodland, Severn Estuary)	4 (Avon Gorge Woodlands, Mendip Limestone Grasslands, North Somerset and Mendip Bats, Severn Estuary)	1 (Severn Estuary)	
Special Protection	1 (Chew)	1 (Severn Estuary)	1 (Severn Estuary)	1 (Severn Estuary)	

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**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area					Suggested evolution without the plan
n Area (SPA)	Valley Lake				
National Nature Reserves (NNR)			2		
Sites of Special Scientific Interest (SSSIs)	24	5	56, covering c. 3,483 ha of area	22, covering 553 hectares	
Local Nature Reserves (LNR)	tbc	8	13, covering 291.424ha	X, covering over 109 ha	
Local Geologic al Sites (LGS)	tbc		77	269 Sites of Nature Conserva tion Interest (SNCIs)	
Local Wildlife Sites	tbc	83	205, covering 8509.39ha	53 Regionall y Importan t Geologic al / Geomor phologic al Sites (RIGS)	
<b>Climate change and flood risk</b>					
<p>The areas prone to flooding tend to follow the main rivers.</p> <p>The areas most at risk of flooding are:</p> <p><b>Bath</b> - at risk of flooding from rivers, sewers, surface water, artificial sources and to a lesser degree from groundwater (springs). Level 2 SFRA has shown that large proportions of the central area and areas closest to the River Avon are in Flood Zone 3a and 3b (the highest risk). The Black and Veatch Bath Flood Risk Management</p>					

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**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<p>Project Technical Note (February 2012) confirms that the impact of raising the development sites is a loss of conveyance, rather than a loss of flood storage. It recommends, where necessary, to raise all the development sites and the access/egress routes and implement compensatory flow conveyance schemes. Bath Waterside Project is being progressed.</p> <p><b>Keynsham</b> -at risk of flooding from rivers (which may be tidally influenced), surface water, sewers and artificial sources. A level 2 SFRA has shown that a small area to the north of the Somerdale site is in Flood Zone 2. A small area to the South East of the town centre may also be Flood Zone 3a.</p> <p><b>Midsomer Norton</b> -at risk of flooding from rivers, surface water and sewers. A level 2 SFRA has shown that the town centre is in Flood Zone 1. Small areas are at higher risk of flooding. Midsomer Norton benefits from a flood alleviation scheme during a 1% AEP river flood event.</p> <p><b>Radstock</b> - at risk of flooding from rivers, surface water and sewers. A level 2 SFRA has shown that some of the central parts of the town centre are in Flood Zone 2 and 3a.</p> <p><b>Chew Magna and downstream communities</b> -at risk of flooding from rivers, surface water and artificial sources.</p>	
<b>Community and well being</b>	
<p>In rural areas the level of service deprivation is naturally high due to geographical distance to the services. There is increasing diversity within local communities and identified pockets of deprivation amongst growing levels of affluence across the region.</p> <p>The English Indices of Multiple Deprivation identify the most deprived areas across the country. An updated national dataset is being released in July 2015. This will be utilised within the sustainability appraisal to create a revised baseline understanding of the most deprived Lower Super Output Areas (LSOA) within the WoE. The appraisal will consider whether spatial scenarios are located in or near the most deprived LSOA's and whether specific approaches are included to address deprivation in those areas.</p> <p>Individual Authorities IMD information</p> <p>The following descriptions utilise 2010 IMD data (using the 'Average of LSOA Scores' measure).</p> <p><b>Bristol</b> is ranked 79 out of 326 English authorities. It has 32 LSOAs in the most deprived 10% in England for multiple deprivation (compared to 39 in 2007 and 35 for 2004). Of these 32 LSOAs there are 14 in the most</p>	<p>If not addressed, crime, deprivation and access to services are likely to remain problems.</p> <p>The patterns of deprivation are likely to follow existing trends and will respond to external pressures.</p> <p>Nationally, predicted future trends in population dynamics are: rising household numbers, reflecting increasingly rapid decline in household size, due to ever increasing life expectancy, more households separating and higher inward migration both from other areas of the UK and internationally.</p> <p>Obesity is an increasing issue facing the whole of the country.</p> <p>Without the Plan, the market led development approach may result in inappropriate uses take</p>

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**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<p>deprived 5% and 1 in the most deprived 1%. The number of people living in the most deprived 10% of LSOAs is 60,665 people, which is 14% of all residents living in Bristol.</p> <p><b>In Bristol</b> as a whole 69,500 – 16% of the population – suffer from income deprivation. There are 22 LSOAs where more than a third of all people live in income deprivation. On a ward basis, more than a third of people are income-deprived in Lawrence Hill (36%) and Filwood (35%). The whole of Lawrence Hill ward falls within the most deprived 10% of areas in England with the exception of 'Redcliffe'.</p> <p><b>Bath and North East Somerset</b> is one of the least deprived authorities in the country, ranking 247 out of 326 English authorities. It is ranked 49 out of 56 unitary authorities. Despite these relatively low levels of deprivation, pockets of high deprivation remain within the area. The following five areas are within the most deprived 20% of the country, Twerton West, Whiteway, Twerton, Fox Hill North and Whiteway West. A research project to understand the issues facing south west Bath is currently underway.</p> <p><b>North Somerset</b> is ranked as 224th out of 326 English authorities. This relative affluence however, hides a number of deprived urban wards. North Somerset has the 7th largest range of inequality of all of the 326 authorities in England. It includes areas within both the most deprived 1% nationally, and the least deprived 1% nationally. 15 of the Lower Level Super Output Areas are within the most deprived 25% of areas nationally, all of these areas being in Weston-Super-Mare.</p> <p><b>South Gloucestershire</b> is ranked as 272nd out of 326 authorities. Compared to many other local authority areas, levels of deprivation in South Gloucestershire are low, but there are sub ward pockets of relatively high deprivation. South Gloucestershire's most deprived LSOA's are generally located within the urban wards of Staple Hill, Kings Chase, Patchway, Woodstock and Filton.</p> <p>In terms of the IMD (the composite measure of multiple deprivation), South Gloucestershire only has one LSOA (within Staple Hill) within the most deprived 20% of areas in England. In terms of the Employment Deprivation Domain, South Gloucestershire has two LSOAs (in Staple Hill and Kings Chase) within the most deprived 20% of areas in England.</p>	up the key regeneration sites resulting not meeting to create balance communities.
<b>Economy and employment</b>	
There is an uneven spatial distribution of skills levels in the West of England region.	Without intervention the pattern of skills levels and

## Appendix C

**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<p>Within <b>Bristol</b> the economic planning strategy is set out in Core Strategy BCS8 'Delivering a Thriving Economy'. This sets out that 220000m<sup>2</sup> of additional office space will be provided in the city centre, South Bristol and within designated centres. The policy also protects Primary Industrial and Warehousing (PIWA) areas for existing and future employment use. PIWAs are designated on the proposals map, the Site Allocations and Development Management Policies Plan, contains supporting policy DM18.</p> <p>Bristol also contains an Enterprise Zone, called Bristol Temple Quarter. The planning approach to this area is set out in the Bristol Central Area Plan, policy BCAP 35.</p> <p>The <b>Bath and North East Somerset</b> Core Strategy sets out the economic strategy promoting a net increase of 10,300 jobs. The planning approach for the Enterprise Area in Bath is set out in the Core Strategy, policy B2.</p> <p><b>North Somerset's</b> Core Strategy (Policy CS20) seeks to provide at least 10,100 additional employment opportunities 2006-2026. This is additional to the existing backlog of jobs in relation to past housing growth at Weston-super-Mare. The overall jobs target for North Somerset is therefore about 14,000 jobs.</p> <p><b>South Gloucestershire's</b> Core Strategy seeks to maintain a supply of economic development land in accordance with the Plan's strategy for development set out in Policy CS5. This land is distributed between the North and East Fringe of Bristol urban area, Yate &amp; Chipping Sodbury, Thornbury, the Rural Area and Severnside.</p>	<p>wages within the district is likely to remain the same.</p> <p>The patterns of deprivation are likely to follow existing trends and will respond to external pressures.</p> <p>Unemployment in some wards, again, may remain the same, without intervention to improve skills levels and the diversity of employers in the area.</p>
Historic environment	
<p>Bath was designated a World Heritage site in 1987.</p> <p>There are 37 Conservation Areas, 11 Registered Historic Parks and Gardens, 84 SAMs and approximately 6,400 listed buildings and structures in <b>B&amp;NES</b> (of which 5,000 lie within the City of Bath). There are currently 17 Conservation Areas, 9 Scheduled Monuments, 4 buildings and 1 Designated Park and Garden on the Heritage at Risk Register 2010.</p> <p>The area which was formerly part of the Somerset coalfield retains a rich industrial heritage.</p> <p><b>North Somerset</b> has 36 Conservation Areas, 8 Registered Historic Parks and Gardens, 70 SAMs and 1,072 listed buildings and structures. There are currently 4 Conservation Areas, 2 Scheduled Monuments and 3 listed buildings on the Heritage at Risk Register.</p>	<p>If no development takes place (in the absence of the plan) the value of the designated sites and areas should remain the same. However, climate change may put historic assets at risk due to extreme weather events, flooding, hotter, drier summers and wetter winters.</p>

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**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<b>South Gloucestershire</b> has 2074 Listed Building entries of which 2% are Grade I, 6% are Grade II*, and 92% are Grade II, also over 1,470 locally listed buildings, 38 Scheduled monuments, 30 Conservation Areas, 8 registered parks and gardens and 1 battlefield.	
<b>Housing</b>	
<p>High house prices and a lack of affordable housing make it difficult to attract people to the area and to retain key workers.</p> <p>Lower quartile house price in Bath and North East Somerset are more than 9 times the lower quartile resident annual earnings. Nearly half the overall need for affordable housing in B&amp;NES is concentrated in Bath City.</p> <p>Of the households in need, newly forming households unable to afford to buy are the dominant group in Bath &amp; North East Somerset. Achieving an appropriate mix of decent, affordable homes will need to be a priority in any new development proposals.</p> <p>Specific attention needs to be devoted to ensuring energy efficiency, water consumption, and the use of sustainable building materials.</p> <p>In 2011, there are 3,850 HMOs in the district (as defined under planning regulations), the majority of which are located in the City of Bath. There is a strong geographical clustering of HMO in specific parts of the City. The wards of Widcombe, Westmoreland and Oldfield have the highest numbers of HMO with shared facilities, there are estimated to be up to 1,500 properties of this type in these wards alone. To encourage a sustainable community in Bath, by encouraging an appropriately balanced housing mix across Bath, supporting a wide variety of households in all areas, Article 4 Direction was issued to manage the change of use from Family Homes (Use Class C3) to Houses in Multiple Occupation (Use Classes C4 of Sui Generis) across the entire City of Bath.</p>	<p>Without the pro-active planning represented by the Plan, it is unlikely that B&amp;NES will be able to provide enough affordable housing to satisfy future requirements.</p> <p>Without the Plan, the market led development approach may result in inappropriate uses take up the key regeneration sites in Bath resulting not meeting the Council's economic and housing objectives.</p> <p>With the improvements in the Building Regulations the sustainability of new houses is likely to improve.</p>
<b>Land</b>	
<p>B&amp;NES has prepared a Remediation Statement (2002) relating to contaminated land located in Keynsham. This land has been remediated, including the removal of all material, contaminated and uncontaminated, from the site and, therefore, permanently removing the pollutant linkage.</p> <p>No further land is registered as contaminated under Part 2A of the Environmental Protection Act 1990.</p>	<p>As developments occur on contaminated land they will be remediated. Therefore, the amount of contaminated land will decrease over the next 5-10 years.</p> <p>The amount of development that is built on brownfield land should remain high in the district.</p>

## Appendix C

**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
82% of new or converted dwellings in the District completed during 2008/09 were built on previously developed land.  In the year to April 2016 some 55% of dwelling completions were on previously developed land (PDL). The South Gloucestershire Local Plan sets a target that 50% of all new dwelling completions should be on PDL, since 2004 this target has been exceeded in all except the 2013/2014 monitoring year.	Without the Plan, the market led development approach may result in inappropriate uses take up the key regeneration sites in Bath resulting not meeting efficient use of the brownfield land within the settlement boundaries.
<b>Landscape</b>	
There are 2 AONBs partly within the West of England – Mendip and Cotswolds AONBs.  The district has a varied landscape represented by 18 LCAs. Large areas of B&NES are Green Belt (61%).  Bath has a distinctive townscape in the way that buildings respond to the distinct topography. Many buildings and terraces follow contours, often overlooking open ground and panoramic views.  The character of Keynsham, Norton-Radstock and the villages are enriched and partly defined by the landscapes which surround and in some cases penetrate the built up areas.  Large areas of Radstock are covered by a Conservation Area.  <b>South Gloucestershire</b> has a varied and complex landscape which includes the nationally protected landscapes of the Cotswolds Area of Outstanding Natural Beauty (AONB) and the protected habitats of the Severn Estuary, whilst being an important area for growth and economic development.	Landscape character may be threatened by lack of appropriate management, inappropriate development and climate change.  Without the Core Strategy, areas deemed to be of poor townscape character will not be proactively improved, leading to a degradation in townscape quality.
<b>Transport</b>	
The current Joint Local Transport Plan (JLTP3) was published in 2011 and sets out the priorities for transport to 2026. In particular, the JLTP3 seeks to achieve a better connected, more balanced and more customer focused transport network. The four West of England authorities, in partnership with the Department for Transport and public transport operators, have invested £80 million to improve key bus corridors as part of the Greater Bristol Bus Network (GBBN) programme which was completed in 2012.  <b>B&amp;NES</b> There is no direct link to the motorway network in B&NES and Bath suffers particularly from the sub-	The high proportion of the district's population recorded in 2001 who travel to work by car will continue unless alternative and more attractive modes of transport are provided.  Increased traffic would exacerbate all of the existing problems outlined in the baseline data.  The Plan facilitates the implementation of the Transport Strategy. Without the Plan, traffic congestion and air

## Appendix C

**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<p>region's poor internal transport links. The A4 through Keynsham is subject to high levels of congestion. Norton Radstock is connected to Bath by the A367, a popular tourist route to the West Country, and to Bristol via the A362 and A37, the latter also extending south to the A303.</p> <p>Bath is well served by conventional bus services, with good penetration to most parts of the City. These services have difficulty in keeping to timetable due to congestion. High levels of out-commuting from Midsomer Norton and Radstock means that the link road south from Bath to Keynsham, Midsomer Norton and Radstock copes with high levels of commuter traffic.</p>	quality are likely to remain the same or will be worsen.
<p><b>North Somerset</b></p> <p>Despite high car ownership levels, North Somerset contains pockets of deprivation with two wards in Weston-super-Mare within the bottom 5% of most deprived wards nationally. This is reflected in car ownership levels with up to 49% having no access to a car in these areas. Accessibility by public transport, walking and cycling to services, facilities and employment in the rural areas is limited. Information for 2010/2011 indicates the following:</p> <ul style="list-style-type: none"> <li>• 54% of households live within 30 minutes travel time by public transport of those health facilities in the Bristol Health Service Plan.</li> <li>• 55% of households live within 40 minutes travel time by public transport from key employment sites.</li> </ul> <p>GBBN investment, together with further investment in other schemes and improvements, has in recent years contributed to increases in bus passenger numbers. The number of passengers boarding services in North Somerset increased by 11% from 2010/11 to 5,286,127 passengers in 2013/14.</p> <p>Cycling trips have also continued to grow with continued investment in new routes and cycling facilities as well as ongoing promotion of cycling in the area. Department for Transport figures show a 52% increase in cycling on North Somerset roads between 2000 and 2013.</p> <p>On a single selected survey day in November 2013, 7,583 rail journeys were made using the five stations in North Somerset. Since 2003, when it stood at 4,507, the number has increased every year.</p>	

## Appendix C

**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<p>Bristol Airport is the largest airport serving the South West and South Wales, the ninth largest in the UK and the UK's fifth largest outside London. During 2013, air transport movements increased by 8.8% to 55,640 as a result of the transfer of corporate charter movements from Filton and the growth of scheduled services to Europe. Total aircraft movements increased by 6.7% to 65,299 (compared with 61,206 in 2012 and 66,179 in 2011). Terminal air passengers increased by 3.5%, to a total of 6,125,149. In August 2013, the Airport recorded the busiest month in its history, handling over 700,000 passengers. An estimated 13% of air passengers used public transport for their journey to or from the airport. The number of people working at the airport in summer 2013 was 2,618 (full-time equivalent), up from 2,585 in 2012. Planning permission was granted in February 2011 for a comprehensive expansion of the airport facilities.</p> <p><b>South Gloucestershire</b> has higher than average car ownership and usage. According to the 2011 Census: 86.9% of households have access to at least one car or van, compared to 74.2% nationally.</p> <p>There were 158,289 cars or vans in South Gloucestershire, an average of 1.47 cars or vans per household.</p> <p>In general terms, households without a car tend to be located in parts of the district which are more urban in character, such as Kingswood and Patchway.</p> <p>In 2016, the proportion of people who say they normally cycle to work (13.5%) increased marginally on the 2015 figure (13.3%).</p> <p>In 2015/16 just over 9.4 million journeys were made by bus. This is a 5.8% increase on the previous year and continues the overall trend for increasing bus use in recent years.</p>	
<b>Waste</b>	
<p>B&amp;NES is one of the top recycling authorities within the country, recycling 41% of household waste in 2009/10.</p> <p>Waste infrastructure: 2 x waster transfer stations (Bath and Radstock), 9 x Recycling Collection Points, 3 x Recycling Centres (bulkier items), 1 x railhead, and 2 x refuse collection and cleansing depots.</p> <p>Every day B&amp;NES sends 15 containers by road to Shortwood Landfill Site in South Gloucestershire and Dimmer Landfill Site in Somerset.</p> <p>In 2015/16, 120,590 tonnes* of waste was produced by households in <b>South Gloucestershire</b>, an increase on the</p>	<p>Levels of recycling have been increasing and there is no reason to believe that this trend will change.</p> <p>However, household waste generation may also rise, as a result of new development and population growth and therefore total amounts of residual waste may also increase.</p>

## Appendix C

**Table 3:** Summary of the sustainability baseline data

Sustainability baseline / issues / characteristics of the area	Suggested evolution without the plan
<p>amount produced the previous year. The increase in overall household waste is proportionate to the increase in the number of new households built since 2014/15. In 2015/16, 47.7%* of household waste was recycled compared to 47.5% in the previous year. Although more recycling was collected via the kerbside recycling services, including flats, the overall amount of residual waste (black bin and Sort It Centres) also increased and less recycling was collected at the Sort It Centres compared to 2014/15.</p>	
<p>Since the start of the contract with SITA (now Suez) in 2000, the total amount of waste sent to landfill is for another year in succession at its lowest point. In 2015/16 only 13% of household waste was sent to landfill compared to around 15% in 2014/15. More material has been diverted from landfill to alternative treatment methods – thermal treatment by Suez, mechanical biological treatment (MBT) and the treatment and recycling of street sweepings. A number of changes are currently being implemented and planned for to further improve recycling rates including future changes to the existing kerbside recycling services and containers in 2017, as well as current changes to the Sort It Centre services to make them more accessible and easier to use e.g. new vehicle registration system and van permit scheme. Some improvements for recycling have already been introduced at the Sort It Centres including providing facilities for residents to separate recycling from bagged waste which is brought to the centres.</p>	
Energy and carbon emissions	
<p>CO<sub>2</sub> emissions from B&amp;NES = 1182 kt annually. Emissions from Domestic sources is 2.7 tonnes per capita (UK average = 2.6 tonnes)</p> <p>There is no record of any major renewable energy schemes within the district. There are a few small scale schemes undertaken on an individual basis but no comprehensive survey of existing installations has been undertaken and this may be a gap in baseline information.</p> <p>A renewable energy research study has been undertaken.</p> <p>Initiatives to improve energy efficiency and utilise renewable energy need to be addressed in relation to the historic buildings.</p> <p>Renewable energy currently generated in <b>South Gloucestershire</b> is equal to 1.5% of projected 2020 energy demand. If all the consented renewable energy schemes are developed, the amount of renewable</p>	<p>With the expected improvements in the Building Regulations, the energy efficiency of new dwellings is likely to improve over the next 5 years.</p> <p>Historic buildings may be difficult to make more energy efficient in light of existing planning controls.</p> <p>On-site renewable energy technologies are developing in response to Part L of the Building Regulations and targets set in other areas of the UK. The percentage of energy generated from renewable sources is likely to increase in the future.</p>

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<b>Table 3:</b> Summary of the sustainability baseline data	
<b>Sustainability baseline / issues / characteristics of the area</b>	<b>Suggested evolution without the plan</b>
energy being generated will be equal to 4.8% of projected 2020 total energy demand which is more than half of the 7.5% target. An assessment of opportunities to deliver additional renewable and low carbon energy in South Gloucestershire by 2020 is being undertaken, and feasibility studies into the potential for strategic district heat networks are currently underway.	
<b>Water</b>	
<p>Wessex Water has two unused abstraction licences at Newton Meadows and Monkton Combe that may be invested in, in the future. They are implementing sustainable reduction in abstractions in the Malmesbury area and on the Hampshire Avon, outside of this CAMS area but used to supply water into this catchment.</p> <p>During a drought, in the upper reaches of the Bristol Avon flows can be increased by more than 30Ml/d using water taken from boreholes.</p> <p>In Somerset some water must be released from reservoirs to compensate for the impact that dams have on flows.</p> <p><b><u>CheW Valley Lake pumped storage</u></b> The use of Chew Valley Lake for storage of water from the River Avon near Saltford, for use when flows in the river are low in very dry periods</p> <p><b><u>Low volume appliances in new homes</u></b> Working with developers to provide water efficient appliances in new homes and, where applicable, providing appropriate subsidies</p>	With the expected improvements in the Building Regulations, the water efficiency of new dwellings is likely to improve over the next 5 years.

## Appendix C

### 6. Reasonable alternatives and difficulties encountered

What the SEA Regulations state:.

***Information for environmental reports (Schedule 2):***

***8. 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.***

#### Selecting alternatives

6.1 The ODPM guide and the Planning Practice Guidance state that to meet the requirement to justify the alternatives selected the report should outline:

- the main strategic options considered, how they were identified and the reasons for selecting the options;
- a comparison of the social, environmental and economic effects of the options and how social, environmental and economic issues were considered in choosing the preferred options; and
- other options considered, and why these were rejected.

6.2 The SA iterations mirrored those of the JSP. Iteration 1 (2015) identified a number of typologies – ‘urban intensification’, ‘urban extension’, ‘town expansion’, ‘other settlements / locations’, and ‘dispersed’ – and broad locations associated with each, based on a call for sites and other information on development potential. For Iteration 2 (2016), this range of options was refined, identifying for each of the settlements studied potential directions for expansion. Based on the findings, the options were then divided into those to be taken forward into the preferred strategy and those considered not to be reasonable alternatives beyond this stage. The latter are listed in Table 2 of the document Towards an Emerging Spatial Strategy [weblink], which identifies the reasons why they were filtered out.

6.3 For Iteration 3 (2017), the preferred strategy to be assessed consists of provision that is not specific to a known location and that which is included in the 12 SDLs. The former includes urban intensification and non-strategic growth (up to 500 dwellings). This provision is assessed through SA of the relevant JSP policies. Specific appraisal tables have been produced for each of the SDLs; their relationship to previous work is described in Table 4 below. Iteration 3 was a mix of old and revised locations and took into account the more precise requirements for development set out in the JSP wording.

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**Table 4:** SDLs appraised in 2017

Policy	SDL	Description
7.1	North Keynsham	An expansion of Keynsham is proposed to the north, a location appraised in 2016.
7.2	Whitchurch	An expansion of Whitchurch is proposed to the south east, a location appraised in 2016.
7.3	Land at Bath Road, Brislington	An expansion of Bristol is proposed to the east
7.4	Backwell	An expansion of Backwell is proposed to the west, a location appraised in 2016.
7.5	Banwell Garden Village	Banwell Garden Village is proposed as freestanding development close to the existing village of Banwell. It was not appraised in the 2016 SA, which focused on the existing village.
7.6	Churchill Garden Village	Churchill Garden Village is proposed as freestanding development close to the existing village of Churchill. It was not appraised in the 2016 SA, which focused on the existing village.
7.7	Nailsea	An expansion of Nailsea is proposed to the west. This location was appraised in 2016 but for a less extensive form of development. Previous findings have been reviewed on the basis of the current proposals.
7.8	Buckover Garden Village	Buckover Garden Village provides opportunity to deliver a new Garden Village in the West of England. The site was appraised in the 2016 SA.
7.9	Charfield	An expansion of Charfield is proposed to the North, West, South and East. The site was appraised in the 2016 SA.
7.10	Coalpit Heath	An expansion of Coalpit Heath is proposed to the West. The site was appraised in the 2016 SA.
7.11	Yate	An expansion of Yate is proposed to the North and West. The site was appraised in the 2016 SA.
7.12	Thornbury	An expansion of Thornbury is proposed to the East. The site was appraised in the 2016 SA.

6.4 Each SDL has been assessed as an individual location rather than for its contribution to a strategy. The *Issues and Options* document set out for discussion a number of possible spatial scenarios: protection of the Green Belt, concentration at the Bristol urban area, transport-focused, a more even spread, and a new settlement or limited number of new settlements. Arguments for and against each of these were presented. The spatial scenarios were not subject to SA, which would have required greater certainty about the locations to be included in each scenario. A brief comparison was done of Green Belt versus non-Green Belt locations. SA of alternative strategies becomes increasingly difficult as the number of possible locational combinations increases. It is also somewhat artificial where a preferred

## **Appendix C**

strategy combines elements of several theoretical possibilities in order to respond to a range of local constraints and opportunities.

### **Undertaking the assessment**

6.5 The SA was undertaken internally by officers from the four councils, using readily available information. The core team was not directly involved in the production of the plan itself.

### **Baseline data**

6.6 Some data gaps have been identified within Appendix B. Where there are gaps in the baseline, this has made it difficult to predict the future evolution of the baseline characteristics without the JSP. There is no ‘noise map’ for the plan area and little other information is available relating to the noise baseline. Tranquillity maps produced by the Campaign to Protect Rural England are available but are now 10 years old. Effects on the noise environment, including exposure to existing noise, have therefore not been assessed.

6.7 Data on agricultural land quality is taken from the provisional Agricultural Land Classification maps, updated by reference to Natural England’s ALC Strategic Map, supplemented by detailed surveys where available. Where no detailed survey is known, the SA has identified the potential for agricultural land quality to be of a specified grade. The scale of the ALC maps is such that there is scope for considerable local variation and so detailed survey would be needed for confirmation.

### **Proposal definition**

6.8 The level of detail available for assessment increased through the stages of JSP preparation. This allowed scores to be refined from ‘uncertain’ to ‘positive’ or ‘negative’. In particular, the policy requirements for each SDL set out in the wording of the Publication Version have allowed more ‘++’ scores, on the basis that the proposal would not normally be permitted to proceed unless this mitigation or enhancement is included. Some uncertainties remain, mainly where viability / deliverability has yet to be tested.

## Appendix C

### 7. Appraisal of effects

What the SEA Regulations say...

***Information for environmental reports (Schedule 2):***

- 6.** *The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as—*
- (a) biodiversity;*
  - (b) population;*
  - (c) human health;*
  - (d) fauna;*
  - (e) flora;*
  - (f) soil;*
  - (g) water;*
  - (h) air;*
  - (i) climatic factors;*
  - (j) material assets;*
  - (k) cultural heritage, including architectural and archaeological heritage;*
  - (l) landscape; and*
  - (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).*
- 7.** *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.*

#### Range of effects

7.1 The time frames used are as follows:

Short term	0-5 years (2016-2021)
Medium term	5-10 years (2021-2026)
Long term	10-20 years (2026-2036)

‘Long-term’ also includes effects extending or arising beyond the plan period. National policy is assumed to endure for the long-term. Some climate change effects will also be long-term.

All effects are assumed to be long-term unless there is evidence to the contrary. At the SDLs, short-term effects are discounted because of the lead-in times required to make a start on development. This does not mean that a start could not be made, only that it is considered unlikely.

7.2 All effects are assumed to be permanent, at least for the lifetime of the development, unless there is evidence that they are temporary.

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7.3 Positive and negative effects have been defined according to the following scale:

0	no discernible effect
-	negative effect capable of mitigation
--	negative effect incapable of mitigation
+/-	mixed effect
+	positive effect capable of enhancement
++	positive effect incapable of enhancement
?	uncertain effect

Where necessary, these scores have been combined, for example '+/?' where the scale of development could result in the effect described but there is some uncertainty over viability / deliverability.

7.4 Secondary, cumulative and synergistic effects have not been identified. Given the limited detail available in a strategic plan such as the JSP, the likelihood of all these types of effect has been treated as uncertain.

7.5 Cumulative effects are likely but difficult to identify. The main cumulative effect is on climate change, where development in principle increases carbon emissions. Infrastructure capacity constraints can also arise as a result of incremental growth in demand but the JSP seeks developer contributions to address these. The JSP plan period overlaps with the adopted Core Strategies of the four councils and so part of the housing requirement will be met through developments that are committed but not yet built. These are therefore additions to the JSP baseline that have not been appraised as part of the JSP, though each Core Strategy was subject to its own SA prior to adoption. The JSP SA has been carried out with the benefit of local knowledge of where these sites are. However, some SDLs are new to large-scale development and in these cases there will be little or no cumulative impact from current housebuilding to be taken into account. The case for new transport infrastructure takes into account the current demand for travel and that generated by all new development over the JSP period, from whatever source. Cumulative effects on biodiversity are in part addressed through the Habitats Regulations Assessment, which looks at cumulative effects on particularly sensitive receptors, including the most important protected habitats. Cumulative effects on flood risk are of concern in some areas and the use of sustainable drainage systems to limit or reduce risk is therefore an important mitigation. Cumulative effects on school rolls are uncertain because reliable projections at primary school level cannot be made more than five years ahead.

7.5 Cumulative and synergistic effects may also arise in conjunction with the plans and programmes of other bodies, outside the planning system. However, work undertaken by, for example, public utilities, is often directed towards meeting needs arising from development and where such bodies are statutory consultees within the planning system there are procedures in place for co-operation.

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7.6 The 21 sustainability objectives used cover the full range of issues from (a) to (l). There are inter-relationships between the various issues studied (issue (m)) and therefore overlap between some of the sustainability objectives used. These should be clear from a reading of the appraisal tables.

### **Mitigation**

7.7 The final column of each appraisal table sets out any potential to mitigate the negative effects identified. In some cases, this will be through further detail to be made available through Local Plans or planning applications. The SDLs are of such a scale that it is to be expected that they will provide significant new infrastructure to meet the needs arising from development, which could also benefit existing residents and/or their environment.

### **Appraisal tables**

7.8 The appraisal tables for

- Vision
- Policies
- SDLs (including updated Summary Table at the start)

are set out as Appendix D.

## Appendix C

### 8. Monitoring

What the SEA Regulations say...

***Monitoring of implementation of plans and programmes:***

**17.—(1) 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.**

**(2) The responsible authority's monitoring arrangements may comprise or include arrangements established otherwise than for the express purpose of complying with paragraph (1).**

***Information for environmental reports (Schedule 2):***

**9. A description of the measures envisaged concerning monitoring in accordance with regulation 17.**

8.1 The monitoring of the JSP will help to:

- monitor the significant effects of the plan;
- track whether the plan has had any unforeseen effects;
- ensure that action can be taken to reduce / offset the significant adverse effects of the plan; and
- provide baseline data for the next SA and to provide a picture of how those factors assessed by the environmental / sustainability criteria are evolving.

8.2 A summary of the proposed approach to monitoring for each objective is in Appendix C, including potential indicators. This will be further developed before submission of the plan. The requirements of the SEA Regulations focus on monitoring the effects of the plan. This equates to both the plan's significant effects and also unforeseen effects. It may be difficult to implement monitoring mechanisms for unexpected effects, or to attribute such effects to the implementation of the JSP when they occur. Due to this difficulty we have suggested a number of more general monitoring indicators which are linked to the SA objectives (contextual indicators, to be appended to DraftSA produced with draft Plan).

8.3 Monitoring forms part of the councils' Annual Monitoring Reports. It will allow them to identify whether the recommended mitigation measures from the SA have been effective and develop further mitigation proposals that may be required where unforeseen adverse effects are identified. In some cases monitoring may identify the need for a policy to be amended or deleted, which could trigger a review of the JSP, or for further policy guidance to be developed (for example a Supplementary Planning Document).

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### 9. Next steps

#### **Adoption**

What the SEA Regulations say...

#### **Restriction on adoption or submission of plans, programmes and modifications**

**8.—(2) A plan or programme for which an environmental assessment is required by any provision of this Part shall not be adopted or submitted to the legislative procedure for the purpose of its adoption before—**

*(a) if it is a plan or programme co-financed by the European Community, the environmental assessment has been carried out as mentioned in regulation 7;*

*(b) in any other case, the requirements of paragraph (3) below, and such requirements of Part 3 as apply in relation to the plan or programme, have been met.*

**(3) The requirements of this paragraph are that account shall be taken of—**

*(a) the environmental report for the plan or programme;*

*(b) opinions expressed in response to the invitation referred to in regulation 13(2)(d);*

*(c) opinions expressed in response to action taken by the responsible authority in accordance with regulation 13(4); and*

*(d) the outcome of any consultations under regulation 14(4).*

#### **Information as to adoption of plan or programme**

**16.—(1) As soon as reasonably practicable after the adoption of a plan or programme for which an environmental assessment has been carried out under these Regulations, the responsible authority shall—**

*(a) make a copy of the plan or programme and its accompanying environmental report available at its principal office for inspection by the public at all reasonable times and free of charge; and*

*(b) take such steps as it considers appropriate to bring to the attention of the public—*

*(i) the title of the plan or programme;*

*(ii) the date on which it was adopted;*

*(iii) the address (which may include a website) at which a copy of it and of its accompanying environmental report, and of a statement containing the particulars specified in paragraph (4), may be viewed or from which a copy may be obtained;*

*(iv) the times at which inspection may be made; and*

*(v) that inspection may be made free of charge.*

**(2) As soon as reasonably practicable after the adoption of a plan or programme—**

*(a) the responsible authority shall inform—*

*(i) the consultation bodies;*

*(ii) the persons who, in relation to the plan or programme, were public consultees for the purposes of regulation 13; and*

*(iii) where the responsible authority is not the Secretary of State, the Secretary of State; and*

*(b) the Secretary of State shall inform the Member State with which consultations in relation to the plan or programme have taken place under regulation 14(4), of the matters referred to in paragraph (3).*

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- (3) *The matters are—*
- (a) *that the plan or programme has been adopted;*
  - (b) *the date on which it was adopted; and*
  - (c) *the address (which may include a website) at which a copy of—*
    - (i) *the plan or programme, as adopted,*
    - (ii) *its accompanying environmental report, and*
    - (iii) *a statement containing the particulars specified in paragraph (4), may be viewed, or from which a copy may be obtained.*
- (4) *The particulars referred to in paragraphs (1)(b)(iii) and (3)(c)(iii) are —*
- (a) *how environmental considerations have been integrated into the plan or programme;*
  - (b) *how the environmental report has been taken into account;*
  - (c) *how opinions expressed in response to—*
    - (i) *the invitation referred to in regulation 13(2)(d);*
    - (ii) *action taken by the responsible authority in accordance with regulation 13(4), have been taken into account;*
  - (d) *how the results of any consultations entered into under regulation 14(4) have been taken into account;*
  - (e) *the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and*
  - (f) *the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.*

9.1 If any significant issues arise through consultation leading to amendments to the JSP, then further consultation would be required. If the changes made to the JSP are significant, they would also need to be subject to SA.

9.2 Once the plan is adopted, a Sustainability Appraisal (SA) Adoption Statement will need to be published in accordance with SEA Reg. 16(4). This legal requirement relates to environmental considerations but it would be good practice to consider sustainability considerations generally and an Adoption Statement is also a requirement of the Local Plan Regulations (Town and Country Planning (Local Planning) (England) Regulations 2012, Reg. 26).

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### APPENDIX C: SA Framework

The framework used to appraise the JSP has been developed and refined at each stage. The sustainability objectives and linked effect criteria, used to score the locations appraised, were first set out in the Revised SA Scoping Report (November 2015). The Methodology Paper (October 2016) identified a number of adjustments required in the light of experience and set these out in an additional column. For this draft SA Report, a further column has been added to identify potential monitoring requirements. Infrastructure mitigation thresholds mentioned here are indicative only. Actual mitigation would be determined on a case-by-case basis dependent on viability, deliverability and site conditions. The assessment of the Publication Version assumes that specific mitigation required by policy is delivered but not mitigation that is to be investigated, as there is no certainty that these investigations would be successful.

Sustainability Objective / Related SEA Topic	Effect Criteria		Adjustments	Monitoring Approach / Potential Indicators
	Positive Effect (+/++)	Negative Effect (-/--)		
<b>Theme 1:</b> Improve the health, safety and wellbeing of all				
<b>1a. Achieve reasonable access to public open space</b> (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)  <b>SEA Topic</b> Landscape Human Health Population	<ul style="list-style-type: none"> <li>Development in location providing access to suitable (in terms of both quantity and quality) public open space</li> <li>Development on or adjacent primary walking network / public rights of way routes.</li> </ul> <p><b>Reasonable Distance</b></p>	<ul style="list-style-type: none"> <li>Development in location lacking access to suitable (in terms of both quantity and quality) public open space</li> <li>Development on public open space which reduces quantity, quality and accessibility.</li> </ul>	<ul style="list-style-type: none"> <li>Consistency / objectivity unlikely to be achieved at this stage: LPA standards / data availability differ. NSC have included 2km distance from major open spaces.</li> <li>Generally the standards used are:</li> </ul>	Local plans / masterplans should ensure POS standards are met.

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	<p><i>Open Space 400m</i></p> <ul style="list-style-type: none"> <li>• Development outside public rights of way network</li> </ul> <p><b><i>Reasonable Distance</i></b></p> <p><i>Open Space 400m</i></p>	<ul style="list-style-type: none"> <li>• Development outside public rights of way network</li> </ul> <p><b><i>Reasonable Distance</i></b></p> <p><i>Open Space 400m</i></p>	<p>400m from playgrounds, 800 metres from natural spaces, countryside in reasonable walking distance, e.g. via PRoWs.</p> <ul style="list-style-type: none"> <li>○ [+] or [-], depending on compliance.</li> <li>○ [++] where range of facilities is exceptionally good, e.g. both major and minor POS, or urban fringe site with direct access to POS plus PRoW access to countryside.</li> <li>○ [?] where location already includes POS but it is not known whether this would be retained or replaced by development.</li> </ul>	
<b>1b. Minimise impacts on air quality and locate sensitive development</b>	<ul style="list-style-type: none"> <li>• Sensitive uses (residential, schools, children's facilities,</li> </ul>	<ul style="list-style-type: none"> <li>• No consideration or inclusion of mitigation</li> </ul>	<ul style="list-style-type: none"> <li>○ [+] no AQMA, not next to motorway.</li> </ul>	Local plans / masterplans should ensure that provision is made.

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<p><b>away from areas of poor air quality</b></p> <p><b>SEA Topic</b> Air Climatic factors Human health Population</p>	<p>food production and distribution) placed outside of AQMA</p> <ul style="list-style-type: none"> <li>• Construction methods / design to reduce and / or eliminate air pollution within new sensitive development</li> <li>• Multiple trees included to assist in reducing poor air quality</li> </ul>	<p>techniques / methods proposed for sensitive development in areas of high air pollution and AQMAs</p> <ul style="list-style-type: none"> <li>• Development which will significantly increase pollution in and around AQMA</li> </ul>	<ul style="list-style-type: none"> <li>○ [+/?] close to AQMA – additional traffic could lead to deteriorating conditions.</li> <li>○ [-] AQMA or next to motorway.</li> <li>○ [--] if no mitigation exists.</li> <li>○ Note need for transport impact assessment as framework for mitigation.</li> <li>○ Note nearby railway line if this may give rise to an air quality issue. Evidence on rail traffic levels may be insufficiently clear to affect the score.</li> </ul>	
<p><b>1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)</b></p> <p><b>SEA Topic</b> Material assets</p>	<ul style="list-style-type: none"> <li>• Development generating need for health facilities within reasonable distance.</li> </ul> <p><b>Reasonable distance</b> Hospital 5km GP Surgery 1200m</p>	<ul style="list-style-type: none"> <li>• Development generating need for health facilities outside reasonable distance.</li> </ul> <p><b>Reasonable distance</b> Hospital 5km GP Surgery 1200m</p>	<ul style="list-style-type: none"> <li>○ [++] location is within the specified distance of all 5 aspects.</li> <li>○ [+] 1-4 aspects.</li> <li>○ Otherwise, [-] or [--], depending on potential for mitigation.</li> </ul>	<p>Local plans / masterplans should ensure that provision is made.</p>

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Population	<i>Dentist 1200m Opticians 800m Pharmacies 800m</i>	<i>Dentist 1200m Opticians 800m Pharmacies 800m</i>	<ul style="list-style-type: none"> <li>○ At least 1,500 homes needed to deliver a small satellite surgery, but trend is towards super surgeries.</li> </ul>	
<b>Theme 2:</b> Support communities that meet people's needs				
<b>2a. Deliver a suitable quantum of high quality housing for the West of England sub-region</b>  <b>SEA Topic</b> Material assets Population	<ul style="list-style-type: none"> <li>• Development that contributes to meeting the needs identified by the wider Bristol SHMA</li> <li>• Development that does not contribute to meeting the needs identified by the wider Bristol SHMA</li> </ul>	<ul style="list-style-type: none"> <li>○ Generally [++) as all locations deliver housing within one of the relevant HMAs – now including Bath as well as Bristol.</li> <li>○ Exception only where slope angle and on-site restrictions could severely limit development potential, resulting in [0] score.</li> </ul>	Local plans / masterplans should ensure that provision is made.	
<b>2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of</b>	<ul style="list-style-type: none"> <li>• Development that contributes to meeting the needs identified by the wider Bristol SHMA</li> <li>• Development that does not contribute to meeting the needs identified by the wider Bristol SHMA</li> </ul>	<ul style="list-style-type: none"> <li>○ As 2a: housing quantum.</li> <li>○ Note greenfield as more viable and so</li> </ul>	Local plans / masterplans should ensure that provision is made.	

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<b>society within the West of England sub-region</b>			offering more affordable housing.	
<b>SEA Topic</b> Material assets Population				
<b>2c. Achieve reasonable access to community facilities</b> (post office, meeting venues, youth centres)	<ul style="list-style-type: none"> <li>Development generating need for community facilities within a reasonable distance</li> </ul> <p><b>Reasonable distance</b></p> <p><i>Post Offices 600m</i>  <i>Meeting Venues 600m</i>  <i>Youth Facilities 400m</i></p>	<p><b>Significant negative effect:</b></p> <ul style="list-style-type: none"> <li>Development generating a need for community facilities, beyond a reasonable distance, with no public transport to community facilities.</li> </ul> <p><b>Negative effect:</b></p> <ul style="list-style-type: none"> <li>Development generating a need for community facilities, beyond a reasonable distance</li> </ul> <p><b>Reasonable distance</b></p> <p><i>Post Offices 600m</i>  <i>Meeting Venues 600m</i>  <i>Youth Facilities 400m</i></p>	<ul style="list-style-type: none"> <li>Consistency / objectivity unlikely to be achieved at this stage: LPA standards / data availability differ.</li> <li>[++) location within specified distance of all 3 aspects.</li> <li>[+] 1-2 aspects.</li> <li>Otherwise, [-] or [--], depending on potential for mitigation.</li> <li>Libraries added as equivalent to meeting venues, as they may have potential for evening use.</li> <li>Around 1,500 homes needed to deliver a new community meeting space.</li> </ul>	Local plans / masterplans should ensure that provision is made.

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<p><b>2d. Achieve reasonable access to educational facilities</b> (primary schools, secondary schools)</p> <p><b>SEA Topic</b> Material assets Population</p>	<ul style="list-style-type: none"> <li>Development generating a need for education facilities within reasonable distance.</li> <li>Development which adds to capacity of educational facilities, where known capacity issues exist.</li> </ul> <p><b>Reasonable distance</b> <i>Primary School 800m Secondary School 1500m</i></p>	<p><b>Significant negative effect:</b></p> <ul style="list-style-type: none"> <li>Development generating a need for educational facilities beyond a reasonable distance, and no public transport access to educational facilities.</li> </ul> <p><b>Negative effect:</b></p> <ul style="list-style-type: none"> <li>Development in location beyond a reasonable distance to education facilities.</li> <li>Development which places capacity on educational facilities, where known capacity issues exist.</li> </ul> <p><b>Reasonable distance</b> <i>Primary School 800m Secondary School 1500m</i></p>	<ul style="list-style-type: none"> <li>Assessment split into primary and secondary, with separate scores reflected in overall score.</li> <li>[++) if mostly within 800m of primary AND mostly within 1500m of secondary.</li> <li>[+] if compliant with only one of these.</li> <li>[ -] if school lacking in the location but potential to provide one. Can combine with positive score as [+/-] if the other type of school is already present.</li> <li>[ --] if impossible to provide a required school (e.g. scale of new housing may be insufficient to fund). This applies mainly to secondary schools: can combine with score for existing</li> </ul>	<p>Local plans / masterplans should ensure that provision is made.</p>
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			<ul style="list-style-type: none"> <li>primary school as [+/- -].</li> <li>○ Around 5,000 homes needed to deliver a new secondary school</li> <li>○ Around 600 homes for a small primary school.</li> <li>○ Note any potential for strategic mitigation: redrawing of notional catchment areas, etc.</li> <li>○ Capacity issues fall into mitigation, i.e. extra classrooms would be needed and form part of developer costs.</li> <li>○ May need to highlight existing school sites that are too small to accommodate extra classrooms. Scope here for [?] score if unclear.</li> </ul>	
<b>2e. Achieve reasonable access to town centre services and facilities</b>	<ul style="list-style-type: none"> <li>• Development within reasonable distance of designated city,</li> </ul>	<p><b>Significant negative effect:</b></p> <ul style="list-style-type: none"> <li>• Development beyond reasonable</li> </ul>	<ul style="list-style-type: none"> <li>○ Consistency / objectivity unlikely to be achieved at this stage: LPAs vary in</li> </ul>	Local plans / masterplans should ensure that provision is made. However, some

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(Designated City, Town and District Centres)	<p>town or district centre.</p> <ul style="list-style-type: none"> <li>• Development which adds to the retail and leisure services and facilities within a city, town or district centre.</li> <li>• Development which would create a demonstrable increase in footfall and potential use of a centre.</li> <li>• Development with potential to create a critical mass / sense of place which would enable conditions / circumstances to establish a new town / district centre</li> </ul> <p><b>Reasonable distance</b></p> <p><i>City centre (plus WsM) 5km (includes access by public transport)</i></p> <p><i>Town / District Centre 1500m</i></p>	<p>distance to designated centres, and no public transport access to town centre services and facilities.</p> <p><b>Negative effect:</b></p> <ul style="list-style-type: none"> <li>• Development beyond a reasonable distance of designated city, town or district centre.</li> </ul> <p><b>Reasonable distance</b></p> <p><i>City centre (plus WsM) 5km (includes access by public transport)</i></p> <p><i>Town / District Centre 1500m</i></p>	<p>approach to defining centres.</p> <ul style="list-style-type: none"> <li>○ Villages are likely to score poorly. Note village shop if there is one but score on access to district centre and above.</li> <li>○ [++] if mostly within both distances.</li> <li>○ [+] if mostly within one distance.</li> <li>○ [-] if mostly beyond 5km of city / WsM centre but with reasonable public transport access available. Can be combined with being within 1500m of district centre, as [+/-].</li> <li>○ [--] if mostly beyond both distances and no reasonable public transport available.</li> <li>○ Around 5,000 homes needed to deliver a new district centre.</li> </ul>	development will be remote from district / town centres.
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<p><b>2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage</b></p> <p><b>SEA Topic</b> Material assets Population</p>	<ul style="list-style-type: none"> <li>Development that helps to regenerate the areas identified as the most deprived 25% of areas in England</li> <li>Development that provides good access to employment opportunities for the areas identified as the most deprived 20% of areas in England</li> </ul>	<ul style="list-style-type: none"> <li>Development that does not help to regenerate the areas identified as the most deprived 25% of areas in England</li> <li>Development that does not provide good access to employment opportunities for the areas identified as the most deprived 20% of areas in England</li> </ul>	<ul style="list-style-type: none"> <li>Where locations adjoin areas of concentrated disadvantage, mitigation column needs to refer to difficulty of making any credible linkage. This may mean that all or most scores are [0] but this is a realistic assessment.</li> </ul>	<p>Local plans / masterplans should ensure that provision is made. However, some development will be remote from these areas.</p>
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### Theme 3: Develop a diverse and thriving economy that meets people's needs

<p><b>3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region</b></p> <p><b>SEA Topic</b> Material assets Population</p>	<ul style="list-style-type: none"> <li>Development that contributes towards the needs identified by the Economic Development Needs Assessment and the outputs and requirements of the Strategic Economic Plan</li> </ul>	<ul style="list-style-type: none"> <li>Development that [does not] contribute towards the needs identified by the Economic Development Needs Assessment and the outputs and requirements of the Strategic Economic Plan</li> </ul>	<ul style="list-style-type: none"> <li>Emphasis of assessment under 3a should be employment development potential rather than current employment opportunities.</li> <li>Most locations suitable for housing will also be suitable</li> </ul>	<p>Local plans / masterplans should ensure that provision is made.</p>
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			<p>for some level of employment provision, though commercial attractiveness may be expected to be higher in the larger settlements where economic opportunities of all kinds are wider.</p> <ul style="list-style-type: none"> <li>○ [++) for towns and above (including urban extensions).</li> <li>○ [+] for villages.</li> <li>○ If evidence exists that a location is unsuited to employment, discount to the next lower score.</li> </ul>	
<p><b>3b. Achieve reasonable access to major employment areas</b></p> <p><b>Major Employment sites</b></p> <p>Enterprise Zones</p> <p>Locally designated key employment areas</p> <p><b>SEA Topic</b></p>	<ul style="list-style-type: none"> <li>• Development within reasonable distance of major employment areas</li> </ul> <p><i>Thresholds to be confirmed:</i></p> <p><i>Walking/Cycling distances,</i></p>	<ul style="list-style-type: none"> <li>• Development beyond reasonable distance of major employment areas</li> </ul> <p><i>Thresholds to be confirmed:</i></p> <p><i>Walking/Cycling distances,</i></p>	<ul style="list-style-type: none"> <li>○ Emphasis of assessment under 3b should be current employment opportunities rather than employment development potential.</li> </ul>	<p>Local plans / masterplans should ensure that provision is made.</p>

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Material assets Population Air Climatic factors	<i>Served by Public Transport</i>	<i>Served by Public Transport</i>	<ul style="list-style-type: none"> <li>○ Consistency / objectivity unlikely to be achieved at this stage: LPAs vary in approach to defining major employment areas / priority sites. As well as EZ / EA and designated employment areas, could consider significant undesignated complexes such as the port and airport.</li> <li>○ No distance thresholds have been established, either in terms of direct access or by public transport. Future work could consider further possible indicators of proximity, journey length, journey time, and mode of travel.</li> <li>○ At this stage, a [+/-] judgement has to be</li> </ul>	
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			<p>made on whether or not good employment opportunities are available in the location assessed.</p> <ul style="list-style-type: none"> <li>○</li> </ul>	
<b>Theme 4:</b> Maintain and improve environmental quality and assets				
<p><b>4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings</b></p> <p><b>Assets</b></p> <p>Listed Buildings, Conservation Areas, Scheduled Ancient Monuments, Registered Historic Parks and Gardens, Unregistered Historic Parks and Gardens Registered Battlefields, Undesignated local assets (HER) World Heritage Site</p>	<ul style="list-style-type: none"> <li>● Development is likely to safeguard, protect, and where appropriate enhance, the significance of any affected heritage asset, historic townscape or landscape</li> <li>● Development that leads to loss, change or harm of significance of any affected heritage assets, historic townscape or landscape</li> <li>● Development in locations which would harm the character and setting of an asset</li> </ul>	<ul style="list-style-type: none"> <li>○ [0] if no known heritage constraints.</li> <li>○ [-] if evidence of avoidable harm. Mitigation of avoidable harm includes reducing the area considered for development.</li> <li>○ [--] for registered landscape (i.e. scheduled monument, open space landscape), if this is unavoidable harm, with no way of mitigating negative impact.</li> </ul>	<p>Local plans / masterplans should ensure that provision is made.</p>	

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Protected Wreck Site Locally listed structure Town and village greens Local Green Spaces  <b><i>SEA Topic</i></b> Climatic factors Cultural heritage			<ul style="list-style-type: none"> <li>○ [?] for listed buildings. Impact could be positive, neutral or negative and will not be known until design work is progressed.</li> </ul>	
<b>4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)</b>  <b><i>National Sites and assets</i></b> SSSI National Nature Reserves Local Nature Reserves UK Priority Habitat  <b><i>Local Sites</i></b> SNCI – All authorities Wildlife Corridors – Bristol Ecological Networks	<ul style="list-style-type: none"> <li>● Development that integrates/preserves or enhances existing local sites habitats or features</li> <li>● Development that maintains/enhances the connectivity and integrity of Wildlife Networks</li> <li>● Development which enhances existing GI corridors and linked assets</li> <li>● Development that takes opportunities to provide new/strengthen existing GI corridors</li> </ul>	<ul style="list-style-type: none"> <li>● Development on or adjacent national and local sites (including Wildlife Corridors) that creates potential for harm</li> <li>● Development that would fragment the Connectivity and Integrity of Wildlife Networks</li> <li>● Development that severs existing GI corridor</li> <li>● Development that leads to loss of individual GI assets on existing corridors in the Strategic Network</li> </ul>	<ul style="list-style-type: none"> <li>○ Similar range to 4a: heritage.</li> <li>○ [0] if no known biodiversity constraints.</li> <li>○ [-] if evidence of avoidable harm. Mitigation of avoidable harm includes reducing the area considered for development.</li> <li>○ [--] where impact on European sites seems likely, if this is unavoidable harm, with no way of mitigating negative impact.</li> <li>○ [?] for most sites – SNCI, etc. Impact</li> </ul>	Local plans / masterplans should ensure that provision is made.
<b><i>SEA Topic</i></b> Biodiversity Fauna Flora Landscape				

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Material assets Soil			could be positive, neutral or negative and will not be known until design work is progressed. Phase 1 assessments may be needed.	
<b>4c. Minimise impact on and where appropriate enhance valued landscapes</b>  <b>National designations</b> AONB  <b>SEA Topic</b> Biodiversity Climatic factors Cultural heritage Fauna Flora Landscape Soil	<ul style="list-style-type: none"> <li>Development utilises topography and landform to enhance valued landscape</li> <li>Development that avoids the impacts on the AONB</li> </ul>	<ul style="list-style-type: none"> <li>Damage or harm to sensitive areas of the AONB</li> <li>Overbearing or unsympathetic development in and around key landscape features</li> </ul>	<ul style="list-style-type: none"> <li>Note AONB where present but scoring now extended to landscape as a whole, based on initial assessment of sensitivity to strategic level of development:           <ul style="list-style-type: none"> <li>[++) Low</li> <li>[+] Low to medium</li> <li>[0] Medium</li> <li>[-] Medium to high</li> <li>[--] High</li> </ul> </li> </ul>	Local plans / masterplans should ensure that provision is made.
<b>4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land</b>	<ul style="list-style-type: none"> <li>Development on previously developed land / brownfield sites</li> </ul>	<ul style="list-style-type: none"> <li>Development on previously undeveloped / open space / greenfield sites</li> </ul>	<ul style="list-style-type: none"> <li>[--] in almost all conceivable cases. Opportunities for urban intensification were examined at the Issues &amp; Options</li> </ul>	Local plans / masterplans should ensure that opportunities are taken.

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<b>SEA Topic</b> Fauna Flora Landscape Soil			stage; this stage of SA is focused on greenfield alternatives supplementing that potential. Except at Severnside, brownfield land at the locations assessed is likely to be minimal. ○ Explain score: no scope for mitigation.	
<b>4e. Minimise the loss of productive land, especially best and most versatile agricultural land</b>	<p><b>Significant positive effect:</b></p> <ul style="list-style-type: none"> <li>Safeguarding the protection of high value agricultural land (1 to 3a) which is also outside of flood risk zones 3a and 3b.</li> </ul> <p><b>Positive effect:</b></p> <ul style="list-style-type: none"> <li>Development on land with no current or immediate potential agricultural value</li> <li>Provision or enhancement of</li> </ul>	<p><b>Significant negative effect:</b></p> <ul style="list-style-type: none"> <li>Development on land with agricultural value 1 to 3a, which is also outside of flood risk zones 3a and 3b.</li> </ul> <p><b>Negative effect:</b></p> <ul style="list-style-type: none"> <li>Loss of local food growing land of demonstrable value</li> </ul>	<ul style="list-style-type: none"> <li>Use the provisional ALC data except where superseded by site-specific surveys.</li> <li>[--] Grades 1 to 3a, outside FZ3</li> <li>[+] Grades 1 to 3a, inside FZ3</li> <li>[?] Grade 3 (where 3a/3b split unknown)</li> <li>[+] Grades 3b to 5</li> <li>[+++] Non-agricultural land – but ALC includes under this heading some urban fringe land planned for development in</li> </ul>	Local plans / masterplans should ensure that opportunities are taken.

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	local food growing land of demonstrable value		the past that is currently farmed: commentary needs to acknowledge this.	
<b>4f. Minimise vulnerability to tidal / fluvial flooding (taking account of climate change), without increasing flood risk elsewhere</b>  <b>SEA Topic</b> Climatic factors Water	<p><b>Significant positive effect:</b></p> <ul style="list-style-type: none"> <li>Highly vulnerable and more vulnerable development in flood zone 1 (as contained in Table 3 of the Flood Risk and Coastal Change PPG).</li> </ul> <p><b>Positive effect:</b></p> <ul style="list-style-type: none"> <li>Development proposed in areas of lowest flood risk (as contained in Table 2 and 3 of the Flood Risk and Coastal Change PPG).</li> <li>Development which mitigates existing flood risk from tidal or fluvial sources</li> </ul>	<p><b>Significant negative effect:</b></p> <ul style="list-style-type: none"> <li>Highly, more and less vulnerable development in flood risk zone 3b (as contained in Table 3 of the Flood Risk and Coastal Change PPG).</li> <li>Highly vulnerable development in flood risk zone 3a</li> </ul> <p><b>Negative effect:</b></p> <ul style="list-style-type: none"> <li>Any other development in areas of flood risk (as contained in Table 3 of the Flood Risk and Coastal Change PPG).</li> <li>Flood defences and mitigation measures would have negative effects on flooding elsewhere</li> </ul>	<ul style="list-style-type: none"> <li>[++) FZ1</li> <li>[+] FZ2</li> <li>[ -] FZ3a</li> <li>[ --] FZ3b (current locations affected are already sieved-out but significant negative impact could be reintroduced via climate change)</li> <li>[+/-] if substantially mixed</li> <li>Normally no need for [?] as all land has a known FZ status: exceptions can be made where climate change effect is unclear.</li> </ul>	SFRA / site-specific FRA needed to support local plan allocations / masterplans

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<p><b>4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere</b></p> <p><b>SEA Topic</b> Climatic factors Water</p>	<ul style="list-style-type: none"> <li>• Development proposed outside of identified high risk surface water areas.</li> <li>• Development which includes measures to reduce run off</li> <li>• Development which mitigates existing surface water flood risk</li> </ul>	<ul style="list-style-type: none"> <li>• Development proposed in identified areas at high risk from surface water flooding</li> <li>• Development which significantly increases run off, increasing the risk of surface water flooding</li> </ul>	<ul style="list-style-type: none"> <li>○ Variety of the locations encountered makes consistent scoring difficult.</li> <li>○ Use EA Updated Flood Map for Surface Water and score directly if possible:            [--] 1 in 30            [-] 1 in 100            [+] 1 in 1000            [++) less than 1 in 1000. This data is comprehensive and so avoids the need for a [0] score.</li> <li>○ On most sites with SWF, the area at risk is little more than the width of local watercourses, so will be a mixed score [+/-] unless a wider area is noticeably affected.</li> <li>○ Where a score based on EA categories appears not relevant, because of the</li> </ul>	<p>SFRA / site-specific FRA needed to support local plan allocations / masterplans</p>
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			<p>complexity of SWF risk across the site, an alternative scoring is possible, based on assessment of the extent of the area at risk and potential for mitigation [-], including reduced site area.</p> <ul style="list-style-type: none"> <li>○ SuDS may offer a solution to be noted as possible mitigation.</li> <li>○ Note groundwater (also reservoir) information where known but consistency unlikely to be achievable at this stage as data availability varies between LPAs.</li> </ul>	
<b>4h. Minimise harm to, and where possible improve, water quality and availability</b> <i>SEA Topic</i>	<ul style="list-style-type: none"> <li>● Development with potential to improve water quality and/or availability</li> </ul>	<ul style="list-style-type: none"> <li>● Development posing a risk to water quality and/or availability</li> </ul>	<ul style="list-style-type: none"> <li>○ Generally [0], unless an issue exists: examples below.</li> <li>○ [?/-] in Groundwater Source Protection Zone.</li> </ul>	Local plans / masterplans should ensure that provision is made.

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Water			<ul style="list-style-type: none"> <li>○ [?] GSPZ nearby.</li> <li>○ [?] location crossed by major streams, especially if of wildlife interest, as polluted run-off from housing could affect these, even if damage is accidental.</li> </ul>	
<b>Theme 5:</b> Minimise consumption of natural resources				
<b>5a. Achieve reasonable access to sustainable transportation</b> (rail station, bus stops, cycle paths, footways)  <i>SEA Topic</i> Material assets Population Air	<ul style="list-style-type: none"> <li>• Development generating need for travel within reasonable distance of rail station</li> <li>• Development generating need for travel within reasonable distance of bus stops</li> <li>• Development with access to multiple bus routes</li> <li>• Development on or adjacent to the</li> </ul>	<ul style="list-style-type: none"> <li>• Development generating need for travel outside reasonable distance of rail station</li> <li>• Development generating need for travel outside distance to bus stops</li> <li>• Development outside cycling network</li> <li>• Development that reduces connectivity, safety or use of cycling network</li> </ul>	<ul style="list-style-type: none"> <li>○ [+] or [-], depending on compliance. Many locations will be mixed [+/-].</li> <li>○ Note where significant mitigation required.</li> <li>○ 'Reasonable access to sustainable transportation' is mainly about distance to travel facilities but note any capacity constraints that if</li> </ul>	Local plans / masterplans should ensure that provision is made.

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	<p>existing cycling and PROW network</p> <ul style="list-style-type: none"> <li>Extension or enhancement to cycling network to facilitate and encourage sustainable travel</li> </ul> <p><b>Reasonable distance:</b> Rail Station 800m Bus Stop 400m Cycle and Public Rights of Way 400m</p>	<p><b>Reasonable distance:</b> Rail Station 800m Bus Stop 400m Cycle and Public Rights of Way 400m</p>	<p>severe can reduce score to [--].</p>	
<p><b>5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks</b></p> <p><b>SEA Topic</b> Air Climatic factors Material assets</p>	<ul style="list-style-type: none"> <li>Development that contributes to reducing non-renewable energy consumption and 'greenhouse' emissions</li> <li>Development that provide opportunities to link into an existing energy network</li> </ul>	<ul style="list-style-type: none"> <li>Development that does not contribute to reducing non-renewable energy consumption and 'greenhouse' emissions</li> <li>Development that does not provide opportunities to link into an existing energy network</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable development teams can advise on heat opportunities.</li> <li>Generally [0], as although there is potential for more energy-efficient housing, opportunities will not vary greatly by broad location.</li> <li>Note that dispersed development is likely to have some negative effects.</li> </ul>	<p>Local plans / masterplans should ensure that provision is made.</p>

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			<p>Where these have been identified under other more specific objectives it would be double-counting to repeat them under this.</p> <ul style="list-style-type: none"><li>○ [?] if urban extension or close to Bristol and potential for heat network cannot be ruled out.</li></ul>	
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### APPENDIX D: Appraisal tables

Vision and Priorities				Commentary	Mitigation or enhancement
Sustainability Objective	S/T	M/T	L/T		
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	++	++	<p>The proposed Vision states that 'The rich and diverse environmental character will be integral to health and economic prosperity. Patterns of development and transport will facilitate healthy and sustainable lifestyles.</p> <p>Strategic Priority 4 includes improve substantially the quality and sustainability of new development by</p> <ul style="list-style-type: none"> <li>• Incorporating a Placemaking approach</li> <li>• Facilitating health, social and cultural well-being</li> <li>• Integrating high quality, multi-functional green infrastructure</li> </ul>	
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	0/?	0/?	<p>Air quality is not specifically mentioned within the Vision and Priorities however the Vision refers to patterns of development and transport facilitating healthy and sustainable lifestyles. The Priority 4 also refers to health well-being and reducing greenhouse gas emission.</p>	
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	++	++	<p>The Vision refers to existing and new communities will be well integrated, attractive and desirable places and supported by the necessary infrastructure. The Priority 4 also refers substantially improving the quality and sustainability of new development by facilitating health, social and cultural well-being.</p>	

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2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	The Vision refers to the WoE to be one of Europe's fastest growing and most prosperous city regions and provision of a range of housing types will be of high quality and more affordable. Strategic Priority 1 refers to meeting in full the identified needs for housing, as far as possible, in a sustainable way.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	The Vision refers to the WoE to be one of Europe's fastest growing and most prosperous city regions and provision of a range of housing types will be of high quality and more affordable. Strategic Priority 1 refers to meeting in full the identified needs for housing, as far as possible, in a sustainable way. In particular to make a substantial step change in the supply of affordable housing across the plan area.	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>++</b>	<b>++</b>	The Vision refers to existing and new communities will be well integrated, attractive and desirable places and supported by the necessary infrastructure  Strategic Priority 3 refers to new development to be properly aligned with infrastructure and maximises opportunities for sustainable and active travel. Strategic Priority 4 refers to improving the quality and sustainability of new development by facilitating health, social and cultural well-being.	
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>++</b>	<b>++</b>	The Vision refers to existing and new communities will be well integrated, attractive and desirable places and supported by the necessary infrastructure. Strategic Priority 4 refers to improving the quality and sustainability of new development by facilitating social and cultural well-being.	
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>++</b>	<b>++</b>	The access to town Centre services and facilities are no specifically mentioned in the Vision, however Strategy Priority refers to to improving the quality and sustainability of new development by facilitating health, social and cultural well-being.	

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2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>++</b>	<b>++</b>	<p>The Vision states that by 2036 the WoE will be one of Europe's fastest growing and most prosperous city regions with the gap between disadvantaged and other communities closed and a rising quality of life for all.</p> <p>Strategic Priority 1 refers to accommodating the economic growth objectives of the LEP Strategic Economic Plan, particularly growth of existing employment centres such as the Enterprise Zones and Enterprise Areas and economic rebalancing to help address inequality and improve accessibility to jobs.</p>	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	<p>The Vision states that by 2036 the WoE will be one of Europe's fastest growing and most prosperous city regions with the gap between disadvantaged and other communities closed and a rising quality of life for all.</p> <p>Strategic Priority 1 refers to accommodating the economic growth objectives of the LEP Strategic Economic Plan, particularly growth of existing employment centres such as the Enterprise Zones and Enterprise Areas and economic rebalancing to help address inequality and improve accessibility to jobs.</p>	
3b. Achieve reasonable access to major employment areas	<b>0</b>	<b>++</b>	<b>++</b>	<p>The Vision states that by 2036 the WoE will be one of Europe's fastest growing and most prosperous city regions with the gap between disadvantaged and other communities closed and a rising quality of life for all.</p> <p>Strategic Priority 1 refers to accommodating the economic growth objectives of the LEP Strategic Economic Plan, particularly growth of existing employment centres such as the Enterprise Zones and Enterprise Areas and economic rebalancing to help address inequality and improve accessibility to jobs.</p>	
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	<b>++</b>	<b>++</b>	<p>The Vision states that the rich and diverse environmental character will be integral to health and economic prosperity.</p> <p>Strategic Priority 4 refers to protect and enhance the sub-region's diverse and high quality natural, built and historic environment.</p>	

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4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	<b>0</b>	<b>++</b>	<b>++</b>	<p>The Vision states that the rich and diverse environmental character will be integral to health and economic prosperity.</p> <p>Strategic Priority 4 refers to protect and enhance the sub-region's diverse and high quality natural, built and historic environment and secure a net gain in biodiversity.</p>	
4c. Minimise impact on and where appropriate enhance valued landscapes	<b>0</b>	<b>++</b>	<b>++</b>	<p>The Vision states that the rich and diverse environmental character will be integral to health and economic prosperity.</p> <p>Strategic Priority 4 refers to protect and enhance the sub-region's diverse and high quality natural, built and historic environment.</p>	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	<b>?/+</b>	<b>?/+</b>	<p>The Vision does not specifically refer to promoting conservation and wise use of land. However Strategic Priority 4 refers to retaining the overall function of the Bristol and Bath Green Belt which encourage more efficient use of previously developed land.</p>	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	<b>?</b>	<b>?</b>	<p>The Vision and priorities don't specifically refer to minimize the loss of productive land.</p>	
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	<b>+</b>	<b>+</b>	<p>The Vision states that new development will be designed to be resilient to, and reduce the impacts of climate change.</p> <p>Strategic Priority 4 refers to ensuring resilience to the impacts of climate change</p>	

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4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	<b>+</b>	<b>+</b>	The Vision states that new development will be designed to be resilient to, and reduce the impacts of climate change. Strategic Priority 4 refers to ensuring resilience to the impacts of climate change	
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>?</b>	<b>?</b>	The Vision and priorities don't specifically refer to minimize the loss of productive land.	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	<b>0</b>	<b>++</b>	<b>++</b>	The Vision states that patterns of development and transport will facilitate healthy and sustainable lifestyles and existing and new communities will be well integrated, attractive and desirable places and supported by the necessary infrastructure.  Strategic Priority 3 refers to ensuring a spatial strategy where new development is properly aligned with infrastructure and maximises opportunities for sustainable and active travel.	
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	<b>0</b>	<b>+</b>	<b>+</b>	The Vision states that new development will be designed to be resilient to, and reduce the impacts of climate change.  Strategic Priority 4 refers to reducing greenhouse gas emissions and ensure resilience to the impacts of climate change.	

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### POLICIES 1-6

Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<p>Policy 5; Clause 4 states “ensure the protection and enhancement of the natural, built and historic environment” and Clause 8 is to “maintain and enhance the Green Infrastructure network to deliver multiple benefits for people, place and the environment” to inform new development and delivery of high quality and sustainable places.</p> <p>Non-strategic development will be identified through each authority’s Local Plan process and will need to adhere to local standards addressing open space. Within Policy 5, under Policy Principle 4, the production of a regional Green Infrastructure plan is highlighted as future assessment of the regional environmental assets and will highlight areas in need of protection or enhancement.</p>	<p>Policy 7 indicates where new recreational open space and Green Infrastructure is required as part of individual Strategic Development Locations.</p> <p>Further enhancement opportunities could be delivered through the intended associated Green Infrastructure Plan.</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	-/+	-/+	<p>No specific mention in Policy text.</p> <p>Policy 5; Clause 2 refers to "<i>improve health and wellbeing</i>"; Clause 4 refers to "<i>ensure the protection and enhancement of the natural, built and historic environment</i>"; Clause 5 refers to "<i>mitigate and adapt to climate change</i>"; Clause 6 refers to "<i>minimise energy demand and maximise the use of renewable energy</i>", Clause 7 refers to "<i>provide and ensure access to infrastructure including public transport, which reduces reliance on use of cars</i>".</p> <p>Delivery of housing targets would likely result in increased traffic generation and increased trips throughout the region, particularly where strategic growth is proposed. Increasing density of urban areas would have a similar effect in more vulnerable air quality locations. While policy requirements in Policy 5 would have indirect consequences, the issue of air quality impact should be made more explicit in the Plan.</p>	<p>Wording relating to impact on air quality should be included in policy – Potentially Policy 5.</p> <p>Transport Impact Assessments would be required on larger scale development and have been identified in Strategic Development Locations where necessary.</p> <p>Further enhancement opportunities could be delivered through the intended associated Green Infrastructure Plan.</p> <p>Individual Local Plan site allocations should identify problematic areas where non-strategic growth may be impacted and take appropriate action.</p>
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	+	+	<p>Policy 5; Clause 2 refers to reducing health inequalities. Clause 7 refers to provide and ensure access to infrastructure.</p> <p>Policy 6 states "<i>Strategic infrastructure will be required to support the effective implementation of the Joint Spatial Plan Spatial Strategy</i>" and later that "<i>new development must be properly aligned with the provision of the necessary strategic infrastructure</i>".</p> <p>SDLs, and their relevant Policy, highlight issues relating to the identified areas for strategic growth. Non-strategic growth will be directed by Local Plans and, as expanded on in Policy Principle 7 in Policy 5, development</p>	<p>Policy 6 will be supported by the West of England Joint Infrastructure Delivery Programme.</p> <p>Policy 7 indicates where strategic growth is proposed, key new infrastructure has been identified within the relevant location policy section.</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
				should make provision of community infrastructure necessary to support the new development.	Other, more localised infrastructure will also be required and this will be identified through local plans.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	<p>Policy 1 gives figures relating to the housing need in the region and what will be achieved / delivered during the life of the plan. This includes the identification of suitable strategic growth locations.</p> <p>Policy 5 aims to facilitate all new development to contribute towards the delivery of high quality places.</p> <p>Policy 2; Clause 3 allows non-strategic locations to be identified through individual Local Plans.</p> <p>A key objective of the Plan is to provide for the future housing need of the region and supply the necessary amount of homes to each sub-region. The risk of not planning for this adequately would result in development in inappropriate and unsustainable locations.</p>	<p>Policy 2 ensures strategic growth is directed towards the most appropriate locations.</p> <p>Non-strategic growth is to be identified and controlled at Local Plan level.</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	0	++	++	<p>Policy 3; Clause 1 is focused upon the delivery of Affordable Housing in the region and sets out a target number of affordable homes that the plan will deliver.</p> <p>Policy 3; Clause 3 sets the affordable housing requirement for development in the region, giving a minimum target of 35% affordable homes on applications delivering 5 or more dwellings or on sites larger than 0.2ha and broadens the requirement to self-contained C2 developments, including student accommodation.</p> <p>Policy 3; Clause 4 reaffirms that each Strategic Development Location will have a specific affordable housing target.</p> <p>Policy 5 more generally aims to facilitate all new development to contribute towards the delivery of high quality places.</p> <p>A key objective of the plan is to ensure an adequate supply of affordable homes is delivered in conjunction with overall housing targets. Affordable housing will be delivered through individual development and therefore would be subject to individual viability tests.</p>	

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	0	+	+	<p>Policy 5; Clause 2 refers to “reducing health inequalities and facilitate social interaction”. Clause 7 refers to “provide and ensure access to infrastructure”.</p> <p>Policy 2 reinforces the need for delivery of development in Strategic Development Locations to adhere to specific set out policy requirements.</p> <p>Policy 6 states “<i>Strategic infrastructure will be required to support the effective implementation of the Joint Spatial Plan Spatial Strategy</i>” and later that “<i>new development must be properly aligned with the provision of the necessary strategic infrastructure</i>”.</p> <p>SDLs, and their relevant Policy, highlight issues relating to the identified areas for strategic growth. Non-strategic growth will be directed by Local Plans and, as expanded on in Policy Principle 7 in Policy 5, development should make provision of community infrastructure necessary to support the new development.</p>	<p>Policy 6 will be supported by the West of England Joint Infrastructure Delivery Programme.</p> <p>Policy 7 indicates where strategic growth is proposed, key new infrastructure has been identified within the relevant location policy section.</p> <p>Other, more localised infrastructure will also be required and this will be identified through local plans.</p>
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	0	+	+	<p>Policy 2 reinforces the need for delivery of development in Strategic Development Locations to adhere to specific set out policy requirements held in the relevant section of Policy 7.</p> <p>Policy 6 states “<i>Strategic infrastructure will be required to support the effective implementation of the Joint Spatial Plan Spatial Strategy</i>” and later that “<i>new development must be properly aligned with the provision of the necessary strategic infrastructure</i>”.</p> <p>SDLs, and their relevant Policy, highlight issues relating to the identified areas for strategic growth. Non-strategic growth will be directed by Local Plans and, as expanded on in Policy Principle 7 in Policy 5, development should make provision of community infrastructure necessary to support the new development.</p>	<p>Policy 6 will be supported by the West of England Joint Infrastructure Delivery Programme.</p> <p>Policy 7 indicates where strategic growth is proposed, key new infrastructure has been identified within the relevant location policy section.</p> <p>Other, more localised infrastructure will also be required and this will be identified through local plans.</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	0	+	+	<p>Policy 5; Clause 7 creates a requirement to “provide and ensure access to infrastructure”.</p> <p>Policy 2 reinforces the need for delivery of development in Strategic Development Locations to adhere to specific set out policy requirements.</p> <p>Policy 6 states “Strategic infrastructure will be required to support the effective implementation of the Joint Spatial Plan Spatial Strategy” and later that “new development must be properly aligned with the provision of the necessary strategic infrastructure”.</p> <p>SDLs, and their relevant Policy, highlight issues relating to the identified areas for strategic growth. Non-strategic growth will be directed by Local Plans and, as expanded on in Policy Principle 7 in Policy 5, development should make provision of community infrastructure necessary to support the new development.</p>	<p>Policy 6 will be supported by the West of England Joint Infrastructure Delivery Programme.</p> <p>Policy 7 indicates where strategic growth is proposed, key new infrastructure has been identified within the relevant location policy section.</p> <p>Other, more localised infrastructure will also be required and this will be identified through local plans.</p>
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	0	0	0/+	<p>Policy 4 identifies the need to provide better access to employment in South Bristol.</p> <p>Policy 5; Clause 2 refers to “reducing health inequalities and facilitate social interaction”. Clause 7 refers to “provide and ensure access to infrastructure”.</p>	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region.	0	++	++	<p>Policy 4 set out the region’s requirements for employment and identifies key strategic employment locations. The delivery and protection of employment in these locations will be set out in individual Local Plans.</p> <p>In relation to Strategic Development Locations, Policy 4 states “The amount of employment land provided for at the SDLs will respond to the amount of residential development proposed... will be secured through allocation and policy detail in Local Plans”.</p>	

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
3b. Achieve reasonable access to major employment areas	0	+	+	<p>Policy 4 prioritises the growth of existing centres and explicitly identifies areas - South Bristol, Bath and Weston-super-Mare – as areas where improved accessibility is required.</p> <p>Where additional growth is identified, the policy reaffirms the overall strategic aim to provide new supporting transport infrastructure.</p> <p>Policy 5; refers to “enable inclusive and sustainable economic growth”; while Clause 7 creates a requirement to “provide and ensure access to infrastructure”.</p> <p>Policy 2 reinforces the need for delivery of development in Strategic Development Locations to adhere to specific set out policy requirements.</p> <p>Policy 6 states “Strategic infrastructure will be required to support the effective implementation of the Joint Spatial Plan Spatial Strategy” and later that “new development must be properly aligned with the provision of the necessary strategic infrastructure”.</p>	Where strategic growth is proposed, key new infrastructure has been identified within the relevant policy. Other more localised infrastructure will also be required and this will be identified through local plans.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	0	+/?	+/?	<p>Policy 5; Clause 4 requires “the protection and enhancement of the natural, built and historic environment”.</p> <p>The Plan gives firm direction to the protection of historic assets. Detail of the historic environment will be pursued through individual Local Plans and through mechanisms such as Conservation Appraisals. Development will be assessed against the impact on heritage assets on a case by case basis.</p>	Further enhancement opportunities could be delivered through the intended associated Green Infrastructure Plan.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	0	+/?	+/?	<p>Within Policy 5, policy requirement for all new development follows the set clauses - Clause 4 requires the “protection and enhancement of the natural, built and historic environment”; Clause 5 refers to “mitigate and adapt to climate change and use a catchment based approach to water management”; Clause 6 to “Minimise energy demand and maximise the use of renewable energy” and; ‘Clause 8 refers to “maintain and enhance the Green Infrastructure network to deliver multiple benefits for people, place and the environment”.</p>	Further enhancement opportunities could be delivered through the intended associated Green Infrastructure Plan.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4c. Minimise impact on and where appropriate enhance valued landscapes	0	+/?	+/?	<p>Within Policy 5, policy requirement for all new development follows the set clauses - Clause 1 refers to “<i>create character, distinctiveness and sense of place</i>”. Clause 4 refers to “<i>ensure the protection and enhancement of the natural, built and historic environment</i>”. Clause 8 refers to “<i>maintain and enhance the Green Infrastructure network to deliver multiple benefits for people, place and the environment</i>”.</p> <p>The Plan encourages the protection of valuable landscapes. Detail on important areas or local issues will be identified through the Local Plans of each authority and development will be assessed on a case by case basis.</p>	Further enhancement opportunities could be delivered through the intended associated Green Infrastructure Plan.
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	0	+/-	+/-	<p>Policy 2; Clause 2 directs the delivery of housing and employment land to maximise “<i>the sustainable development of previously developed land and other appropriate opportunities within existing urban areas</i>”. Policy 5 later states that “The general extent of the Green Belt will be maintained except where it is required to be amended through local plans to enable the delivery of the strategic development locations”.</p> <p>Policy 1 - 60% of currently allocated land, accounting for 61,500 of the proposed housing number in Policy 1, is previously developed land. Of the 44,000 additional dwellings needed identified in Policy 1, it is estimated that 16,200 will be delivered through urban living; i.e on previously developed urban land.</p> <p>Policy 4 seeks to direct employment growth to existing employment zones and centres, thereby promoting the use of previously developed land.</p> <p>Non-strategic growth will be identified through individual plans and is likely to be a combination of brownfield and greenfield land. Strategic Development Locations which total some 17,600, account for the majority of the remaining 27,800 required dwellings and will be greenfield land.</p>	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	0	-	-	<p>No specific mention in Policy text.</p> <p>Evidence on Agricultural Land classification is not complete and it is not fully understood at this stage if land is classified as 3a or 3b land, which is a</p>	<p>Green Infrastructure Plan, NPPF.</p> <p>Wording relating to the maintaining Best and Most</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
				<p>significant differentiation to make. In general, having a strategic plan will minimize loss through the identification of SDLs as development will be discouraged at inappropriate locations that may be best and most versatile agricultural land.</p> <p>Further work would be required to ascertain the agricultural land classification.</p>	versatile Agricultural Land should be included in policy – potentially within Policy 5.
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	0	+/?	+/?	<p>Policy 5; Clause 5 refers to “<i>mitigate and adapt to climate change and use a catchment based approach to water management</i>”.</p> <p>Policy 6 states “<i>New development must be properly aligned with the provision of the necessary strategic infrastructure</i>”, and identifies the need for strategic flood management infrastructure at Avonmouth/Severnside; and the River Avon relating Bristol City Centre.</p> <p>The Plan gives direction to Local Plans for the approach to Flood Management. Each authority will be responsible for identifying issues and addressing those on a case by case basis.</p>	Strategic flood management plans and risk assessments will identify problematic areas at local level.
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	0	+/?	+/?	<p>Policy 5; Clause 5 refers to “<i>mitigate and adapt to climate change and use a catchment based approach to water management</i>”.</p> <p>Policy 6 states “<i>New development must be properly aligned with the provision of the necessary strategic infrastructure</i>”, including flood management.</p> <p>The Plan gives direction to Local Plans for the approach to Flood Management. Each authority will be responsible for identifying issues and addressing those on a case by case basis.</p>	Strategic flood management plans and risk assessments will identify problematic areas at local level.
4h. Minimise harm to, and where possible improve, water quality and availability	0	+/?	+/?	<p>Policy 5; Clause 5 refers to “<i>mitigate and adapt to climate change and use a catchment based approach to water management</i>”.</p> <p>The Plan gives direction to Local Plans for the approach to Flood Management. Each authority will be responsible for identifying issues and addressing those on a case by case basis.</p>	Strategic flood management plans and risk assessments will identify problematic areas at local level.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	+	+	<p>Policy 5; Clause 7 requires the provision and access to “<i>infrastructure including public transport, which reduces reliance on use of cars</i>”.</p> <p>Policy 6 explicitly requires the implementation of transport infrastructure to support the delivery of the Plan and states priority will be given to development schemes that benefit the delivery of the wider spatial strategy in Policy 2.</p> <p>The Plan explicitly highlights the importance of new infrastructure where growth is identified, particularly through SDLs.</p>	<p>Policy 6 will be supported by the West of England Joint Infrastructure Delivery Programme.</p> <p>Policy 7 indicates where strategic growth is proposed, key new infrastructure has been identified within the relevant location policy section.</p> <p>Other, more localised infrastructure will also be required and this will be identified through local plans.</p>
5b. Reduce non-renewable energy consumption and ‘greenhouse’ emissions, and provide opportunities to link into existing heat networks	0	+	+	Policy 5; Clause 6 states “ <i>Minimise energy demand and maximise the use of renewable energy, where viable meeting all demands for heat and power without increasing carbon emissions</i> ”.	

### Policy Commentary

#### Policy 1: The housing requirement

The thrust of Policy 1 is the underlying principle of the Plan - that the sustainable future of the region is through growth - and so sets out the housing requirements for the region. The housing target is based upon the calculated need for each authority area and then forms the basis of the wider strategy and the identification of Strategic Development Locations (SDLs) and the distribution of

## **Appendix C**

growth throughout the region. Inherently, the delivery of housing and, therefore, growth has strong benefits for the economic and social sustainability of the region and would help address key issues relating to social and economic disparities.

However, in isolation and without mitigation, there is potential for the delivery of such large numbers of new homes to cause harm to the environment and, in the wrong locations, would not necessarily deliver on overall economic and social sustainability objectives. As such, the role of the spatial strategy must be incorporated into the assessment of the sustainability of Policy 1, which is recognised in the policy itself. With the identification of SDLs, new development is encouraged towards the most suitable locations in terms of specific sustainability issues – the individual SDLs also form part of this Sustainability Assessment – and the risk of haphazard delivery of homes is greatly reduced.

Primarily, potentially negative impacts arising from the delivery of housing (such as to Green Infrastructure, flood management or pressure on the existing built environment) are mitigated through the rest of the Plan's policies, which seek to address such risks.

One point of concern would relate to air quality where, although other policy requirements would have indirect consequences, the issue of air quality impact should be made more explicit in the Plan. It is recognised that, in the majority of SDLs, a Transport Impact Assessment would be a policy requirement and non-strategic growth will be allocated in individual Local Plans where there issues can be addressed.

### **Policy 2: The spatial strategy**

The spatial strategy relates predominantly to sustainability objectives 2a and 2b, although through individual SDL policy can broaden out to include objective relating to employment, infrastructure. Therefore, the policy also links strongly with Policy 4.

Policy 5 is the mitigation against poorly located strategic development and preventing harmful impacts that development in unsuitable locations would bring, such as impacts on valuable landscapes or where poor accessibility to services exist. As Policy 5 is part of the delivery mechanism for Policy 1, the commentary for that policy is also relevant here.

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### **Policy 3: The affordable housing target**

Similar to Policy 1, Policy 3 specifies the target figure for Affordable Housing for the region and, in terms of assessing against sustainability objectives, should be read in the wider context of the strategic policies. The policy seeks to ensure a suitable mix of housing types, relevant only to objective 2b, and mitigation to development would be through the remaining policies of the Plan. Non-strategic growth will be allocated in individual Local Plans where there issues relating to viability can be addressed.

### **Policy 4: The employment requirement**

The growth of employment land is inextricably linked to the growth in housing numbers and, therefore, supplying the appropriate quantum of employment land increases the economic and social sustainability of the region. In respect to specific sustainability objectives, the policy relates to objectives 3a and 3b; setting out the overall targets for employment growth in the region to meet need.

Policy 4 prioritises the delivery of employment land at existing employment Enterprise Zones and Areas as well as designated Town Centres. These locations are generally in sustainable locations with existing infrastructure in place. Where employment need has been identified at SDLs, the level will be appropriate to the site, which will be determined at a later date and mitigation will take place according to the individual location.

Both existing and new locations of employment growth must be mitigated with suitable transport infrastructure to ensure good access as growth continues, however, the policy does explicitly reference south Bristol, Bath and Weston-Super-Mare as areas where access to employment will be supported.

In terms of environmental sustainability, the Policy prioritises and encourages development on previously developed land, minimising loss of green infrastructure and minimising flood risk and other environmental concerns.

Intensifying areas within Flood Risk areas may be an issue and further assessments would be needed.

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### **Policy 5: Place-shaping policies**

Policy 5 provides a set of principle for development to follow, both at SDLs and non-strategic development and support a wide range of sustainability issues. As such, the policy scores well against the majority of sustainability objectives.

When assessed against the objectives, however, there are gaps, as the policy makes no reference to minimising loss of agricultural land nor makes emphasis of development on previously developed land, although does encourage ‘regeneration led development’. Development on previously developed land is advocated through Policy 5 and so is also mitigated against within the Plan. In order to achieve a more positive score, mention should be made of minimising loss of best quality agricultural land within the Plan.

### **Policy 6: strategic infrastructure requirements**

Policy 6 essentially acts as mitigation to ameliorate any impacts of delivering the scale of growth the Plan seeks and identifies key strategic infrastructure, relating to transport, energy and flooding among others, that is critical to support housing and employment growth.

The policy does not explicitly state what the requirements will be, but defers to the West of England Infrastructure Delivery Programme. and to individual Local Plans to pinpoint where infrastructure will be required and programme the delivery timescales. These infrastructure plans are essential in the mitigation of the Plan.

Where key infrastructure is required to deliver SDLs, this has been identified in each individual location.

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### Summary of SA Findings (long-term effects) for Strategic Development Locations

<b>Strategic Development Location</b>	<b>1a</b>	<b>1b</b>	<b>1c</b>	<b>2a</b>	<b>2b</b>	<b>2c</b>	<b>2d</b>	<b>2e</b>	<b>2f</b>	<b>3a</b>	<b>3b</b>	<b>4a</b>	<b>4b</b>	<b>4c</b>	<b>4d</b>	<b>4e</b>	<b>4f</b>	<b>4g</b>	<b>4h</b>	<b>5a</b>	<b>5b</b>		
B&NES 7.1 North Keynsham	+	-/?	+	++	++	+	+	+	0	++	+	?	-/?	--	--	?/-	+	+/-	0	+/?	?		
B&NES 7.2 Whitchurch	+	?	+	++	++	+	+	+	0	+/?	+	?	-/?	--	--	?	++	+/-	0	+/?	?		
Bristol 7.3 Brislington	+	-	-/+	++	++	+/?	+	+/?	0	+/?	+	?	-/?	?	-/?	?	-	?	+	+/-	0	+/?	?
NSC 7.4 Backwell	+/?	+	+/?	++	++	+/?	++	-	0	+/?	++	0	+	0/--	--	--	++	+/-	?	++	?		
NSC 7.5 Banwell Garden Village	+/?	+/?	+/?	++	++	+/?	++/	-	0	+	+	?	?/-	--	--	?	++	+/-	?/-	+/-	?		
NSC 7.6 Churchill Garden Village	++	+	+/?	++	++	+/?	++	--	0	+/?	+/-	++	-/?	--	--	?	++	+/-	0	+/?	?		
NSC 7.7 Nailsea	+/?	+	+/?	++	++	+/?	++	+/-	0	+/?	++	0	0/?	--	--	--	++	+/-	?	++	?		
SGC 7.8 Buckover Garden Village	+	+/?	-	++	++	+	+	-	0	+	-	?	?	-	--	--	++	+/-	0	-	+		

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SGC 7.9 Charfield	+	+	-	++	++	+	++/-	-	0	+	-	?	?	-	--	+/?	+	+/-	0	-	?
SGC 7.10 Coalpit Heath	+	+	+	++	++	+/?	+/-	-	0	+	+	?	0	-	--	+/?	+	+/-	0	+	?
SGC 7.11 Thornbury	+	+	+	++	++	-/?	+	+	0	++	+	?	?	---	--	--	+	+/-	0	+	?
SGC 7.12 Yate	++	+/?	+	++	++	+	+/-	+	0	++	+	-/?	?	---	--	?/+	+/-	+/-	0	+	?
<b>Strategic Development Location</b>	<b>1a</b>	<b>1b</b>	<b>1c</b>	<b>2a</b>	<b>2b</b>	<b>2c</b>	<b>2d</b>	<b>2e</b>	<b>2f</b>	<b>3a</b>	<b>3b</b>	<b>4a</b>	<b>4b</b>	<b>4c</b>	<b>4d</b>	<b>4e</b>	<b>4f</b>	<b>4g</b>	<b>4h</b>	<b>5a</b>	<b>5b</b>

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Sustainability Appraisal of the Joint Spatial Plan Publication Version											
Strategic Location:		North Keynsham									
Summary											
<ul style="list-style-type: none"> <li>Good link to National Cycle Route 4, Regional 16, Avon Cycle Route and other local routes. East part of the area has good access to Manor Wood and Saltford Community Association recreational grounds.</li> <li>An AQMA was declared for the Centre of Keynsham. It is also closely linked to the AQMA in Saltford.</li> <li>There is a relatively good range of healthcare facilities and community services in Keynsham Town Centre. It also has good public transport links to large urban centres in Bath and Bristol.</li> <li>Policy requires a new local centre with facilities to provide a focus for the new community to meet their needs including a new primary school.</li> <li>Policy facilitates around 1,500 new homes of which 1,400 homes in the plan period.</li> <li>In general good access to local employment sites, Bristol EZ and Bath EA with public transport and Policy facilitates around 50,000 sq.m of employment space.</li> <li>Parts of the area are highly sensitive associated with Keynsham and Queen Charlton Conservation Areas.</li> <li>Some land is or close to protected ecological sites the Stidham farm geological SSSI of which a small part is a RIG. The River Avon SNCI runs north of the site boundary, The Broad Mead SNCI field lies entirely within the site at the eastern end.</li> <li>Cotswolds AONB lies east of Saltford.</li> <li>Policy facilitates the implementation of key transport infrastructure prior to the housing development.</li> <li>Mainly Flood Zone 1. Existing industrial area is within FZ2.</li> </ul>											
Sustainability Objective	S/ T	M/ T	L/ T	Commentary		Mitigation or enhancement					
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	Good link to National Cycle Route 4, Regional 16, Avon Cycle Route and other local routes. East part of the area has good access to Manor Wood. Saltford Community Association recreational grounds.		Policy requires a well-integrated and multifunctional green infrastructure network					

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1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	<b>0</b>	-/?	-/?	An AQMA was declared for the Centre of Keynsham in July 2010. Development may cause pressure on the key transport network impacting on air quality. It is also closely linked to the AQMA in Saltford.	Policy requires a full Transport Assessment. Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	<b>0</b>	+	+	<p>There is a relatively good range of healthcare facilities and services in Keynsham Town Centre. It also has good public transport links to large urban centres – Bath and Bristol – with healthcare facilities. However some areas are quite remote from the town centre and beyond a reasonable walking distance of facilities.</p> <p>East part of the area is within 1200m of the Doctor Surgery in Saltford. All facilities in Keynsham are beyond a reasonable walking distance of facilities. There is currently no public transport route to the area.</p>	<p>This level of strategic growth may require mitigation or future provision of health facilities. This would need to be identified at masterplanning stage.</p> <p>Policy requires a new local centre with facilities to provide a focus for the new community to meet their needs including healthcare facilities.</p>
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	<b>0</b>	++	++	<p>Policy facilitates around 1,500 new homes of which 1,400 homes in the plan period.</p> <p>This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective.</p>	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	++	++	No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing.	Policy 3 sets a minimum target of 35%.

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2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>+</b>	<b>+</b>	<p>There is a good range of community facilities and services in Keynsham Town Centre as the second largest town in the district. In general it also has good public transport links to large urban centres – Bath and Bristol – with good community facilities. However Area S1 is largely remote from these centres.</p> <p><i>Community Facilities:</i> No existing community facilities located within the site area or within a reasonable distance.</p>	Policy requires a new local centre with facilities to provide a focus for the new community to meet their needs.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>+</b>	<b>+</b>	<p>There are currently 5 primary schools and 3 secondary schools in the town however there is no or limited capacity to accommodate primary school students from new development. Within 1500m from Wellsway School.</p>	Policy requires a new primary school on site and financial contribution to the provision of a secondary education provision off site.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>+</b>	<b>+</b>	<p>There is a relatively good range of town centre uses in Keynsham. Eastern part of the area is within 1500m of Saltford centre.</p>	Policy requires a new local centre with facilities to provide a focus for the new community to meet their needs.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<p>It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).</p>	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	<p>Policy facilitates around 50,000 sq.m of employment space.</p>	

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3b. Achieve reasonable access to major employment areas	<b>0</b>	<b>+</b>	<b>+</b>	In general good access to local employment sites, Bristol EZ and Bath EA with public transport.	
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	<b>?</b>	<b>?</b>	Parts of the area are highly sensitive associated with Keynsham and Queen Charlton Conservation Areas.	The area with high sensitivity should be avoided.  Policy requires a layout and form that produces a high quality of urban design, contributes positively to local character and distinctiveness, and mitigates impact on sensitive views (including key views from the Cotswold AONB).

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4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	0	-/?	Some land is or close to protected ecological sites the Stidham farm geological SSSI of which a small part is a RIG. The River Avon SNCI runs north of the site boundary, The Broad Mead SNCI field lies entirely within the site at the eastern end.	<p>The area with high sensitivity should be avoided. Further assessment and ecological mitigation plan are necessary.</p> <p>Policy requires a layout and form that produces a high quality of urban design, contributes positively to local character and distinctiveness, and that mitigates impact on sensitive views (including key views from the Cotswolds Area of Outstanding Natural Beauty). This should incorporate a well-integrated, multifunctional green infrastructure network that includes new wetland features, restored floodplain meadows and new woodland.</p>
4c. Minimise impact on and where appropriate enhance valued landscapes	0	--	<p>Cotswolds AONB lies east of Saltford. Keynsham is located where the River Chew meets the River Avon. The town has principally grown out along plateau areas either side of the Chew Valley, avoiding the low lying floodplain areas of the River Avon and the River Chew; and also the steeper valley slopes of the River Chew and the Stockwood Vale tributary valleys. The beautiful valley of the River Chew funnels through into the centre of Keynsham from the south west, effectively dividing the settlement into two halves.</p> <p>Development resulting in the extension of the urban area into the distinctive tributary valleys of the River Avon and the Chew Valley affects the distinctive character of the existing landscape.</p>	<p>Policy requires a layout and form that produces a high quality of urban design, contributes positively to local character and distinctiveness, and mitigates impact on sensitive views (including key views from the Cotswold AONB).</p>

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4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	--	--	The western part of the area is previously developed land however majority of the development area would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land.	No apparent scope for mitigation.
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	?/-	?/-	The majority of the area is Grade 2 and 3 therefore further detailed survey needed to identify precise land grading. Mixture of Grade 2 and Grade 3	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	+	+	Mainly Flood Zone 1. Existing industrial area is within FZ2. To the north the area is bounded by the River Avon, which forms a corridor of fluvial Flood Zone 3 that also forms part of the functional floodplain.	New residential development should be focused on the parts of the area in Flood Zone 1, avoiding the areas identified as functional floodplain.

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4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	<b>+/-</b>	<b>+/-</b>	Areas of surface water flood risk exist along the river corridors but are largely contained within the fluvial extents.	Surface water runoff should be carefully managed to avoid adverse downstream impacts on Keynsham.  Policy Principle 5 includes implementation of a sustainable drainage strategy.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>0</b>	<b>0</b>	There is a small Groundwater Source Protection Zone at Somerdale, contained within the site. There are no Drinking Water Safeguard Zones nearby.	

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5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	+/?	<p>This site has particular challenges in providing suitable and appropriate access across the railway line. The railway line and A4 will act as barriers for potential future residents to access the town centre, railway station and facilities in the town by sustainable modes of travel.</p> <p>There is the opportunity for the site to benefit from access to the Bristol-Bath cycle path to the north of the site (and its link to NCN Route 410 in Saltford), which will require improvement to the existing PROW connecting to the cycle path. Maximising access to the higher frequency bus corridor on the A4 will be important for providing access to bus services in the area. Traffic generated from this site will contribute towards congestion on the A4, B3116 and in Keynsham town centre.</p> <p>Policy states that 'No housing will be completed at the North Keynsham SDL ahead of the Avon Mill Lane to A4 link, Keynsham rail station improvements and Metrobus (high quality public transport) route from Bristol to Keynsham on the A4 corridor being completed.'</p>	<p>The traffic impacts of this site will need to be considered as part of an assessment of the cumulative impact of traffic generated by other planned and proposed development sites in the West of England area.</p> <p>Policy requires provision of key transport infrastructure including:</p> <ul style="list-style-type: none"> <li>i. North Keynsham multi modal link from Avon Mill Lane to A4.</li> <li>ii. Pedestrian and cycle connections in all directions which link the site with key services and facilities.</li> <li>iii. Where existing vehicle routes across the railway line are no longer required for continued use by motor traffic, seek to downgrade them to pedestrian and cycle only links;</li> <li>iv. Metrobus route from Bristol to Keynsham on the A4 corridor;</li> <li>v. High frequency local bus service</li> <li>vi. Improved passenger facilities at Keynsham rail station;</li> <li>vii. Off-site junction improvements including at Hicks Gate; and</li> <li>viii. Expanded or relocated A4 Bristol Park &amp; Ride.</li> </ul>
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5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	?	?	?	All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks. No locally specific issues. General issue of dispersed growth producing longer vehicle trips. Potential opportunities for hydropower along the river, as identified in the B&NES Renewable Energy and Planning Research Update (2010)	Policy 4 requires; 6. Minimise energy demand and maximise the use of renewable energy, where viable meeting all demands for heat and power without increasing carbon emissions.
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<b>Joint Spatial Plan Sustainability Appraisal</b>	
<b>Strategic Location:</b>	<b>Land South East of Bristol Whitchurch</b>
<b>Summary</b> <ul style="list-style-type: none"><li>• The area has good access to National Route 3.</li><li>• The northern part of the area is designated as Ecological Networks through B&amp;NES Placemaking Plan Policy NE4 and Green Infrastructure Policy NE1.</li><li>• Not in AQMA but close to Bristol AQMA. The Council has started a short term monitoring scheme (6 months) to clarify the levels of NO2 in Whitchurch.</li><li>• Residential expansion is likely to relate better to Bristol or Keynsham rather than Bath for local facilities. There are limited facilities at Whitchurch village. However Policy requires to provide retail, healthcare and community facilities, two new primary schools and a secondary school.</li><li>• Policy facilitates approximately 2,500 new homes of which 1,600 homes in the plan period.</li><li>• Policy requires to include employment spaces at a quantum and of a type to be determined though the Local Plan.</li><li>• The west of Whitchurch village is very sensitive within the setting of the Maes Knoll, Wansdyke Scheduled Ancient Monuments and a number of listed buildings. The area towards Queen Charlton is very sensitive within the setting of Queen Charlton Conservation Area.</li><li>• The area is located within the Dundry Plateau landscape area. The assets and aspects of significance including the Maes Knoll and Wansdyke Scheduled Ancient Monument, the historic landscape around Whitchurch, a visually important references point for much of southern Bristol and countryside to the south of the ridge and the interface with the distinctive landscape of the Chew Valley contributes to the distinctiveness of this part of the Dundry plateau area.</li><li>• The area around the village lies almost entirely within FZ1.</li><li>• There is good connection to Bristol with existing footpath and cycle path infrastructure, and opportunities for enhancing routes in to Keynsham.</li><li>• Policy facilitates the implementation of key transport infrastructure prior to the housing development.</li></ul>	

## Appendix C

Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<p>The area has good access to National Route 3. There are a number of sites used as playing fields between Whitchurch and Stockwood and along A37. The northern part of the area is designated as Ecological Networks through B&amp;NES Placemaking Plan Policy NE4 and Green Infrastructure Policy NE1.</p> <p><i>Public Space</i></p> <ul style="list-style-type: none"> <li>• The area contains open greenspace, two existing sports grounds, playing field and a playground;</li> <li>• Hursley Brow football ground, village Fete Field, allotment, football and rugby pitches (Bristol Telephones RFC and Stockwood Wanderers), Stockwood Vale Golf Club</li> </ul>	A strategic level of development with appropriate on-site provision will contribute to this objective. Policy 7.2 requires to create a comprehensive green infrastructure network that reinforces and enhances the important characteristics of the area, including the existing green gaps between Whitchurch village and the Bristol urban area.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	?	?	<p>Not in AQMA but close to Bristol AQMA. The Council has started a short term monitoring scheme (6 months) to clarify the levels of NO2. This data will help to inform any decision on the need for an air quality management area in Whitchurch.</p> <p>Policy requires a full Transport Impact Assessment.</p>	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	+	+	<p>Residential expansion is likely to relate better to Bristol rather than Bath for local facilities. There are limited facilities at Whitchurch village and in the adjoining urban edge of Bristol within walking or cycling distance. It is also proposed, where possible, to enhance public transport provision and cycling routes to Keynsham.</p> <p><i>Healthcare Facilities:</i></p> <ul style="list-style-type: none"> <li>• Dentist located 450m to the north, at present there is no other healthcare facilities in the surrounding area that could serve the site area.</li> </ul>	Large development with good on-site facilities will benefit new and existing communities. Policy requires providing retail, healthcare and community facilities, two new primary schools and a secondary school.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	Policy facilitates approximately 2,500 new homes of which 1,600 homes in the plan period. This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective.	

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	0	++	++	Greenfield development is likely to be more viable than brownfield. Viability likely to be dependent upon alternative sources of funding.	Policy 3 sets a minimum target of 35%.
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	0	+	+	<p>Residential expansion is likely to relate better to Bristol rather than Bath for local facilities, but there are limited facilities at Whitchurch village and in the adjoining urban edge of Bristol within walking or cycling distance.</p> <p>Keynsham is within relatively close proximity and it is proposed to enhance cycling routes to the town.</p> <p><i>Existing Facilities:</i></p> <ul style="list-style-type: none"> <li>Stockwood Lane recreation ground located within the site area: and</li> <li>Whitchurch Cricket Club located 600m to the west.</li> </ul>	Policy requires to provide retail, healthcare and community facilities, two new primary schools and a secondary school.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	0	+	+	<p>No or limited capacity to accommodate primary school students from new development into existing schools. The Council currently provides bus services to secondary schools in Keynsham.</p> <p>Policy requires providing two new primary schools and a secondary school.</p>	
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	0	+	+	<p>Keynsham is the nearest town centre and is within relatively close proximity, it is proposed, where possible, to enhance public transport provision and cycling routes to the town.</p> <p>The area potentially has good access to facilities within south Bristol but this is dependent on securing a good level of public transport services.</p>	Policy requires the provision of new local centre(s) within reasonable walking distances of the new community and environmental enhancement to Whitchurch village and its local centre.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	0	0	0	It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 20% of areas in Bath or Bristol.	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	0	+/?	+/?	Policy requires to include employment spaces at a quantum and of a type to be determined through the Local Plan. No specific quantum or types are identified.	
3b. Achieve reasonable access to major employment areas <i>Major Employment sites</i> Enterprise Zones Locally designated key employment areas	0	+	+	Good access to employment opportunities in Bristol with improved transport infrastructure including public transport.	Policy requires key transport infrastructure including; i. Multi modal A4 – A37 link and the south Bristol link road ii. Park and Ride iii. Metrobus route from Bristol on the A4 – A37 link iv. Pedestrian and cycle connections v. Off-site junction improvements including at Hicks Gate
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	0	?	?	The west of Whitchurch village is very sensitive within the setting of the Maes Knoll, Wansdyke Scheduled Ancient Monuments and a number of listed buildings. The area towards Queen Charlton is very sensitive within the setting of Queen Charlton Conservation Area.	The area with high sensitivity should be avoided. Policy requires protecting and enhancing areas of high landscape character and visual sensitivity including the setting of Queen Charlton Conservation Area, Maes Knoll and Wansdyke Scheduled Ancient Monuments Policy also requires mitigating impacts on sensitive views.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change) <i>National Sites and assets</i>	0	-/?	-/?	<p>The east of Whitchurch village is relatively unconstrained but there are a number of SNIs.</p> <ul style="list-style-type: none"> <li>• Sturminster Road SNCI and Stockwood Open Space SNCI</li> <li>• Carlton Bottom and Queen Charlton Watercourse SNCI</li> </ul>	<p>The area with high sensitivity should be avoided. Further assessment and ecological mitigation plan are necessary.</p>
4c. Minimise impact on and where appropriate enhance valued landscapes <i>National designations AONB</i>	0	--	--	<p>The area is located within the Dundry Plateau landscape area. The assets and aspects of significance including the Maes Knoll and Wansdyke Scheduled Ancient Monument, the historic landscape around Whitchurch, a visually important reference point for much of southern Bristol and countryside to the south of the ridge and the interface with the distinctive landscape of the Chew Valley contributes to the distinctiveness of this part of the Dundry plateau area.</p> <p>Policy requires protecting and enhancing areas of high landscape character and visual sensitivity including the setting of Queen Charlton Conservation Area, Maes Knoll and Wansdyke Scheduled Ancient Monuments</p> <p>Policy also requires mitigating impacts on sensitive view</p>	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	0	--	--	Development on greenfield land does not contribute to promoting the conservation and wise use of land.	No apparent scope for mitigation.
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	0	?	?	<p>The majority of the area is Grade 3 therefore further detailed survey needed to identify precise land grading.</p> <p>Mixture of Grade 2 and Grade 3</p>	Further Agricultural Land Classification (ALC) assessment to identify Grade 3a and 3b is necessary.
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	0	++	++	<p>The area around the village lies almost entirely within FZ1. A small area of fluvial FZ2 flows a tributary of Brislington Brook that flows between Whitchurch Park and Stockwood.</p>	New residential development should be focused on the parts of the area in Flood Zone 1, avoiding the areas identified as functional floodplain.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	0	-/+	-/+	Several parts of the area are at risk of surface water flooding, with particular areas west of A37, along Queen Charlton Lane and adjoining the settlement area of Whitchurch in Bristol.	Policy Principle 5 includes implementation of a sustainable drainage strategy.
4h. Minimise harm to, and where possible improve, water quality and availability	0	0	0	There are no Groundwater Source Protection Zones nearby. There are no Drinking Water Safeguard Zones nearby.	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	+/?	+/?	<p>This area is not within a reasonable distance to railway stations.</p> <p>There is good connection to Bristol with existing footpath and cycle path infrastructure, and opportunities for enhancing routes in to Keynsham. The area also benefits from existing bus services which provide a regular service to Keynsham, Bristol and Bath.</p> <p>Existing Sustainable Transportation:</p> <ul style="list-style-type: none"> <li>• PROWs run through the site area which provide connection to Whitchurch;</li> <li>• Cycle paths are located immediately north (A37) and south (Norton Lane); and</li> <li>• Area is well serviced with a number of bus stops along the A37 which provide regular bus services.</li> </ul> <p>Policy states that No housing will be completed at the Whitchurch SDL ahead of:</p> <ol style="list-style-type: none"> <li>i. Park and Ride, and</li> <li>ii. the multi-modal link A4-A37-south Bristol link including as a pre-requisite, the Callington Road scheme being completed.</li> </ol>	<p>The traffic impacts of this site will need to be considered as part of an assessment of the cumulative impact of traffic generated by other planned and proposed development sites in the West of England area.</p> <p>Policy requires key transport infrastructure including;</p> <ol style="list-style-type: none"> <li>i. Multi modal A4 – A37 link and the south Bristol link road</li> <li>ii. Park and Ride</li> <li>iii. Metrobus route from Bristol on the A4 – A37 link</li> <li>iv. Pedestrian and cycle connections</li> <li>v. Off-site junction improvements including at Hicks Gate</li> </ol>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	?	?	?	All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks	Large scale development will provide an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved. Policy 4 requires; 6. Minimise energy demand and maximise the use of renewable energy, where viable meeting all demands for heat and power without increasing carbon emissions.

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<b>Sustainability Appraisal of the Joint Spatial Plan Publication Version</b>	
DIAGRAM TO BE INSERTED	
<b>Strategic Location:</b>	<b>Land at Bath Road,</b>
<b>Highlights:</b> <ul style="list-style-type: none"><li>• Near Stockwood Local Nature Reserve, which sits to the south of the location, while Durley Park is found to the east. Bath Road Allotments are located adjacent to the location.</li><li>• The provision of at least 750 new homes.</li><li>• The area is not within an Air Quality Management Area, but sits between the Keynsham and Bristol AQMAs.</li><li>• There is good public transport availability along the A4 to SE Bristol, Keynsham and Bath where a range of facilities, jobs and services can be accessed.</li><li>• Although on-site development would be residential led, a mix of uses is also being encouraged in policy. These supporting uses will be identified through the masterplanning process.</li><li>• The Grade II Registered Garden of Brislington House, along with the Avon Valley Conservation Area terminates at the northern side of the A4.</li><li>• The surface water flooding area follows the path of Scotland Bottom and generally follow the areas of Flood Zone.</li></ul>	

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<p>There is a good range of different types of space within the walking distance of the location. The area is near to Stockwood Local Nature Reserve, which sits to the south of the location, while Durley Park is found to the east. Bath Road Allotments are located adjacent to the location.</p> <p>Though not designated, there is easy access to the wider countryside, historic wood land and other natural green sites via main cycle routes and the River Avon Trail.</p> <p>Provision of a further new recreational linear park will be made through development of the site is a policy requirement.</p>	<p>The creation of a new recreational facility would provide a benefit to both potential future residents and wider existing residents in accordance with local open space standards.</p> <p>Policy 7.3 requires provision of a linear recreational park incorporating Scotland Bottom watercourse to allow for maintenance of the watercourse and the protection and enhancement of nature conservation. The park should include walking and cycling routes</p>
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	-	-	The area is not within an Air Quality Management Area, but sits between the Keynsham and Bristol AQMAs. Given the nature of the A4, it would be likely that the AQMA would have to be reviewed as part of a wider Transport Impact Assessment.	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	-/+	-/+	<p>There is good public transport availability along the A4 to SE Bristol, Keynsham and Bath where a range of facilities can be accessed.</p> <p>Although on-site development would be residential led, a mix of uses is also being encouraged in policy. These supporting uses will be identified through the masterplanning process.</p>	<p>This level of strategic growth may require mitigation or future provision of health facilities. This would need to be identified at masterplanning stage.</p> <p>New transport infrastructure, including pedestrian and cycling links connected to the location, is a policy requirement. This will improve current connectivity for the wider area as a whole.</p>

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<b>Sustainability Objective</b>	<b>S/T</b>	<b>M/T</b>	<b>L/T</b>	<b>Commentary</b>	<b>Mitigation or enhancement</b>
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	An approximate 750 homes will be provided at the location.  This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective and the housing need of the region.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	No specific local issues. The site is a mix of green and brown field. Greenfield development is likely to be more viable than brownfield, therefore, the majority of the location could provide more certainty for the delivery of a mix of suitable tenures.	Policy 3 sets a minimum target of 35%.
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	A range of community facilities exist in the Brislington and Keynsham areas, accessible via public transport.  Although on-site development would be residential led, a mix of uses is also being encouraged in policy. These supporting uses will be identified through the masterplanning process.	This level of strategic growth may require mitigation or future provision of community facilities. This would need to be identified at masterplanning stage.  New transport infrastructure, including pedestrian and cycling links connected to the location, is a policy requirement. This will improve current connectivity for the wider area as a whole.  Policy 7.13 has no specific requirements.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>+</b>	<b>+</b>	There are schools within the existing urban areas. Within Bristol, there are 4 primary schools and 3 secondary schools within reasonable distance of the edge of the settlement.	This level of strategic growth would be expected to contribute to primary school places and this mitigation would be required. It is a policy requirement that off-site contribution to the provision of primary school places is made.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	<p>Keynsham Town Centre (approx 1.5km away) is accessible by public transport, but beyond comfortable walking distance. Brislington Local Centre is also approximately 1.5km away, but is too low in the centre hierarchy to be scored here. Both Bristol and Bath City Centres can be accessed by public transport.</p> <p>Although on-site development would be residential led, a mix of uses is also being encouraged in policy. These supporting uses will be identified through the masterplanning process.</p>	<p>This level of strategic growth will require mitigation or future provision of retail facilities. The level of provision would need to be identified at masterplanning stage.</p> <p>New transport infrastructure, including pedestrian and cycling links connected to the location, is a policy requirement. This will improve current connectivity for the wider area as a whole.</p>
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).	If development is to be used to benefit nearby disadvantaged areas, the means to do this must be specified.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region.	0	+/?	+/?	<p>Although on-site development would be residential led, a mix of uses is also being encouraged in policy. These supporting uses will be identified through the masterplanning process.</p> <p>New transport infrastructure, including pedestrian and cycling links connected to the location, is integral to the development of the location and is a policy requirement. This will improve current connectivity for the wider area as a whole.</p>	
3b. Achieve reasonable access to major employment areas	0	+	+	<p>There is good public transport access to both the Bristol EZ and Bath EA. The Brislington Trading Estate PIWA is located approx. 0.5km north west along Bath Road and Keynsham Industrial Estate is approx. 2km southbound on the A4.</p>	<p>New transport infrastructure, including pedestrian and cycling links connected to the location, is integral to the development of the location and is a policy requirement. This will improve current connectivity for the wider area as a whole.</p>
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	0	?	?	<p>The Grade II Registered Garden of Brislington House, along with the Avon Valley Conservation Area terminates at the northern side of the A4, but does not encroach into the strategic location. Brislington House Lodge itself is also Grade II Listed and found immediately on the opposite side of the A4, leading to the Grade II listed Long Fox Manor. The Grade II Listed 1 and 2 Oakleigh are also found to the north.</p>	<p>Further heritage assessment may be necessary.</p> <p>Ensuring no harm to valuable heritage assets would need to inform the design process.</p>
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	0	-	-	<p>The strategic location is outside any designated ecological areas, but skirts SNCI land to the south in Stockwood Local Nature Reserve.</p> <p>An area of Priority Habitat deciduous woodland is found within the location.</p> <p>The Bickley Wood SSSI is also north of the River Avon, whose impact zones include the settlement area.</p> <p>Policy requires the protection and enhancement of nature conservation.</p>	<p>Appropriate mitigation may be necessary once the nature of development has been determined and if there is sufficient impact on protected habitats. This would be through planning obligations.</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4c. Minimise impact on and where appropriate enhance valued landscapes	0	?	?	<p>The area is located within the Hicks Gate landscape character area. Not in proximity to AONB. The location itself mostly medium sensitivity landscape value and provides green relief with views from the A4 with hedgerows and trees. There is a network of very good, thick, tree-lined hedgerows with scrubby woodland, and Scotland Bottom stream to the south requiring protection.</p> <p>There is a mixture of high to medium landscape in the surrounding area. To the north of the A4 is a recognised heritage landscape in Brislington House Gardens, and to the south is a prominent and attractive ridge line, forming a green visual backdrop to the character area and adjacent areas.</p> <p>The retention of hedgerows within the location and the integration of Scotland Bottom in any future design is a policy requirement.</p>	The retention of hedgerows within the location and the integration of Scotland Bottom in any future design is a policy requirement.
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	0	-	-	The location includes previously developed land at Bath Road Park and Ride and existing garden centre, though the majority of the site is greenfield and therefore would not contribute towards this objective.	No scope for mitigation.
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	0	?	?	Data and information is limited. Location is classified predominantly as urban land, which does potentially include Grade 3 land.	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	0	+	+	Mainly FZ1. Both FZ2 and FZ3 run along the southeast boundary on the southern section, along Scotland Bottom, and intrude somewhat into the area.  Policy requires SuDS strategy to ameliorate exiting issues along Scotland Bottom.	New residential development should be focused on the parts of the area in Flood Zone 1, avoiding the areas identified as functional flood plain.  Policy requires SuDS strategy to ameliorate exiting issues along Scotland Bottom.
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	0	+/-	+/-	The surface water flooding area follows the path of Scotland Bottom and generally follow the areas of Flood Zone.  Policy requires SuDS strategy to ameliorate exiting issues along Scotland Bottom.	Policy requires SuDS strategy to ameliorate exiting issues along Scotland Bottom.
4h. Minimise harm to, and where possible improve, water quality and availability	0	0	0	There are no Groundwater Source Protection or Drinking Water Safeguard Zones nearby.	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	+/?	+/?	The settlement surrounds Bath Road (A4) with good access to sustainable transport. The road is a major bus route with dedicated bus lanes and numerous bus stops. Regional Route 16 of the Sustrans cycle network is nearby. The nearest train station is in Keynsham.  The development of the location is dependent on key transport infrastructure improvements, set out in the policy. This includes a range of pedestrian and cycling links, upgrading the A4 corridor for public transport and new link roads.	The Bath Road park and ride is located within the strategic location and would require to be relocated as a policy requirement – minimising the impact of any loss.

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<b>Sustainability Objective</b>	<b>S/T</b>	<b>M/T</b>	<b>L/T</b>	<b>Commentary</b>	<b>Mitigation or enhancement</b>
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	?	?	?	All development will need to adhere to national and each council's planning policies related to energy provisions. Proximity to Bristol may provide opportunities to link up with existing heat networks. However, there is no evidence at present that this is feasible.	Large scale development provides an opportunity to incorporate larger scale, low carbon schemes which potentially allows higher standards to be achieved. This would be determined at the design stage. Policy 4 requires; 6. Minimise energy demand and maximise the use of renewable energy, where viable meeting all demands for heat and power without increasing carbon emissions.

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<b>Sustainability Appraisal of the Joint Spatial Plan Publication Version</b>								
DIAGRAM TO BE INSERTED								
<b>Strategic Development Location:</b>	<b>Backwell</b>							
<b>Highlights:</b>								
<ul style="list-style-type: none"><li>• Village expansion, accessible to largely existing facilities, with some enhancements required.</li><li>• Lack of capacity on A370 corridor – Backwell crossroads a particular constraint.</li><li>• Existing station and opportunity to improve links to Bristol with MetroBus.</li><li>• Ecological issues related to bat foraging and commuting routes.</li><li>• Impact on nearby heritage assets to be considered.</li><li>• Loss of high-grade agricultural land.</li><li>• Local surface water flooding issues.</li></ul>								
Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement			

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1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	Backwell Lake LNR is nearby, though a 400m radius extends only slightly south of the railway. Backwell is flanked by National Cycle Routes to the west (410: Avon Cycleway) and east (33: Festival Way) and there is a local cycle route along Backwell Common. Crossed by PRoWS running into countryside. Adjoins outdoor playing space near Lunt Mead.	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.4 has no specific requirements.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	<b>0</b>	<b>+</b>	<b>+</b>	There is no AQMA in the area.	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	Backwell has a GP practice/health centre (plus 3 in Nailsea), pharmacy (plus 4 in Nailsea) and dentist (plus 3 in Nailsea). No hospital. No opticians (nearest is Nailsea).	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.4 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy suggests 700 dwellings.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy suggests 30%, namely 210.	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	Backwell has a post office, village hall and youth centre. There is no library (the nearest is Nailsea) but there are 2 mobile library stops. Eastern part is within 600m of village facilities.	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.4 has no specific requirements.

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2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>++</b>	<b>++</b>	<p>Two primary schools serve the village but these comprise West Leigh Infants and Backwell Junior, on widely separated sites. Within 800m of West Leigh only.</p> <p>There is a secondary school in Backwell and another nearby at Nailsea. All within 1500m of Backwell School.</p> <p>Empty places at primary level are predicted for 2015-2019, with an increasing trend. A shortfall in secondary places is predicted for 2015-2021. Empty places are predicted at Nailsea School over the same period, with an increasing trend.</p>	<p>Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements.</p> <p>Scoring assumes delivery of Policy 7.4 requirement for additional primary school.</p>
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>-</b>	<b>-</b>	Local Centre only. More than 1500m from any town / district centre. Over 5km from any city centre or equivalent but on bus / rail routes to Bristol / WsM.	
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	<b>0</b>	<b>+/?</b>	<b>+/?</b>	Currently limited local employment opportunities. Local Plan employment allocation at Moor Lane has not been taken up.	Policy 7.4 requires delivery of about 8.2ha of employment land to be investigated but does not require delivery to be achieved, hence scoring cannot be '++'. Given uncertainty of deliverability, score has been revised to '+/?'.
3b. Achieve reasonable access to major employment areas	<b>0</b>	<b>++</b>	<b>++</b>	No major employment area, though Temple Quarter EZ is accessible by rail. Backwell is well-placed to continue to serve as a commuter settlement with rail access to central Bristol and Weston-super-Mare but transport capacity constraints may restrict this.	Policy 7.4 requires phasing in line with transport improvements. Scoring assumes delivery of these.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	<b>0</b>	<b>0</b>	Important to maintain open aspect around Chelvey and West Town Conservation Areas. Grove Farm is listed.	Impacts could largely be mitigated through provision of open space buffers around heritage assets. Developable area is large enough do this without difficulty.

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					Policy 7.4 requires sensitive treatment of listed building's setting. Scoring assumes this results in a neutral impact.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	0	+	+	Wildlife Sites at Backwell are on the higher ground to the south and east and along the River Kenn. Backwell Lake is a LNR. There are patches of Priority Habitat in and around the village. The proposed development location itself is free from biodiversity designations but there are likely to be bat foraging and commuting routes associated with this land.	Further ecological assessments would be required. However it is considered that mitigation is readily achievable through the integration of certain ecological features as part of any new development. Policy 7.4 requires safeguarding and enhancement of bat habitat. Scoring assumes this results in a positive impact.
4c. Minimise impact on and where appropriate enhance valued landscapes	0	0/--	0/--	Not in proximity to AONB. Impact on setting of hills to south. The area is within the Land Yeo and Kenn Rolling Valley Farmland landscape character area, a pastoral landscape intermediate between the valley floor and wooded limestone ridges. It is marked by stone farmsteads, thick hedgerows, winding rural lanes and modern ribbon / infill development along the A370. Area is considered to be of medium / medium to high / high sensitivity, with sensitivity generally increasing towards higher ground.	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	0	--	--	Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land. Therefore all locations have a negative effect on this objective and there is no apparent scope for mitigation.	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	0	--	--	Detailed surveys already exist of almost all the land between Backwell and Chelvey. Proposed development location is confirmed as partly Grade 2/3a.	Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).

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4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	<b>++</b>	<b>++</b>	Within Flood Zone 1.	
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	<b>+/-</b>	<b>+/-</b>	There are wide areas of surface water flood risk associated with the River Kenn and its tributaries, including those running down from Backwell Hill, some of which appear to be culverted beneath modern development. There is another large area at risk NE of Grove Farm. There are possible issues of groundwater flooding associated with Backwell Hill, which is a Groundwater Source Protection Zone.	Surface water runoff should be carefully managed to avoid adverse downstream impacts on Clevedon.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>?</b>	<b>?</b>	Backwell is within the Groundwater Source Protection Zone for Chelvey spring. There are no Drinking Water Safeguard Zones nearby.	Further engagement with regulators is necessary to understand what constraints or opportunities exist. The constraint on land north of the A370 is identified as 'subsurface activity only'.
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	<b>0</b>	<b>++</b>	<b>++</b>	Existing rail station (Nailsea & Backwell), although no current capacity considered at AM and PM peaks. Good bus links to Bristol. Lack of capacity on A370 corridor – Backwell crossroads a particular constraint. Mostly within 800m of the station and accessible via existing roads/PRoWs.	Policy 7.4 requires phasing in line with transport improvements. Scoring assumes delivery of these.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	<b>0</b>	<b>?</b>	<b>?</b>	All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks. No locally specific issues. General issue of dispersed growth producing longer vehicle trips.	Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved. JSP seeks investigation of zero carbon development.

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DIAGRAM TO BE INSERTED									
Strategic Development Location:		Banwell Garden Village							
<b>Highlights:</b>									
<ul style="list-style-type: none"> <li>• New development location with potential for community infrastructure package.</li> <li>• Not currently well-located in relation to employment, retail or public transport, though close to Weston-super-Mare.</li> <li>• Delivery of Banwell Bypass would enable environmental conditions in the centre of Banwell to be improved.</li> <li>• No secondary school.</li> <li>• Ecological sensitivities in relation to bat flight corridors.</li> <li>• Impact on AONB to the south.</li> <li>• Low flood risk generally but some surface water issues.</li> </ul>									
Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement				
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+/?	+/?	Currently agricultural land detached from facilities in the existing village of Banwell. Development here would connect existing PROWs and is of a scale that could deliver new public open space to meet its own needs and those arising from the existing village.	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.5 has no specific requirements.				

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1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	<b>0</b>	<b>+/?</b>	<b>+/?</b>	There is no AQMA in this location. Not adjacent to motorway but could be within 200-300m. M5 is in cutting at this location. Bypass would reduce traffic impact in centre of Banwell and so improve air quality there.	Transport Impact Assessment and adequate preventative and mitigation measures are required. Distance from housing could be increased by zoning employment as buffer.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	Banwell has a GP practice and pharmacy (plus others at Locking and Winscombe). Only SE edge of proposed development location is within 1200m. No hospital. No dentist or opticians (nearest are Winscombe and Worle). Population growth in the broader Weston-super-Mare area would contribute to the development of services at Weston General Hospital.	Should strategic growth be proposed, work will be required to assess projected requirements. Development of 1,900 dwellings could support a small satellite surgery. Policy 7.5 has no specific requirements but expects local centre provision to complement facilities in existing village.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy suggests 1,900 dwellings.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy suggests 30%, namely 570.	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	Banwell has a post office, village hall and youth centre. There is no library (the nearest are Winscombe and Worle) but there is a mobile library stop. Existing village facilities are all beyond 600m of proposed development location.	Should strategic growth be proposed, work will be required to assess projected requirements. Development of 1,900 dwellings could support a new community meeting space. Policy 7.5 has no specific requirements but expects local centre provision

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					to complement facilities in existing village.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	0	++/- -	++/- -	<p>There is a primary school in Banwell but no secondary school. Empty places at primary level are predicted for 2015-2019, with an increasing trend. Proposed development location is more than 800m from any primary school. More than 1500m from any existing secondary school and too small a development on its own to deliver a new one.</p> <p>However, a secondary school is required to serve this and the Churchill SDL, with location to be defined through more detailed masterplanning, and consideration of educational requirements across North Somerset. Policy 7.5 requires two new primary schools to serve the new development.</p>	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Scoring assumes delivery of Policy 7.5 requirement for additional primary schools.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	0	-	-	Existing Banwell village has a Local Centre. More than 1500m from any town / district centre. Over 5km from any city centre or equivalent.	Policy proposes bus improvements to Bristol and WsM.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	0	0	0	It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	0	+	+	Currently limited local employment opportunities.	Policy requires mixed use development, including 5 ha of employment. This is expected to be B8, which does not have a high employment density.
3b. Achieve reasonable access to major employment areas	0	+	+	No major employment area, though close to J21 EA at Weston-super-Mare.	Policy proposes bus improvements to Bristol and WsM.

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4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	?	?	Proposed development location avoids known heritage assets but potential archaeology at Stonebridge and Wolvershill Road and between East Street and Riverside requires appropriate mitigation. Environmental improvements to the centre of Banwell are proposed, dependent on the Banwell Bypass. However, these would necessarily be limited if the Bypass does not provide for a north-south link towards Winscombe, whereas the policy specifically addresses only the A368 corridor.	No direct impacts on designated areas but further archaeological work may be necessary to establish what constraints exist.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	<b>0</b>	?/-	?/-	Ecological sensitivities in relation to bat flight corridors. Eastern side of proposed development location is Natural England Priority Habitat.	A full HRA may be required to assess the potential impacts of any future development in the area, given SAC to the south of Banwell. Policy 7.5 requires safeguarding and enhancement of bat habitat. Scoring assumes this results in a positive impact but loss of Priority Habitat may require replacement habitat or enhancement of wildlife value of other land. The overall score is therefore negative in this respect.
4c. Minimise impact on and where appropriate enhance valued landscapes	<b>0</b>	--	--	Not in AONB but this is nearby, south of Banwell village. The proposed development location is within the River Yeo Rolling Valley Farmland landscape character area, a pastoral landscape intermediate between the valley floor and wooded limestone ridges. It is marked by stone farmsteads, thick hedgerows, small rural roads and modern ribbon / infill development along the A371. The area is considered to be of high sensitivity.	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	--	--	Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land. Therefore all locations have a negative effect on this objective and there is no apparent scope for mitigation.	

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4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	?	?	Provisionally Grade 3 agricultural land but Natural England's ALC Strategic Map shows potential for high-grade land on the northern edge. There are no detailed surveys of land at Banwell.	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	++	++	Within Flood Zone 1.	Climate change additional extents should be considered in detailed layout planning.
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	+/-	+/-	Localised surface water flood risk. Significant area at risk north of Stonebridge. Location identified as an area susceptible to groundwater flooding.	Surface water runoff should be carefully managed to avoid further increasing flood risk in the surrounding area.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	?/-	?/-	There are no Groundwater Source Protection Zones nearby, except to the south of Banwell village. There is a known issue concerning cutting into Banwell Hill, raised in connection with proposals for a Banwell bypass, in which context hydrogeological studies were sought by the Environment Agency but have not been commissioned. This is an issue for this location to the extent that development relies on a full Banwell bypass scheme but not if the bypass excludes a north-south link to Winscombe. There are no Drinking Water Safeguard Zones nearby.	Development involving cutting into Banwell Hill would require further environmental assessment, including hydrogeological studies.
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	<b>0</b>	+/-	+/-	No rail station. Nearest is Worle (3km to the NW). Bus stops on Wolvershill Road.	Significant mitigation required. Policy 7.5 requires provision but many details remain unknown.

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5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	<b>0</b>	?	?	All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks. No locally specific issues. General issue of dispersed growth producing longer vehicle trips.	Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved. JSP seeks investigation of zero carbon development.
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<b>Sustainability Appraisal of the Joint Spatial Plan Publication Version</b>									
DIAGRAM TO BE INSERTED									
<b>Strategic Development Location:</b>		<b>Churchill Garden Village</b>							
<b>Highlights:</b>									
<ul style="list-style-type: none"><li>• New development location, accessible to Churchill Academy, with potential for community infrastructure package.</li><li>• Not currently well-located in relation to employment, retail or public transport, though relatively good for a rural area and potential for growth.</li><li>• Impact on AONB to the south, and also sensitive local topography, particularly west of Churchill village.</li><li>• Ecological sensitivities in relation to bat flight corridors.</li><li>• Local surface water flooding issues.</li><li>• High probability of BMV land.</li></ul>									
<b>Sustainability Objective</b>	<b>S/T</b>	<b>M/T</b>	<b>L/T</b>	<b>Commentary</b>	<b>Mitigation or enhancement</b>				
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village	0	++	++	Churchill has a small central open space off Rowan Way but this is remote from likely strategic development. There are no nearby large open spaces but easy access to the Mendip Hills. Churchill Batch and Havyatt Green are common land.	Strategic level of development with appropriate on-site provision would contribute to this objective. Scoring assumes delivery of Policy 7.6				

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Greens, and Public Rights of Way)				The existing village centre (Churchill Gate) is 2.8km from National Cycle Network Route 26 (Strawberry Line). The Garden Village could have access at Sandford. There is an extensive network of PRoWs.	requirements for a Green Infrastructure network and a multi-functional network of green spaces.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	+	+	There is no AQMA in the area.	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	+/?	+/?	Churchill has a GP practice on Pudding Pie Lane, capable of serving the Garden Village. No hospital. No opticians (nearest are Winscombe and Wrington). No pharmacy (nearest are Winscombe and Wrington). No dentist (nearest is Winscombe).	Should strategic growth be proposed, work will be required to assess projected requirements. Development of 2,800 dwellings could support a small satellite surgery. Policy 7.6 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy suggests 2,800 dwellings, of which 96% would be delivered within the plan period.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	0	++	++	No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy suggests 30%, namely 840.	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	0	+/?	+/?	Churchill has a post office, village hall and youth centre but these are widely separated and at the SW side of the village; only the southern parts of the proposed development location are within 600m. There is no library (the nearest are Congresbury and Winscombe) but there is a mobile library stop. Policy 7.6 requires new local centre.	Should strategic growth be proposed, work will be required to assess projected requirements. Development of 2,800 dwellings could support a new community meeting space. Policy 7.6 has no specific requirements.

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2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>++</b>	<b>++</b>	<p>There are primary and secondary schools in Churchill. There is also a primary school nearby at Sandford.</p> <p>Empty places at primary level are predicted for 2015-2019, with an increasing trend. Empty places are also predicted at secondary level for 2015-2021, with a decreasing trend.</p> <p>Policy requires three new primary schools. Proposed development location is predominantly within 1500m of Churchill Academy. However, a secondary school is required to serve this and the Banwell SDL, with location to be defined through more detailed masterplanning, and consideration of educational requirements across North Somerset.</p>	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Scoring assumes delivery of Policy 7.6 requirement for additional primary schools.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>--</b>	<b>--</b>	<p>Local Centre only. More than 1500m from any town / district centre. Over 5km from any city centre or equivalent but on bus routes to Bristol. Policy 7.6 requires new local centre.</p>	Policy 7.6 requires transport improvements but does not specify how public transport would serve the Garden Village.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<p>It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).</p>	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	<b>0</b>	<b>+/?</b>	<b>+/?</b>	<p>Currently limited local employment opportunities. Significant employers are the University of Bristol (Langford House), Monaghan Mushrooms, Churchill Academy and Thatchers Cider. Yeo Valley Foods is nearby in Blagdon parish. Policy 7.6 requires investigation of potential for about 7.4ha of employment land.</p>	Policy 7.6 requires delivery of employment land to be investigated but does not require delivery to be achieved, hence scoring cannot be '++'. Given uncertainty of deliverability, score has been revised to '+/?'.
3b. Achieve reasonable access to major employment areas	<b>0</b>	<b>+/-</b>	<b>+/-</b>	<p>No major employment area, though Bristol Airport in the adjoining parish of Wrington is accessible via the A38.</p>	Policy 7.6 requires transport improvements but does not specify how public transport would serve the Garden Village.

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4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>++</b>	<b>++</b>	<b>++</b>	Heritage assets are associated with the existing villages of Churchill and Langford. There are none in the proposed development location but it does have potential to impact on settings. Policy requires protection and enhancement of local heritage assets and their settings and retention of Windmill Hill (potential Iron Age settlement) as a focal green feature.	Scoring assumes delivery of Policy 7.6 requirements for enhancement.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	<b>0</b>	<b>-/?</b>	<b>-/?</b>	Natural environment designations are to the north (North Somerset Levels) and south (Mendip Hills) or in small parcels adjacent to the existing villages. Proposed development location is largely unconstrained except for areas of Priority Habitat near Nye Road and West Brinsea Farm. Ecological sensitivities in relation to bat flight corridors. Policy 7.6 requires safeguarding and enhancement of bat habitat and investigation of green corridor linking Windmill Hill to south of Langford and Langford Brook.	Policy 7.6 requires green corridor to be investigated but does not require delivery to be achieved, hence scoring cannot be '++'. Given uncertainty of deliverability, and that impact on Priority Habitat not addressed through specific mitigation measures, score has been revised to '-/?'.
4c. Minimise impact on and where appropriate enhance valued landscapes	<b>0</b>	<b>--</b>	<b>--</b>	Not in AONB but potential for indirect impact. The area is within the River Yeo Rolling Valley Farmland landscape character area, a pastoral landscape intermediate between the valley floor and wooded limestone ridges. It is marked by stone farmsteads, thick hedgerows, small rural roads and modern ribbon / infill development along the A38 and A368. Area is considered to be of high sensitivity. Sensitive local topography around Windmill Hill, which Policy 7.6 requires be retained as a focal green feature.	Policy 7.6 requirements for development form and layout and for green infrastructure may mitigate landscape impact but details are currently unknown. There may be residual impacts that cannot be mitigated. A requirement for very high quality development, informed by detailed sensitivity assessment, would minimise these.
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	<b>--</b>	<b>--</b>	Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land. Therefore this location has a negative effect on this objective and there is no apparent scope for mitigation.	

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4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	?	?	<p>There are extensive areas of potentially Grade 2 agricultural land at Churchill / Langford, above the floodplain but below the higher ground, along with some Grade 1.</p> <p>There are no detailed surveys of land at Churchill.</p> <p>According to the provisional Agricultural Land Classification mapping, the proposed development location is unconstrained by BMV land but Natural England's ALC Strategic Map shows it as predominantly Grades 1 and 2.</p>	Detailed Agricultural Land Classification Assessment required to establish the precise land grading. Site definition should seek to avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	<b>++</b>	<b>++</b>	Within Flood Zone 1.	
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	<b>+/-</b>	<b>+/-</b>	<p>There are narrow areas of surface water flood risk associated with local watercourses and roads.</p> <p>There are possible issues of groundwater flooding associated with the Mendip Hills, which are a Groundwater Source Protection Zone.</p>	Surface water runoff should be carefully managed to avoid adverse downstream impacts on Wrington and Congresbury.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>0</b>	<b>0</b>	<p>No apparent groundwater constraints in the proposed development location. A large part of the Mendip Hills to the south are a Groundwater Source Protection Zone.</p> <p>Burrington Combe is part of a Drinking Water Safeguard Zone.</p>	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	<p>No rail station. Nearest is Yatton (6km to the NW).</p> <p>Bus stops mainly on classified roads south and east of the existing village.</p> <p>A38 corridor has more capacity than A370, but impacts on local road network.</p>	Policy 7.6 requires transport improvements but does not specify how public transport would serve the Garden Village.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	<b>0</b>	?	?	<p>All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks.</p> <p>No locally specific issues. General issue of dispersed growth producing longer vehicle trips.</p>	Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved. JSP seeks investigation of zero carbon development.

## **Appendix C**

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### Sustainability Appraisal of the Joint Spatial Plan Publication Version

DIAGRAM TO BE INSERTED

<b>Strategic Development Location:</b>	Nailsea
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#### Highlights:

- Town expansion, remote from all existing town facilities and so requiring extensive community infrastructure package.
- Not currently well-located in relation to employment, retail or public transport, though potential for growth.
- Resumed housing growth addresses demographic imbalance in Nailsea resulting from past expansion.
- Existing station and opportunity to improve links to Bristol with MetroBus.
- Ecological sensitivities in relation to bat flight corridors.
- Landscape and heritage sensitivities, requiring high quality mitigation but little detail yet available.
- Loss of high-grade agricultural land, with no apparent scope to avoid through design.
- Low flood risk generally but complex surface water issues to be resolved affecting biodiversity and drainage.

Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
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1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	<b>0</b>	+/?	+/?	The major open space within Nailsea (Scotch Horn) is more than 400m from the town's edge. There are local cycle routes within and surrounding Nailsea. Route 410 (Avon Cycleway) runs to the SW of Nailsea through Chelvey. There are PRoWs within the proposed development location but these are poorly connected to the surrounding countryside to the west.	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.7 has no specific requirements.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	<b>0</b>	+	+	There is no AQMA in the area.	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	<b>0</b>	+/?	+/?	No local hospital. Part within 5km of Clevedon Hospital. All other local health care facilities present in the town but all over 1200m from proposed development location.	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.7 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	<b>0</b>	++	++	This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy suggests 3,300 dwellings, of which 2,575 are within the plan period.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	++	++	There is concern locally that Nailsea's demographic profile is becoming unbalanced as the population attracted by a previous era of town expansion ages. Further housing could enable more opportunities for younger people. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy suggests 30%, namely 990, assuming 30% target continues to apply beyond the plan period, or 773 if not.	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	+/?	+/?	There is a relatively good range of community facilities and services within Nailsea and surrounding villages but the countryside to the west of Nailsea is not well-served. The Blue Flame public house is the only meeting place currently at the proposed development location.	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.7 has no specific requirements.

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2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>++</b>	<b>++</b>	<p>There are 5 primary schools in the town, of which Hannah More Infants and Grove Junior share a site. Backwell, Claverham and Tickenham also have primary schools nearby. The Nailsea group of primary schools all have a projected surplus of places (2015-2019). In some schools the surplus is projected to increase and in others to decrease.</p> <p>Nailsea has a secondary school and there is another nearby at Backwell. Nailsea is projected (2015-2021) to have an increasing surplus, while Backwell has an increasing shortfall.</p> <p>Land south and west of Nailsea is almost all beyond 800m of any primary school. Small part within 800m of Grove/Hannah More. Eastern edge only within 1500m of Nailsea Secondary School.</p>	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Scoring assumes delivery of Policy 7.7 requirement for additional primary and secondary schools.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>+/-</b>	<b>+/-</b>	<p>There is a relatively good range of town centre uses in Nailsea but proposed development location is more than 1500m away and remote from existing public transport. Over 5km from any city centre or equivalent but bus / rail routes exist to Bristol / WsM.</p>	Scoring assumes delivery of Policy 7.7 requirement for MetroBus corridor and improved access to station. Scoring would improve if proposed local centre had District Centre status but emphasis is on protection of Nailsea Town Centre, which is too remote to serve this area conveniently.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<p>It is unlikely that development in this area would help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).</p>	
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within	<b>0</b>	<b>+/?</b>	<b>+/?</b>	<p>Nailsea does not have extensive undeveloped employment land provision. It has poor access from the strategic road network and is less attractive because of its location south of the Avonmouth Bridge. However, as a town it has some potential for economic development. Policy 7.7 requires investigation of potential for 2.3 ha employment land and proposes new transport infrastructure. Reference to additional potential for 8.2ha at Backwell duplicates Policy 7.4, assessed under Backwell.</p>	Policy 7.7 requires delivery of employment land to be investigated but does not require delivery to be achieved, hence scoring cannot be '++'. Given uncertainty of deliverability,

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the West of England sub-region					score has been revised to '+/?'.
3b. Achieve reasonable access to major employment areas	0	++	++	No EZ or locally designated key employment site. NW and NE industrial estates serve the town. Nailsea is well-placed to continue to serve as a commuter settlement with rail access to central Bristol and Weston-super-Mare but transport capacity constraints may restrict this.	Policy 7.7 requires phasing in line with transport improvements. Revised scoring assumes delivery of these.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	0	0	0	Nailsea Court (listed building and unregistered historic park & garden) and Chelvey (listed buildings and Conservation Area) to SW. Several listed farmhouses and other buildings in the rural area.	Impacts could largely be mitigated through provision of open space buffers around heritage assets. Developable area is large enough do this without difficulty. Policy 7.7 requires protection of heritage assets and their settings. Scoring assumes this results in a neutral impact.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	0	0/?	0/?	Wildlife designations around the town, notably to NW and south. Tickenham, Nailsea and Kenn Moors SSSI lies to the NW of the town. Relates to the watercourses rather than large expanses of land. There is a scatter of Wildlife Sites and small areas of Priority Habitat directly affecting land south and west of Nailsea. Ecological sensitivities related to bat flight corridors and foraging habitat.	Policy 7.7 requires protection and enhancement of bat habitat. Scoring assumes this results in a neutral impact. However, potential for a dark corridor is not proven and indirect impact on SSSI may need to be assessed, so overall score is '0/?'. Important overlap with surface water drainage issues affecting aquatic environment (water levels and quality) of the Moors.

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4c. Minimise impact on and where appropriate enhance valued landscapes	<b>0</b>	--	--	<p>Not in proximity to AONB.</p> <p>Nailsea sits within the Nailsea Farmed Coal Measures landscape character area, a remote, intimate, early mediæval pastoral landscape into which the urban edge protrudes. Area is considered to be of high sensitivity.</p>	<p>Policy 7.7 provides no specific mitigation beyond consideration of re-location / undergrounding of existing pylons.</p> <p>Assessments to identify areas with potential for mitigation may form part of the proposed sensitive green infrastructure strategy.</p>
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	--	--	Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land. Therefore all locations have a negative effect on this objective and there is no apparent scope for mitigation.	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	--	--	Potential for proposed development location to be very largely Grade 2. This land is also outside Flood Zone 3. Detailed surveys so far confirm predominantly BMV status.	<p>Detailed Agricultural Land Classification Assessment required to establish the precise land grading in unsurveyed areas.</p> <p>However, grades 1, 2 and 3a appear to be so extensive in this location that avoiding them would not be possible.</p>
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	++	++	<p>Within Flood Zone 1. The town is surrounded by large areas of fluvial and tidal Flood Zone 3. These areas are also in the functional floodplain for the Land Yeo, River Kenn and surrounding tributaries and rhynes.</p> <p>Climate change will lead to slight enlargement of Flood Zone 3.</p>	
4g. Minimise vulnerability to surface water flooding and other sources of flooding,	<b>0</b>	+/-	+/-	Extensive areas of surface water flood risk exist along the river corridors but are contained within the fluvial extents. So too are the inundation zones for the Barrow Tanks reservoirs. Localised	Surface water runoff should be carefully managed to avoid adverse downstream impacts. Important overlap

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without increasing flood risk elsewhere.				surface water flood risk along watercourses and elsewhere. Southern part susceptible to groundwater flooding.	with biodiversity issues as drainage affects aquatic environment (water levels and quality) of the Moors.
4h. Minimise harm to, and where possible improve, water quality and availability	0	?	?	There is a Groundwater Source Protection Zone for Chelvey spring that includes land S and W of Nailsea. There are no Drinking Water Safeguard Zones nearby.	Further engagement with regulators needed to understand what constraints or opportunities exist. The constraint is identified as 'subsurface activity only'.
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	++	++	Existing rail station (Nailsea & Backwell) but hardly any of the town is within 400m. Good bus links to Bristol via Backwell but poor connectivity to elsewhere. Lack of capacity on A370 corridor constrains improvements: Backwell crossroads is a particular constraint.	Policy 7.7 requires phasing in line with transport improvements. Scoring assumes delivery of these.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	0	?	?	All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks. No locally specific issues. General issue of dispersed growth producing longer vehicle trips.	Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved. JSP seeks investigation of zero carbon development.

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### Sustainability Appraisal of the Joint Spatial Plan Publication Version

DIAGRAM TO BE INSERTED

<b>Strategic Location:</b>	<b>Buckover Garden Village</b>
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#### Summary

- The vision for Buckover Garden Village is to deliver a holistically planned, free standing garden village which enhances the natural environment and provides high-quality and innovative homes, with local jobs in a beautiful, healthy place with diverse communities and delivers step-change in local sustainable transport opportunities.
- Potential medieval settlement located between Horseshoe Farm and Milbury Heath. Roman Road runs east-west through northern part of strategic development location. Two Grade II Listed Buildings towards the centre of the locality. Also consider setting of Tortworth Court (II\*) and Eastwood Park.
- Development requires a package of local and strategic transport improvements.
- No known significant ecological constraints. Two geological SSSIs (Buckover Road Cutting and Brinkmarsh Quarry). SNCI at Ridgewood. Some landscape value on slopes to south and east of the locality. Limited flood risk.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<b>BGV – Buckover</b> Currently agricultural land. Good potential access to the existing strategic cycle network through the Avon Cycleway. Potential to connect with the Jubilee Way and strategic PROW network. Potential to enhance the nearby cycle network and PROWs.	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.8 requires that a GI network be established to ensure a permanent and robust landscape edge to the western boundary of Buckover Garden Village. It also requires that new Local Plan policy will establish a designation to establish a permanent strategic gap between Buckover Garden Village and Thornbury is created and maintained. Transport mitigation will improve accessibility.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	+/?	+/?	<b>BGV – Buckover</b> There is no AQMA in the area. Potential for areas of poor air quality along the A38 and near to M5.	Transport Impact Assessment and adequate preventative and mitigation measures are required. Policy 7.8 requires that consideration will be required to ensure the A38 can continue to act as an effective relief road to the M5 without detriment to the new resident's health & wellbeing.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	-	-	<b>BGV – Buckover</b> There are no healthcare facilities in Buckover. The nearest GP practice, dental practice and pharmacy are located in Thornbury, outside of reasonable distance. The nearest hospital is outside of reasonable distance.	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.8 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	<b>BGV – Buckover</b> This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy 7.8 states that around 3,000 dwellings, of which at least 1,500 will be delivered within the plan period.	

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society Within the West of England sub-region	0	++	++	<b>BGV – Buckover</b> No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy 7.8 states that affordable housing will be delivered.	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	0	+	+	<b>BGV – Buckover</b> There are no dedicated community centres, post offices or libraries in the area or within reasonable distance.	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.8 requires the provision of and support for a range of retail, community & cultural facilities in the Garden Village and potentially other nearby communities to complement existing local provision.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	0	+	+	<b>BGV – Buckover</b> There are no schools in Buckover. The nearest primary and secondary school provision is within Thornbury, outside of reasonable distance.	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Policy 7.8 requires the provision of a primary school and a 3-16 all through school and nursery(s).
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	0	-	-	<b>BGV – Buckover</b> Buckover is outside of reasonable distance to Bristol city centre. The nearest town centre is Thornbury, outside of reasonable distance. There are no local shops located within Buckover.	Policy 7.8 requires the provision of a strategic transport package, including a new local shuttlebus and cycle/ pedestrian improvements will improve access to Thornbury. The potential also exists for limited town centre services and facilities to be provided in small-scale retail units on site.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<b>BGV – Buckover</b> It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).	If development is to be used to benefit disadvantaged areas, the means to do this must be specified.
3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the west of England sub-region	<b>0</b>	<b>+</b>	<b>+</b>	<b>BGV – Buckover</b> Very limited local employment opportunities at present. Likely that additional employment floor space would need to be provided at this location.	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.8 requires the provision of around 11ha of employment land to provide a range of employment opportunities. Potential also exists for the provision of local retail units, cultural and community facilities which will add to the local employment offer.
3b. Achieve reasonable access to major employment areas	<b>0</b>	<b>-</b>	<b>-</b>	<b>BGV – Buckover</b> No major employment area. Area is relatively close to employment opportunities in Thornbury.	Policy 7.8 requires a strategic transport package, including a new local shuttlebus and cycle/pedestrian improvements will improve access to Thornbury and links to major employment areas in the north fringe of Bristol.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	<b>?</b>	<b>?</b>	<b>BGV – Buckover</b> Potential medieval settlement located between Horseshoe Farm and Milbury Heath. Roman Road runs east-west through northern part of strategic development location. There are two grade II Listed Buildings within the site, which have a collection of outbuildings (new and historic) that form their immediate curtilage. No other heritage assets fall within the zone but two listed farmhouses and a locally listed lodge lie to the north.	Impacts could largely be mitigated through provision of open space buffers around heritage assets. Developable areas are large enough do this without difficulty. Policy 7.8 requires a GI network be established to ensure that the setting of local heritage assets is protected.
4b. Minimise impact on and where possible enhance	<b>0</b>	<b>?</b>	<b>?</b>	<b>BGV – Buckover</b>	Impacts could largely be mitigated through provision of

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
habitats and species (taking account of climate change)				<p>There are two geological SSSIs within the area. Buckover Road Cutting SSSI consists of rock exposures either side of the A38 immediately north of the junction with the Old Gloucester Road. Brinkmarsh Quarry SSSI is situated in the far north of the eastern half of the SDL and is notified for its fossil-rich shales and sandy limestones. Ridgewood near the hamlet of Buckover in the eastern half of the SDL is designated as an SNCI for its ancient semi-natural woodland.</p>	<p>open space buffers around ecological assets. Developable areas are large enough do this without difficulty. Policy 7.8 requires a GI network be established to ensure that Ridgewood and other local ecological assets are protected.</p>
4c. Minimise impact on and where appropriate enhance valued landscapes	0	-	-	<p><b>BGV – Buckover</b>  Buckover is not in or near the Cotswolds AONB.  Buckover is located in the Falfield Vale landscape character area and including the side slopes of the Severn Ridge at Milbury Heath which overlook the area from the south. The bowl shaped landscape is overlooked from the higher ground to the north where the medieval deer park of Eastwood Park has a parkland character. The landscape in this area is considered to be of high and medium to high sensitivity.</p>	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	0	--	--	<p><b>BGV – Buckover</b>  Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land.  Therefore all locations have a negative effect on this objective and there is no apparent scope for mitigation.</p>	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	0	--	--	<p><b>BGV – Buckover</b>  Buckover contains areas of potential Grades 2 and 3 agricultural land. There are small areas of Flood Zone 3 around the river corridors.</p>	<p>Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).</p>
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	0	++	++	<p><b>BGV – Buckover</b>  Majority of this location is within a low risk flood zone (FZ1). A small part of this location, along the Pickedmoor Brook, is within a high risk flood zone (FZ2 and FZ3).</p>	<p>New residential development should not take place in high-risk areas if areas with a lower risk of flooding are reasonably available. The functional floodplain is to be avoided altogether.</p>

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	0	+/-	+/-	<b>BGV – Buckover</b> The site is at risk of surface water flooding in 1 in 30, 1 in 100 and 1 in 1000 year events. Surface water flow routes along river corridors. Small areas of surface water pooling across site.	Surface water runoff should be carefully managed to avoid adverse downstream impacts.
4h. Minimise harm to, and where possible improve, water quality and availability	0	0	0	<b>BGV – Buckover</b> There are no Groundwater Source Protection Zones nearby. There are no Drinking Water Safeguard Zones nearby.	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	-	-	<b>BGV – Buckover</b> Limited access to bus-based public transport network at present. There is at present no nearby access to the rail network.	Policy 7.8 requires provision of a strategic transport package including as appropriate delivery of or contributions towards: Metrobus Extension to Thornbury & Buckover GV, A38(N) Park & Ride, M5 J14 improvements, Charfield Rail Station re-opening, local bus service improvements (including new local shuttlebus to Thornbury), strategic and local cycle and pedestrian connections to Thornbury and other local highway network improvements as necessary.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	0	+	+	<b>BGV – Buckover</b> All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks. No locally specific issues. General issue of dispersed growth producing longer vehicle trips.	Policy 7.8 requires the embedding of zero-carbon and energy positive solutions throughout the planning, design and delivery process across the whole settlement. Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved.

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### Sustainability Appraisal of the Joint Spatial Plan Publication Version

DIAGRAM TO BE INSERTED

<b>Strategic Location:</b>	<b>Charfield</b>
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#### **Summary**

- To the south of Charfield the small hamlet of Churchend contains the Grade I listed Church of St James, the Grade II listed Rectory Manor Cottages and other locally listed buildings. LBs also at Poolfield Farm and Park Farm.
- Development requires a package of local and strategic transport improvements.
- Escarpment, slopes and wooded areas through the west and northwest of the village and Elbury Hill to the east have landscape value. Flood risk limited to the Little Avon running along the Stroud District boundary to the east.
- Tortworth Copse is a designated SNCI and Cullimore's Quarry is both a geological SSSI and Regionally Important Geological Site (RIGS). Some associated ecological value to northwest of the village, along the Little Avon River and SNCI's to the south.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<b>Charfield</b> The main open space provision is currently located centrally in the village. Potential to enhance the currently limited local cycle and Public Rights Of Way network.	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.9 requires that the future role and function of remaining greenfield land parcels within the centre of the village will firstly be reviewed in consultation with the local community to ensure future uses make the most efficient use of land. It also requires that a GI network enhances and protects existing assets.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	+	+	<b>Charfield</b> No local AQMAs. Rural area. SDL areas bisected by Bristol to Gloucester railway line and B4058.	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	-	-	<b>Charfield</b> There are no health care facilities in Charfield. The nearest healthcare facilities are located within Thornbury, outside of reasonable distance. There are also healthcare facilities in Yate, to the south. The nearest hospital is located in Southmead.	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.9 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	<b>Charfield</b> This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy 7.9 states that around 1,200 dwellings will be delivered within the plan period.	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	0	++	++	<b>Charfield</b> No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy 7.9 states that affordable housing will be delivered.	
2c. Achieve reasonable access to community	0	+	+	<b>Charfield</b> There is a dedicated community centre and a post office located within Charfield. There is no library in Charfield. The majority of the SDL to the	Should strategic growth be proposed, work will be required to assess projected

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
facilities (post office, meeting venues, youth centres)				west of the railway line is within reasonable distance of the post office, but nearly all of the area to the east is not, The majority of the SDL to the east of the railway line and around half of the area to the west is within reasonable distance of the community centre.	requirements. Policy 7.9 requires that the future role and function of existing community assets within the centre of the village will firstly be reviewed in consultation with the local community to ensure future uses make the most efficient use of land.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	0	++/-	++/-	<b>Charfield</b> Majority of the area is within reasonable distance of the primary school in Charfield. The nearest secondary school is Katherine Lady Berkeley, outside of a reasonable distance to the east. There is also secondary school provision in Thornbury to the west and Yate to the south.	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Policy 7.9 requires the replacement of the existing primary school with a new 3FE school in a central village location and contributions to delivery of an expanded secondary school in the locality, and/or the delivery of a new all through 3-16 school at Buckover Garden Village.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	0	-	-	<b>Charfield</b> Charfield is outside of reasonable distance to Bristol city centre. The nearest town centre is Thornbury, outside of reasonable distance, over 5km to the west, where there is a good range of town centre services and facilities. There is also a good range of town centre services and facilities in Yate, to the south. There are local shops located within Charfield.	Policy 7.9 requires a strategic transport package including: M5 J14 improvements, Charfield Rail Station re-opening, local bus service enhancements – increasing access to Thornbury/Yate.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	0	0	0	<b>Charfield</b> It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).	If development is to be used to benefit disadvantaged areas, the means to do this must be specified.
3a. Deliver a reasonable quantum of employment floorspace/land and increase	0	+	+	<b>Charfield</b> Charfield does not have undeveloped employment land provision. Limited employment development potential within area.	Policy 7.9 requires the provision of a minimum of 5ha of employment land for B-Use

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
access to work opportunities for all parts of society within the West of England sub-region					Classes and a range of non B-Use Class employment opportunities. Potential also exists for new and/or improved retail and community facilities which will add to the local employment offer.
3b. Achieve reasonable access to major employment areas	0	-	-	<b>Charfield</b> There is a safeguarded employment site in the village. A large employer (Renishaw), based in Stroud DC, has premises on the edge of the settlement. Further towards Wotton-Under-Edge is Renishaw's headquarters.	Policy 7.9 requires a strategic transport package including: M5 J14 improvements, Charfield Rail Station re-opening, local bus service enhancement to improve access to employment in Yate and the Bristol north fringe.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	0	?	?	<b>Charfield</b> A number of prominent Listed Buildings are located around the periphery of the village, including a Grade I listed church at Churchend. There is also some archaeological potential but not sufficient to prevent development.	Policy 7.9 requires that a GI network will enhance and protect listed buildings. Investigation of archaeological interest may be required.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	0	?	?	<b>Charfield</b> There is a SSSI and a number of SNCIs in/near the parts of the SDL to the west of the railway line. There are no formal ecological constraints in the parts of the SDL to the east of the railway line. In some cases, further work may be required to determine their value.	Policy 7.9 requires that a GI network will enhance and protect local ecological assets.
4c. Minimise impact on and where appropriate enhance valued landscapes	0	-	-	<b>Charfield</b> Charfield is not in or near the Cotswolds AONB. Charfield is within the Wickwar Ridge and Vale landscape character area, a diverse undulating landscape coverer with a mix of farmland, woodland and common. The landscapes in this SDL are considered to be of high and medium to high sensitivity.	Policy 7.9 requires that a GI network will enhance and protect areas of local landscape importance such as Elbury Hill and the Little Avon river and flood zone.
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	0	--	--	<b>Charfield</b> Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land. Therefore all locations have a negative effect on this objective and there is no apparent scope for mitigation.	

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	0	?/-	?/-	<b>Charfield</b> The majority of Charfield is surrounded by potential Grade 3 agricultural land, although there are small areas of potential Grade 2 land to the east of the railway line. The majority of the SDL area is outside of Flood Zone 3.	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a). Policy 7.9 requires that areas of high flood risk along the Little Avon River will form an important part of the GI network.
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	0	+	+	<b>Charfield</b> Majority of this location is within a low risk flood zone (FZ1). The Little Avon River is located on the eastern side of the railway line. Areas adjacent to the river are in a high risk flood zone (FZ2 and FZ3).	Policy 7.9 requires that the Little Avon River and its flood zone will form part of a GI network.
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	0	+/-	+/-	<b>Charfield</b> The location is at risk of surface water flooding in 1 in 30, 1 in 100 and 1 in 1000 year events.	New development will need to provide Sustainable Urban Drainage systems. Surface water runoff should be carefully managed to avoid adverse downstream impacts.
4h. Minimise harm to, and where possible improve, water quality and availability	0	0	0	<b>Charfield</b> There are no Groundwater Source Protection Zones nearby. There are no Drinking Water Safeguard Zones nearby.	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	-	-	<b>Charfield</b> There is an hourly bus service operating between Wotton-under-Edge and Yate. The majority of the area is within reasonable distance of a bus stop. Land is safeguarded in order that a station service can be reinstated in future at Charfield. The potential for this to happen has been studied and could be viable, depending on the scale of development proposed and the provision of new train services between Bristol, Yate and Gloucester via MetroWest Phase 2.	Policy 7.9 requires a strategic transport package including: M5 J14 improvements, Charfield Rail Station re-opening, local bus services, a comprehensive Wotton Road environmental enhancement scheme, new and improved foot and cycle connections through the village and to key local destinations.

## Appendix C

Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	0	?	?	<p><b>Charfield</b></p> <p>All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks.</p> <p>No locally specific issues. General issue of dispersed growth producing longer vehicle trips.</p>	Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved. Policy 7.8 has no specific requirements.

## **Appendix C**

### **Sustainability Appraisal of the Joint Spatial Plan Publication Version**

DIAGRAM TO BE INSERTED

<b>Strategic Location:</b>	<b>Coalpit Heath</b>
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#### **Summary**

- Historic coalmining across the site.
- Good proximity to employment opportunities and other services in the North & North East Bristol Fringe, and Yate rail station.
- Development requires a package of local and strategic transport improvements.
- Development requires sensitive response to building on ridgeline.
- Setting of Listed Buildings and historic Dramway will require careful consideration.

## Appendix C

Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<p><b>Coalpit Heath</b></p> <p>There are a range of PRoWs and cycle routes travel through the village. There is range of open space provision. Potential to enhance the current cycle network and PRoWs, with cycle network traveling through this area. The main playing field for Coalpit Heath is close by (&lt;400m, in some parts). A suitable scale of development with appropriate on-site provision will contribute to this objective.</p>	A strategic level of development with appropriate on-site provision will contribute to this objective. Policy 7.10 requires a GI network to reinforce a new Green Belt boundary the rail cutting, provide attractive routes through the site to the nearby countryside (including along the historic Dramway), break up development impact along the ridgeline and protect the setting of nearby Listed Buildings.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	+	+	<p><b>Coalpit Heath</b></p> <p>No local AQMAs. Air quality likely to vary among development areas. There are no major traffic routes in proximity to the SDL. No closer to A432 than existing development.</p>	
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	+	+	<p><b>Coalpit Heath</b></p> <p>There is a range of healthcare facilities and services (GP surgeries, dental practices and pharmacies) distributed throughout Winterbourne, Frampton Cotterell and Coalpit Heath. The SDL is within reasonable distance of the GP surgery in Frampton Cotterell, but is outside of reasonable distance of a dental practice, an optician and a pharmacy. The nearest hospital is outside of reasonable distance.</p>	Policy 7.10 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	<p><b>Coalpit Heath</b></p> <p>This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy 7.10 states that around 1,800 dwellings will be delivered within the plan period.</p>	
2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	0	++	++	<p><b>Coalpit Heath</b></p> <p>No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy 7.10 states that affordable housing will be delivered.</p>	

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2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>+/?</b>	<b>+/?</b>	<p><b>Coalpit Heath</b></p> <p>There are six dedicated community centres distributed between Winterbourne, Frampton Cotterell and Coalpit Heath. There are post offices in Winterbourne and Coalpit Heath. Around half of the SDL area is within reasonable distance of a dedicated community centre. Less than half of the SDL area is within reasonable distance of a post office.</p>	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.10 requires the provision of a new community facility/hub.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>+/-</b>	<b>+/-</b>	<p><b>Coalpit Heath</b></p> <p>There are six primary schools distributed between Winterbourne, Frampton Cotterell and Coalpit Heath. There is one secondary school in the area, although there are also secondary schools in Yate. Access to primary schools is good for all assessment areas. Over half of the SDL area is within reasonable distance of a primary school. The SDL area is outside of reasonable distance of a secondary school.</p>	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.10 requires the provision of a new primary school (subject to further testing) plus contributions to a new or expanded secondary school in the wider locality.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>-</b>	<b>-</b>	<p><b>Coalpit Heath</b></p> <p>Coalpit Heath is outside of reasonable distance to Bristol City centre. The nearest town centres are outside of reasonable distance, located within the north and east fringes of Bristol and Yate. Winterbourne has a local centre and offers some services and facilities. There are also a number of local shops distributed around the Winterbourne, Frampton Cotterell and Coalpit Heath area. As a result, most areas are near a local shop.</p>	Policy 7.10 requires the development to provide or contribute to a strategic transport package including: Metrobus extension to Yate and Chipping Sodbury, A432 Park and Ride, Yate Station enhancement, the Winterbourne and Frampton Cotterell Bypass, strategic cycle route and local bus services – increasing access to Yate.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<p><b>Coalpit Heath</b></p> <p>It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).</p>	If development is to be used to benefit disadvantaged areas, the means to do this must be specified.

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3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Coalpit Heath</b></p> <p>Limited local employment opportunities, although area is located close to employment opportunities at Yate, Emersons Green (EA). Given close proximity to existing employment opportunities it is unlikely that additional employment floor space would be provided at this location</p>	Policy 7.10 requires the provision of a minimum of 5ha of employment land for B-Use Classes and a range of non B-Use Class employment opportunities as well as a local centre incorporating a local retail outlet.
3b. Achieve reasonable access to major employment areas <i>Major Employment sites</i> Enterprise Zones Locally designated key employment areas	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Coalpit Heath</b></p> <p>There is little in the way of an employment base beyond local shops and services. Areas to the west lie close to Enterprise Area at Emersons Green. Areas to the west lie relatively close to the North Bristol Fringe.</p>	Policy 7.10 requires the development to provide or contribute to a strategic transport package including: Metrobus extension to Yate and Chipping Sodbury, A432 Park and Ride, Yate Station enhancement, the Winterbourne and Frampton Cotterell Bypass, strategic cycle route and local bus services.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	<b>?</b>	<b>?</b>	<p><b>Coalpit Heath</b></p> <p>The area lies in an historic landscape with numerous heritage assets and significant archaeological potential associated with medieval settlement, the civil war and mining history. Significant archaeological potential associated with a medieval settlement and Frog Lane colliery to northeast of the area. Mayhill Farm sits on a prominent location overlooking north-eastern part of the area. Listed Farmhouse overlooks southern part of the area.</p>	Policy 7.10 requires a GI network to provide attractive routes through the site to the nearby countryside (including along the historic Dramway) protect the setting of Listed Buildings Elsewhere investigation of archaeological potential required.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	<b>0</b>	<b>0</b>	<b>0</b>	<p><b>Coalpit Heath</b></p> <p>There are no significant ecological constraints within the SDL area, although the south eastern boundary abuts an SNCI.</p>	Policy 7.10 requires a GI network, of which the SNCI will be part and which will protect and enhance the nature conservation interest.

## Appendix C

4c. Minimise impact on and where appropriate enhance valued landscapes <i>National designations</i> AONB	<b>0</b>	-	-	<b>Coalpit Heath</b> The area is within the Frome Valley character area, a diverse, enclosed, intricate combination of agriculture and settlement, divided by major roads. Within this area, there are landforms that make a significant contribution to the distinctive character of the locality and to the rural setting of the surrounding existing residential development. The landscape in this area is considered to be of medium to high sensitivity.	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	--	--	--	<b>Coalpit Heath</b> Development would be on greenfield land. There are no opportunities for strategic-level development on brownfield land.	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	?/+	?/+	<b>Coalpit Heath</b> The majority of the SDL is potential Grade 3 agricultural land, although there are small areas of potential Grades 4 and 7. The majority of the SDL area is outside of Flood Zone 3.	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	+	+	<b>Coalpit Heath</b> No main rivers in SDL area. Tubbs Bottom Watercourse becomes main river downstream of Badminton Road. Area is in a low risk flood zone (FZ1).	
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	+/-	+/-	<b>Coalpit Heath</b> The site is at risk of surface water flooding in 1 in 30, 1 in 100 and 1 in 1000 year events. Surface water flow routes along river corridor; south to north in north of area; and west to east in south of area. Large areas of surface water pooling on north west boundary near bridge and along north boundary. Small areas of surface water pooling across area. Approx. 10% of area is within a zone where there is limited potential for groundwater to occur.	Surface water runoff should be carefully managed to avoid adverse downstream impacts.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>0</b>	<b>0</b>	<b>Coalpit Heath</b> There are no Groundwater Source Protection Zones nearby. There are no Drinking Water Safeguard Zones nearby.	

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5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	+	+	<p><b>Coalpit Heath</b></p> <p>The Yate – Bristol bus services run along the A432 (47/X47, half-hourly) and B4058/Church Road (46/X46, 81/82, each hourly). The nearest train stations are Yate and Bristol Parkway (4 to 5km away) - all of the area is outside of reasonable distance of a secondary school.</p>	Policy 7.10 requires that development will provide or contribute to a strategic transport package including: Metrobus extension to Yate and Chipping Sodbury, A432 Park and Ride, Yate Station enhancement, the Winterbourne and Frampton Cotterell Bypass, strategic cycle route and local bus services.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	0	?	?	<p><b>Coalpit Heath</b></p> <p>No locally specific issues. General issue of dispersed growth producing longer vehicle trips.</p>	Large scale development will provide an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved.

## Appendix C

### Sustainability Appraisal of the Joint Spatial Plan Publication Version

DIAGRAM TO BE INSERTED

<b>Strategic Location:</b>	<b>Thornbury</b>
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#### Summary

- Development requires a package of local and strategic transport improvements.
- Scarp slope running from north east to south west around the eastern edge of the town and around the southern end of the town is a significant physical constraint to development. Development will be contained within this landscape feature.
- Some ecological constraints including SNCI and ancient woodland in the area.
- Flood risk along river corridors at Crossways.

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Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<b>Thornbury</b> Currently agricultural land. There are a range of PRoWs and cycle routes travelling through the town. There is range of open space provisions with further planned through already determined planning permissions.	A strategic level of development with appropriate on-site provision will contribute to this objective. Policy 7.11 requires that a Green Infrastructure network that will protect Crossways & Cleve Wood, the setting of Hacket Farm, rural nature of Hacket Lane, Clay Lane & Crossways Lane, include SUDs features at Crossways to manage potential flooding at Crossways, and extend the Picked Brook Rhine streamside walk.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	+	+	<b>Thornbury</b> No AQMAs in locality and no existing air quality issues from major traffic routes. Future air quality will be affected by extent of development.	
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	+	+	<b>Thornbury</b> There is a range of healthcare facilities and services (GP surgeries, dental practices and pharmacies) in Thornbury as one of South Gloucestershire's market towns. The majority of these services are located in the town centre, in the west of Thornbury. There is also a hospital which offers mainly outpatient facilities. The residential area to the north is within reasonable distance of a GP surgery and health centre. Around a quarter of the residential area to the east is within reasonable distance of a GP surgery and health centre. Both residential areas are outside of reasonable distance to a dental practice, optician and the majority of both areas are also outside of reasonable distance to a pharmacy. The nearest hospital is outside of reasonable distance.	A strategic level of development with appropriate on-site provision will contribute to this objective. Policy 7.11 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	<b>Thornbury</b> This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy 7.11 states that a maximum of 500 dwellings will be delivered within the plan period.	

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2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	<p><b>Thornbury</b></p> <p>No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy 7.11 states that affordable housing will be delivered.</p>	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>-/?</b>	<b>-/?</b>	<p><b>Thornbury</b></p> <p>There are three dedicated community centres, all of which are located on the west side of the town. There are three post offices in and around Thornbury. The SDL areas are outside of reasonable distance from the dedicated community centres and post offices in Thornbury.</p>	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.11 requires development to incorporate a new convenience store/retail or community opportunity.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Thornbury</b></p> <p>There are six primary schools in Thornbury and one secondary school (Castle). Castle school is located on the opposite end of Thornbury to areas T3 and T4. Marlwood School is the next nearest school, located in Alveston. Around two thirds of the SDL residential areas are located within reasonable distance of one of Thornbury's primary schools. The residential area to the north is within reasonable distance of a secondary school, but the residential area to the west is not.</p>	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Policy 7.11 requires the new development to contribute towards new school places.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Thornbury</b></p> <p>Thornbury is outside of reasonable distance to Bristol City centre. As a market town, there is a good range of services and facilities in Thornbury town centre. There are also some limited services and facilities in small parades around the town. The vast majority of the SDL area is within reasonable distance of Thornbury town centre.</p>	Policy 7.11 requires development to incorporate a new convenience store/retail or community opportunity.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<p><b>Thornbury</b></p> <p>It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England.</p>	If development is to be used to benefit disadvantaged areas, the means to do this must be specified.

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3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	<b>Thornbury</b> Thornbury has a range of employment opportunities. It does not have extensive undeveloped employment land provision but does have good access to the strategic road network.	Policy 7.11 requires the provision of around 5ha of employment land and a new retail store to provide a range of employment opportunities.
3b. Achieve reasonable access to major employment areas <i>Major Employment sites</i> Enterprise Zones Locally designated key employment areas	<b>0</b>	<b>+</b>	<b>+</b>	<b>Thornbury</b> Employment opportunities within the town are mainly located at Midland Way Business Park (safeguarded employment site) and within the service sector in the town centre. Reasonable access (via A38) to Bristol North Fringe for other employment opportunities (EA).	Policy 7.11 requires the development to provide contributions towards local and strategic transportation schemes, including potentially: Metrobus Extension to Thornbury (& Buckover) GV, A38(N) Park & Ride, M5 J14 improvements, Charfield Rail Station re-opening, local bus service improvements, local highway, foot and cycle improvements.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	<b>0</b>	<b>?</b>	<b>?</b>	<b>Thornbury</b> The north, and eastern side of Thornbury contains a number of Listed Buildings and some archaeological potential. There are Listed Buildings located just outside of the SDL areas and some potential for archaeology of considerable value.	Policy 7.11 requires a GI network that will protect among other things the setting of Hacket Farm, as well as the rural nature of Hacket Lane, Clay Lane & Crossways Lane. Elsewhere archaeological investigation is required.
4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	<b>0</b>	<b>?</b>	<b>?</b>	<b>Thornbury</b> There are no significant ecological constraints within the residential area to the north. The area to the east contains/ is adjacent to the Crossways Wood and Cleeve Wood SNCIs, which are designated for their ancient semi-natural woodland.	Policy 7.11 requires that a GI network will protect both Crossways Wood and Cleve Wood.
4c. Minimise impact on and where appropriate enhance valued landscapes	<b>0</b>	<b>--/-</b>	<b>--/-</b>	<b>Thornbury</b> Thornbury is not in or near the Cotswold AONB. It is located within the Severn Ridges, a complex landform of abrupt scarps and gentle ridges, which rise from the Severn levels. The landscapes in the SDL areas are considered to be of high sensitivity and medium to high/ high sensitivity.	Policy 7.11 requires that a GI network will protect important landscape features, including the rural nature of Hacket Lane, Clay Lane and Crossway Lane.

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4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	--	--	<b>Thornbury</b> Development would be on greenfield land. There are no opportunities for strategic-level development on brownfield land.	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	--	--	<b>Thornbury</b> There are large areas of potential Grade 2 agricultural land surrounding parts of Thornbury. The majority of the SDL area is potential Grade 2 agricultural land, with a small area of potential Grade 3 land at the southernmost extent of the residential area to the east of Thornbury. The vast majority of the SDL area is outside of Flood Zone 3.	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	+	+	<b>Thornbury</b> There are no main rivers in the SDL area. The vast majority of the SDL area is in a low risk flood zone (FZ1). In the residential area to the west, Pickedmoor Brook river corridor is in high risk flood zone (FZ2 and FZ3).	New residential development should not take place in this location if areas with a lower risk of flooding are reasonably available. The functional floodplain is to be avoided altogether.
4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	+/-	+/-	<b>Thornbury</b> The area is at risk of surface water flooding in 1 in 30, 1 in 100 and 1 in 1000 year events. Surface water flow routes east to west in south of northern part of SDL area. Small area of surface water pooling in south of SDL area. Majority of area is within a zone where there is limited potential for groundwater to occur. In the eastern part of the SDL, surface water flow routes along river corridors, with small areas of surface water pooling across SDL. Part of area is within a zone where there is limited potential for groundwater to occur.	Policy 7.11 requires development to include SUDs features to manage potential flooding.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>0</b>	<b>0</b>	<b>Thornbury</b> There are no Groundwater Source Protection Zones nearby. There are no Drinking Water Safeguard Zones nearby.	

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5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	0	+	+	<p><b>Thornbury</b></p> <p>There is a half-hourly bus service (77/78/79) operating between Bristol and Thornbury which runs along the A38, although journey times to Bristol are lengthy at AM and PM peak. The nearest railway stations are Parkway and Pilning/Severn Beach, all of which are outside of reasonable distance.</p>	Policy 7.11 requires the development to provide contributions towards local and strategic transportation schemes, including potentially: Metrobus Extension to Thornbury (& Buckover) GV, A38(N) Park & Ride, M5 J14 improvements, Charfield Rail Station re-opening, local bus service improvements, local highway, foot and cycle improvements.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	0	?	?	<p><b>Thornbury</b></p> <p>No locally specific issues. General issue of dispersed growth producing longer vehicle trips.</p>	Large scale development will provide an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved.

## Appendix C

### Sustainability Appraisal of the Joint Spatial Plan Publication Version

DIAGRAM TO BE INSERTED

**Strategic Location:** Northwest and West Yate

#### Summary

- There are Listed Buildings and some archaeological potential across the SDL area.
- Yate has good access to employment areas in the north & northeast Bristol Fringe and a main line rail station. Development requires a package of local and strategic transport improvements.
- Flood risk and some ecological interest along Frome valley and tributaries.

## Appendix C

Sustainability Objective	S/T	M/T	L/T	Commentary	Mitigation or enhancement
1a. Achieve reasonable access to public open space (Designated Open Spaces, Town and Village Greens, and Public Rights of Way)	0	+	+	<p><b>Northwest and West Yate</b></p> <p>There are a range of PRoWs, cycle routes and playing fields and nature reserves. Potential exists to enhance the current cycle network and PRoWs, with the Avon cycleway travelling through this area.</p>	Strategic level of development with appropriate on-site provision would contribute to this objective. Policy 7.12 requires that a GI network will reinforce a new Green Belt boundary, protect the river valley and provide an attractive segregated route along the Frome Valley Walkway, and enhance North Road and Frome river corridor through the Beeches Estate. Transport mitigation will improve accessibility.
1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality	0	+/?	+/?	<p><b>Northwest and West Yate</b></p> <p>No local AQMA although known areas of poor air quality in Yate. Railway line in the south and A432 bisecting the north of the area. Potentially some localised air quality issues. Future air quality may be affected by extent of development.</p>	Transport Impact Assessment and adequate preventative and mitigation measures are required.
1c. Achieve reasonable access to healthcare facilities (Doctors, Opticians, Pharmacies, Dentists, Hospitals)	0	+	+	<p><b>Northwest and West Yate</b></p> <p>There is a range of healthcare facilities and services (GP surgeries, dental practices and pharmacies) in Yate and Chipping Sodbury. The majority of these services are located in the town's centres. The majority of the SDL, including the area where residential development is likely to be focused, is outside of reasonable distance from an existing GP surgery, dental practice and pharmacy. Notwithstanding this, there will be a GP surgery delivered within the North Yate New Neighbourhood. All of the SDL area is outside of reasonable distance from an optician. The nearest hospital is outside of reasonable distance.</p>	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.12 has no specific requirements.
2a. Deliver a suitable quantum of high quality housing for the West of England sub-region	0	++	++	<p><b>Northwest and West Yate</b></p> <p>This area is within the wider Bristol HMA therefore development in this area contributes well to meeting this objective. Policy 7.12 states that a minimum of 1,900 dwellings will be delivered, of which at least 1,000 will be delivered within the plan period.</p>	

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2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region	<b>0</b>	<b>++</b>	<b>++</b>	<p><b>Northwest and West Yate</b></p> <p>No specific local issues. Greenfield development is likely to be more viable than brownfield therefore it could provide more certainty for the delivery of suitable tenures including affordable housing. Policy 7.12 states that affordable housing will be delivered.</p>	
2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Northwest and West Yate</b></p> <p>There are seven dedicated community centres, five post offices and two libraries distributed between Yate and Chipping Sodbury. The majority of the SDL, including the area where residential development is likely to be focused, is outside of reasonable distance from a dedicated community centre. All the SDL is outside of reasonable distance from a post office. Notwithstanding this, there will be a multi-use local centre comprising community meeting delivered within the North Yate New Neighbourhood.</p>	Should strategic growth be proposed, work will be required to assess projected requirements. Policy 7.12 requires that the residential neighbourhood will contain a new local centre including a community facility/hub.
2d. Achieve reasonable access to educational facilities (primary schools, secondary schools)	<b>0</b>	<b>+/-</b>	<b>+/-</b>	<p><b>Northwest and West Yate</b></p> <p>There are thirteen primary schools in the Yate and Chipping Sodbury area. There are three secondary schools (Brimsham Green, Yate International Academy and Chipping Sodbury) in the Yate and Chipping Sodbury area. Around half of the the area where residential development is likely to be focused is within reasonable distance of a primary school. In addition to this this, there will be additional primary school delivered within the North Yate New Neighbourhood. Around a third of the the area where residential development is likely to be focused is within reasonable distance of a secondary school.</p>	Should strategic growth be proposed, work will be required to assess existing capacity in the context of projected requirements. Policy 7.12 requires that the residential neighbourhood will contain a new local centre including a primary school(s) and/or all through 3-16 school.
2e. Achieve reasonable access to town centre services and facilities (Designated City, Town and District Centres)	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Northwest and West Yate</b></p> <p>Yate is outside of reasonable distance to Bristol City centre. As a market town, there is a good range of town centre services and facilities in Yate and nearby Chipping Sodbury. There are also some limited services and facilities in small parades around the town. The majority of the SDL area is within reasonable distance of Yate town centre. That said, the railway line presents a physical barrier to accessing it from the employment areas to the south (in west Yate).</p>	Policy 7.12 states that an on-site rail crossing and a new rail bridge are also likely to be required across Nibley Lane. The '?' score reflects that this infrastructure is not a full policy requirement as yet.
2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage	<b>0</b>	<b>0</b>	<b>0</b>	<p><b>Northwest and West Yate</b></p> <p>It is unlikely that development in this area will help to regenerate the areas identified as the most deprived 25% of areas in England as measured by the English Indices of Deprivation 2015 - Index of Multiple Deprivation (IMD).</p>	If development is to be used to benefit disadvantaged areas, the means to do this must be specified.

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3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region	0	++	++	<p><b>Northwest and West Yate</b></p> <p>Yate and Chipping Sodbury does not have extensive undeveloped employment land provision, and has good access to the strategic road network due to proximity to M4 and M5.</p>	Policy 7.12 provides a significant new employment land allocation totalling approx. 30ha will be allocated at West Yate, of which, approximately 11ha of land south of Badminton Road will be allocated for B1 and B2 office/light industrial and research use; and 19ha of land between the railway tracks off the Westerleigh Road will be allocated for B2/B8 and similar uses. Potential also exists for the provision of non B-use class employment at an appropriate location which will add to the local employment offer.
3b. Achieve reasonable access to major employment areas	0	+	+	<p><b>Northwest and West Yate</b></p> <p>Variety of employment opportunities in Yate and Chipping Sodbury. Significant (safeguarded) industrial and trading estates are largely located at the western edge of Yate, close to the station.</p>	Policy 7.12 requires the development to provide or contribute to a strategic transport package including: Metrobus extension to Yate and Chipping Sodbury, A432 Park and Ride, a strategic cycle route, Yate Station enhancement, Winterbourne and Frampton Cotterell Bypass and local bus services.
4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings	0	-/?	-/?	<p><b>Northwest and West Yate</b></p> <p>There are Listed Buildings and potential for archaeology associated with this historic landscape all around the periphery of Yate. There are a number of Listed Buildings within the SDL area. Some archaeological potential across the SDL area, particularly associated with Nibley village and former Mayhill colliery, and areas in proximity to Acton Court SAM and Iron Acton village.</p>	Investigation of archaeology and consideration of Listed Buildings required. Policy 7.12 has no specific requirements.

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4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)	<b>0</b>	?	?	<p><b>Northwest and West Yate</b></p> <p>The River Frome forms part of the boundary of the SDL area, and is designated as an SNCI for its open flowing water and bankside vegetation. Fields at Mission Road/North Road – are also designated as an SNCI, again for their species-rich neutral grassland interest.</p>	Policy 7.12 requires that a GI network will reinforce a new Green Belt boundary, protect the river valley and provide an attractive segregated route along the Frome Valley Walkway, and enhance North Road and Frome river corridor through the Beeches Estate.
4c. Minimise impact on and where appropriate enhance valued landscapes	<b>0</b>	-/-	-/-	<p><b>Northwest and West Yate</b></p> <p>The SDL area is not located in the Cotswold AONB. The majority of Yate is within the Wickwar Ridge and Vale landscape character area, a diverse undulating landscape coverer with a mix of farmland, woodland and common. The landscape in this area is considered to be of medium to high/ high sensitivity.</p>	
4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land	<b>0</b>	--	--	<p><b>Northwest and West Yate</b></p> <p>Development would be greenfield. Development on greenfield land does not contribute to promoting the conservation and wise use of land. Therefore all locations have a negative effect on this objective and there is no apparent scope for mitigation.</p>	
4e. Minimise the loss of productive land, especially best and most versatile agricultural land.	<b>0</b>	?/+	?/+	<p><b>Northwest and West Yate</b></p> <p>The area surrounding Yate and Chipping Sodbury contains areas of potential Grades 1, 2, 3 and 4 agricultural land. The majority of the SDL area is made up of potential Grade 3 agricultural land. There is however an area of potential Grade 2 land in West Yate, and a swathe of potential Grade 4 to the south. The area is outside of Flood Zone 3.</p>	Detailed Agricultural Land Classification (ALC) Assessment required to establish the precise land grading. Site definition should avoid identified areas of the best and most versatile (high grade) agricultural land (land in grades 1, 2 and 3a).
4f. Minimise vulnerability to tidal/fluvial flooding (taking account of climate change), without increasing flood risk elsewhere.	<b>0</b>	+/-	+/-	<p><b>Northwest and West Yate</b></p> <p>The majority of the SDL area is in a low risk flood zone (FZ1). There are however areas of high flood risk (FZ2 and FZ3) along the river corridors.</p>	New residential development should not take place in this location if areas with a lower risk of flooding are reasonably available. The functional floodplain is to be avoided altogether.

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4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere.	<b>0</b>	<b>+/-</b>	<b>+/-</b>	<p><b>Northwest and West Yate</b></p> <p>The area is at risk of surface water flooding in 1 in 30, 1 in 100 and 1 in 1000 year events. Surface water flow routes along river corridors, with areas of surface water pooling across the SDL area. Along river corridor there is potential for groundwater flooding to occur at surface. Parts of the area are within a zone where there is limited potential for groundwater to occur.</p>	New development will need to provide Sustainable Urban Drainage systems. Surface water runoff should be carefully managed to avoid adverse downstream impacts.
4h. Minimise harm to, and where possible improve, water quality and availability	<b>0</b>	<b>0</b>	<b>0</b>	<p><b>Northwest and West Yate</b></p> <p>There are no Groundwater Source Protection Zones nearby. There are no Drinking Water Safeguard Zones nearby.</p>	
5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)	<b>0</b>	<b>+</b>	<b>+</b>	<p><b>Northwest and West Yate</b></p> <p>There are regular bus services between Yate and Bristol, although the quality of local bus services is variable, with services to/from Bristol being caught in traffic congestion. Yate Station is at the western edge of Yate and is served by 1 train per hour (a local service running between Malvern/Gloucester, Bristol and the South Coast). MetroWest Phase 2 will double the frequency of services from 2021; this improvement would use up the remaining capacity on the network at Westerleigh Junction.</p>	Policy 7.12 requires the development to provide or contribute to a strategic transport package including: Metrobus extension to Yate and Chipping Sodbury, strategic cycle route A432 Park and Ride, Yate Rail Station enhancement, Winterbourne and Frampton Cotterell Bypass and local bus services.
5b. Reduce non-renewable energy consumption and 'greenhouse' emissions, and provide opportunities to link into existing heat networks	<b>0</b>	<b>0</b>	<b>0</b>	<p><b>Northwest and West Yate</b></p> <p>All development will need to adhere to national and each council's planning policies related to energy provisions. However, there is no evidence at present that development can link into existing heat networks.</p> <p>No locally specific issues. General issue of dispersed growth producing longer vehicle trips.</p>	Large scale development provides an opportunity to incorporate larger scale low carbon scheme which potentially allows higher standards to be achieved.

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### APPENDIX E: Legal compliance checklist

Source	Requirements for an environmental report	Where covered in the SA Report	Notes
References to Regulations and to Schedule 2 are to the 2004 SEA Regulations			
Reg. 12	<p>Prepare 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.</p> <p>Provide 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</p>	The whole report does this.	
Regs. 8, 13	Consultation bodies with environmental responsibilities and the public to be given an effective opportunity to express their opinion on	Not applicable to the content of the report	Environmental bodies and the public will be given 7 weeks to

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	the draft plan or programme and the accompanying environmental report before the plan or programme is adopted		comment on the JSP Publication Version and draft SA Report.
Schedule 2.1	Provide an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes	Chapter 2 and Appendix A The contents and main objectives of the plan are presented in Chapter 2. The plan's relationships to other plans and programmes is also addressed in Appendix A.	
Schedule 2.2	Provide information on the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	Chapter 5 and Appendix B	
Schedule 2.3	Provide information on the environmental characteristics of areas likely to be significantly affected	Chapter 5 and Appendix B	
Schedule 2.4	Provide information on 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 Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive	Scoping Report Chapter 5 and Appendix B See also Habitats Regulations Assessment	
Schedule 2.5	Provide information on the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way	Chapter 4 and Appendix A	

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	those objectives and any environmental considerations have been taken into account during its preparation		
Schedule 2.6	Provide information on the likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, including on issues listed (see below)	Chapter 7 and Appendix D (Appraisal Tables)	
	Provide information on the likely significant effects on biodiversity, fauna and flora		Objective 4b
	Provide information on the likely significant effects on population and human health		Objectives 1a, 1b, 1c, 2a, 2b, 2c, 2d, 2e, 2f, 3a, 3b, 4f, 4g, 4h, 5a
	Provide information on the likely significant effects on soil		Objectives 4d, 4e
	Provide information on the likely significant effects on water		Objectives 4f, 4g, 4h
	Provide information on the likely significant effects on air		Objective 1b
	Provide information on the likely significant effects on climatic factors		Objective 5b
	Provide information on the likely significant effects on material assets		Objectives 2a, 2c, 2d, 2e, 3a, 3b, 5a
	Provide information on the likely significant effects on cultural heritage including architectural and archaeological heritage		Objective 4a
	Provide information on the likely significant effects on landscape		Objective 4c

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	Provide information on the likely significant effects on the interrelationship between the above factors		The Appraisal Tables, in appraising each policy, refer to cross-cutting issues where relevant
Schedule 2.7	Provide information on 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		The Appraisal Tables, in appraising each policy, make judgements on the extent to which it seeks to minimise negative effects. Where possible, they also suggest potential improvements to the Publication Version. Improvements to other options are not suggested, as these are not options that are planned to be taken forward.
Schedule 2.8	Provide an outline of the reasons for selecting the alternatives dealt with	Chapter 6	
	Provide 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		
Schedule 2.9	Provide a description of the measures envisaged concerning monitoring in accordance with Reg. 17	Chapter 8 and Appendix C	
Schedule 2.10	Provide a non-technical summary of the information provided under the above headings	See separate non-technical summary	