

Sustainability Appraisal of the South Staffordshire Local Plan Review

Spatial Housing Strategy and Infrastructure Delivery

August 2019



LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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Spatial Housing Strategy and Infrastructure Delivery

LC-537	Document Control Box
Client	South Staffordshire District Council
Report Title	Sustainability Appraisal of the South Staffordshire Local Plan Review: Spatial Housing Strategy and Infrastructure Delivery
Filename	LC-537_S.Staffs_Spatial_Options_10_230819CW.docx
Date	August 2019
Author	CW
Reviewed	SC
Approved	ND

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sustainability effects of the South Staffordshire Local Plan Review and meets the requirements of the SEA Directive. It is not intended to be a substitute for an Environmental Impact Assessment (EIA) or Appropriate Assessment (AA).

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Acronyms

AA	Appropriate Assessment
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BMV	Best and Most Versatile
CCDC	Cannock Chase District Council
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DTA	David Tyldesley and Associates
EIA	Environmental Impact Assessment
GBHMA	Greater Birmingham Housing Market Area
GHG	Greenhouse Gas
GI	Green Infrastructure
GIS	Geographic Information Systems
IRZ	Impact Risk Zone
LNR	Local Nature Reserve
LPR	Local Plan Review
LWS	Local Wildlife Site
MHCLG	Ministry of Housing, Communities and Local Government
NERC	Natural Environment and Rural Communities
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
OPDM	Office of the Deputy Prime Minister
PRoW	Public Rights of Way
RPG	Registered Park and Garden
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SM	Scheduled Monument
SPA	Special Protection Area
SPD	Supplementary Planning Document
SPZ	Source Protection Zone
SSDC	South Staffordshire District Council
SSSI	Sites of Special Scientific Interest
TAG	Transport Analysis Guidance

Executive Summary

About this report

- E1 Lepus Consulting is conducting a Sustainability Appraisal (SA) for South Staffordshire District Council (SSDC) to help them prepare the Local Plan Review (LPR).
- E2 SA is the process of informing and influencing the preparation of a development plan to optimise its sustainability performance. SA considers the social, economic and environmental performance of the development plan, as the plan is prepared over several distinct stages. The stages of SA facilitate iteration between the plan makers (SSDC) and the appraisal team (Lepus Consulting).
- E3 The first stage of the LPR process is the Issues and Options stage. The Issues and Options document has been proposed by SSDC and sets out five options for the quantum of residential growth, two options for gypsy and traveller growth, three options for employment growth, six options for residential distribution, four options for employment distribution and 34 policy options.
- E4 The Spatial Housing Strategy and Infrastructure Delivery document comprises the second stage of the LPR process and includes a consideration of the seven spatial options. These spatial options constitute reasonable alternatives for the distribution of new housing growth in the Plan area.
- E5 The Spatial Housing Strategy and Infrastructure Delivery SA report presents assessment results which show how each option performs in terms of their contribution towards the principles of sustainable development.
- E6 Later stages of the plan-making process are likely to include a Preferred Options stage and a Submission Stage.

Summary findings

- E7 The spatial options presented in the Spatial Housing Strategy and Infrastructure Delivery document have been assessed for their sustainability impacts. Seven reasonable alternative spatial options have been considered by SSDC and assessed in this SA report.

SA Objective 1 – Climate Change Mitigation

- E8 The development of over 7,000 dwellings proposed under each of the options would be anticipated to increase carbon emissions across the Plan area significantly. The construction and occupation of homes requires carbon resources, which includes fuel to power construction vehicles and gas to heat homes. As a result, all of the options would be likely to have a major negative impact on climate change mitigation.

SA Objective 2 – Climate Change Adaptation

- E9 As the location of development is currently unknown, it is uncertain if development proposals would be situated in areas at risk of pluvial or fluvial flooding. However, as the majority of development would be likely to be located on the outskirts of the existing settlements, it is considered that development proposals surrounding Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne, Brewwood, Kinver, Perton, Wheaton Ashton, Shreshill, Coven and Swindon could potentially situate residents in areas at risk of flooding. This could lead to an adverse impact on the stability of local infrastructure and present health and safety risks. As all of the spatial options would locate development in some of these locations, a major negative impact cannot be ruled out at this stage of the assessment.

SA Objective 3 – Biodiversity and Geodiversity

- E10 Motte Meadows SAC is the only Natura 2000 site located within South Staffordshire and is designated for its lowland hay meadows. The prioritised issues for the SAC include water pollution, hydrological changes, water abstraction and changes in land management¹. The closest area proposed for development within the spatial options, Wheaton Ashton, is located just over 1km south east of the SAC. Other European sites are located outside the Local Plan area and include, Cannock Chase

¹ Natural England (2013) Site Improvement Plan: Motte Meadows. Available at:
<http://publications.naturalengland.org.uk/publication/6519033218203648> [Date Accessed; 07/08/19]

SAC, which is located adjacent to the District to the north east, Cannock extension Canal SAC, which is located approximately 1km east of the District and Fens Pool SAC, which is located approximately 3km to the south east of the District. Many of the locations for development identified within these seven spatial options would locate new development within 5km of one of these SAC's, which could potentially increase development-related threats and pressures, including a deterioration of air quality, increased recreational pressures and hydrological impacts. In addition to these European sites, numerous SSSIs, NNR, LNRs and stands of ancient woodland are located within South Staffordshire. Although the exact location and proposed use of development is not yet known, a minor negative impact on local biodiversity cannot be ruled out.

SA Objective 4 – Landscape and Townscape

- E11 Cannock Chase AONB is partially located within South Staffordshire to the north east of the Plan area. The proposed development within Huntington and Penkridge and the proposed urban extensions south of Stafford and west of Cannock could potentially be located adjacent to or in close proximity to the AONB. It is considered likely that development under all of the spatial options would direct development to the edge of existing settlements or within the open countryside. This has the potential to result in urban sprawl and increase the risk of coalescence between nearby settlements. Although the exact location of development proposals are uncertain at this stage, a major negative impact on the local landscape under all of the spatial options cannot be ruled out.

SA Objective 5 – Pollution and Waste

- E12 There are three AQMA's located within South Staffordshire; 'AQMA No.1 (Woodbank)', 'AQMA No.4 (Wedges Mills)' and 'AQMA No 5 Oak Farm'. The entirety of the Black Country is also an AQMA. Several main roads run through the District, including the M6, M6 Toll, M54, A5, A34, A41, A449 and A545. Development proposed in close proximity to these areas would expose new residents to high levels of air and noise pollution having an adverse impact on human health. Development proposals in these areas would also be expected to exacerbate local air pollution, primarily due to the number of additional vehicles new development would be likely to create. This would be likely to have adverse impacts on human health and the local ecosystem. In addition, there is an extensive river network across South Staffordshire and a large proportion of the District is located within a groundwater SPZ. Depending on its location, development could

potentially result in the contamination of rivers, streams and groundwater sources.

- E13 The occupation of over 7,000 dwellings would be anticipated to result in a significant increase of household waste generation throughout the Plan area. Therefore, it would be expected that development proposed under all of the options would be likely to result in a major negative impact on household waste generation.

SA Objective 6 – Natural Resources

- E14 The majority of South Staffordshire is located on Grades 2 and 3 ALC land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as ‘urban’. As a large quantity of development would be likely to be located on previously undeveloped ALC Grade 2 and 3 land, the proposed development under all of the spatial options would result in the permanent loss of agriculturally and ecologically important soil. Therefore, a minor negative impact would be expected.

SA Objective 7 – Housing

- E15 All of the spatial options would be expected to make a significant and positive contribution to the housing provision within South Staffordshire. As Spatial Option A proposes the least number of dwellings, this option would be expected to have a minor positive impact, whereas all other options would be expected to result in a major positive impact.

SA Objective 8 – Health and Wellbeing

- E16 There are no NHS hospitals with an A&E department located within South Staffordshire. The nearest hospitals are County Hospital in Stafford, New Cross Hospital in Wolverhampton and Russell’s Hall Hospital in Dudley. The majority of new development would be located outside the sustainable travel distance to one of these emergency health centres². A proportion of new residents would also be likely to be situated outside the sustainable travel distance to a GP surgery or leisure centre. In addition, many of the identified locations under these spatial options are situated in close proximity to main roads or AQMAs, which would be expected to

² Barton, H., Grant, M. & Guise, R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

expose site end users to high levels of local air pollution. However, as a rural District, it is anticipated that a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. Overall therefore, a minor negative impact on health and wellbeing could potentially be expected following the proposed development under these seven spatial options.

SA Objective 9 – Cultural Heritage

- E17 There are numerous heritage assets located across the Plan area, including five Registered Parks and Gardens, 17 Conservation Areas, 24 Scheduled Monuments and 655 Listed Buildings. These Listed Buildings are scattered across South Staffordshire and as such, development proposed at any of the settlements identified under these seven spatial options would be likely to located in close proximity to a Listed Building. At this stage of assessment, the exact location of the proposed development is unknown and therefore, it is uncertain if the proposed development would impact surrounding heritage assets. Due to the close proximity of the development locations identified under these spatial options to heritage assets, a minor negative impact on the local historic environmental cannot be ruled out.

SA Objective 10 – Transport and Accessibility

- E18 There are four railway stations located within South Staffordshire; Penkridge, Bilbrook, Codsall and Landywood Railway Stations. As a result, development proposals located in Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to locate new residents in an area with excellent access to rail services to travel around the District and into the surrounding towns and cities. Many new residents located towards Tier 1 and 2 settlements would also be expected to have good access to the local bus network. It is also assumed that new bus stops and services would be provided within proposed urban extensions. As a result, Spatial Options D, E, F and G would be expected to have a minor positive impact on transport and accessibility whereas Spatial Options A, B and C could potentially have a minor negative impact on transport and accessibility due to their more rural location.

SA Objective 11 – Education

- E19 There are a good range of primary and secondary schools located within South Staffordshire. All of the locations identified for development under the spatial options would be expected to be situated in close proximity to

a primary school which can provide education for all children for primary age. Secondary schools are primarily located within the Tier 1 settlements, Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver. As all options would direct some new residents to these locations, a positive impact in regard to access to education would be expected. However, Spatial Option A would be likely to situate fewer residents in areas with good access to both primary and secondary education, in particular due to the proposed development of a new settlement in an uncertain location, and therefore a minor positive impact would be expected.

SA Objective 12 – Economy and Employment

E20 It is noted that the majority of residents living within South Staffordshire commute to out of the District to employment opportunities within Wolverhampton, Dudley, Stafford and Birmingham. The towns of Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley have railway stations which would be expected to provide residents with good access to out-of-District employment opportunities. The proposed urban extensions would also be expected to ensure new residents have good access to these areas. Residents located in more rural locations could potentially have more restricted access to sustainable transport options out of the District. Spatial Options C, D, E, F and G direct over half of the development proposals in locations with good or reasonable sustainable access to the employment opportunities and as such, would be expected to have a minor positive impact on the local economy. As less than half of the proposed development under Spatial Options A and B would be directed towards locations with good or reasonable sustainable access to employment opportunities, a minor negative impact would be expected.

E21 In addition, Spatial Option G proposes development at urban extension for employment-led growth at ROF Featherstone. This would be expected to help facilitate the delivery of key infrastructure to support strategic employment allocations at ROF Featherstone, assisting in increasing employment land across the District. This would also be expected to facilitate good access to local employment opportunities and have benefits to the local economy. A major positive impact would therefore be expected under Spatial Option G.

Best Performing Option

- E22 Spatial Option G has been identified as the best-performing option, as the proposed development would be likely to result in the greatest positive impacts in terms of sustainability, in particular in regard to access to education and employment.

Recommendations

- E23 Recommendations on how to avoid or mitigate some of the potential adverse impacts identified as part of this assessments are presented in **Chapter 10**.

Next steps

- E24 The findings from this report should be used to inform the next stage of the plan-making process: the Preferred Options stage. This stage of the plan-making process would be subject to further SA.
- E25 This Spatial Housing Strategy and Infrastructure Delivery SA Report is subject to consultation, details of which can be found in **Section 10.15**.

1 Introduction

1.1 Background

1.1.1 South Staffordshire District Council (SSDC) is in the process of undertaking a Local Plan Review (LPR). As part of this process, a Sustainability Appraisal (SA) is being undertaken that incorporates the requirements of Strategic Environmental Assessment (SEA). The purpose of SA/SEA is to help guide and influence the LPR process by identifying the likely environmental, social and economic effects of reasonable alternatives and various options.

1.1.2 SSDC has prepared a Spatial Housing Strategy and Infrastructure Delivery document³ as part of the LPR making process. These spatial options constitute reasonable alternatives for the distribution of new housing growth in the Plan area.

1.1.3 This SA/SEA report follows on from the Scoping Report, prepared by Lepus in 2017⁴ and the Issues and Options SA Report, prepared by Lepus in 2018⁵.

1.1.4 The purpose of this report is to provide an appraisal of each reasonable alternative spatial option in terms of its sustainability performance using the SA Framework (see **Appendix A**). This will help SSDC to identify the most sustainable option and to prepare a Local Plan which delivers sustainable development.

1.2 South Staffordshire

1.2.1 In 1974, Cannock Rural District and Seisdon Rural District merged to form South Staffordshire, a district in the county of Staffordshire, located to the north west of the West Midlands (see **Figure 1.1**). Approximately 111,000 residents are spread over the 40,400ha rural district, of which 80% (32,114ha) lies within the West Midlands Green Belt.

³ South Staffordshire District Council (2019) Spatial Housing Strategy and Infrastructure Delivery.

⁴ Lepus Consulting (2017) Sustainability Appraisal, of the South Staffordshire Local Plan Review, Scoping Report

⁵ Lepus Consulting (2017) Sustainability Appraisal, of the South Staffordshire Local Plan Review, Issues and Options SA Report

1.2.2

South Staffordshire is a popular and attractive destination, and in particular attracts people from urban areas in the West Midlands. The district has no dominant settlement or urban area. Instead, it can be considered to be a 'community of communities' with 27 parishes and a diverse pattern of hamlets and villages with distinct characters distributed amongst countryside. Approximately 82% of land in the district is used for agriculture, 12% is built on and urban whilst 6% of the district is considered to be natural⁶.

⁶ Col, B. Kin, S. Ogutu, B. Palmer, D. Smith, G. Belzter, H. (2015) Corine Land Cover 2012 for the UK, Jersey and Guernsey. NERC Environmental Information Data Centre <https://doi.org/10.5285/32533dd6-7c1b-43e1-b892-e80d61a5ea1d>

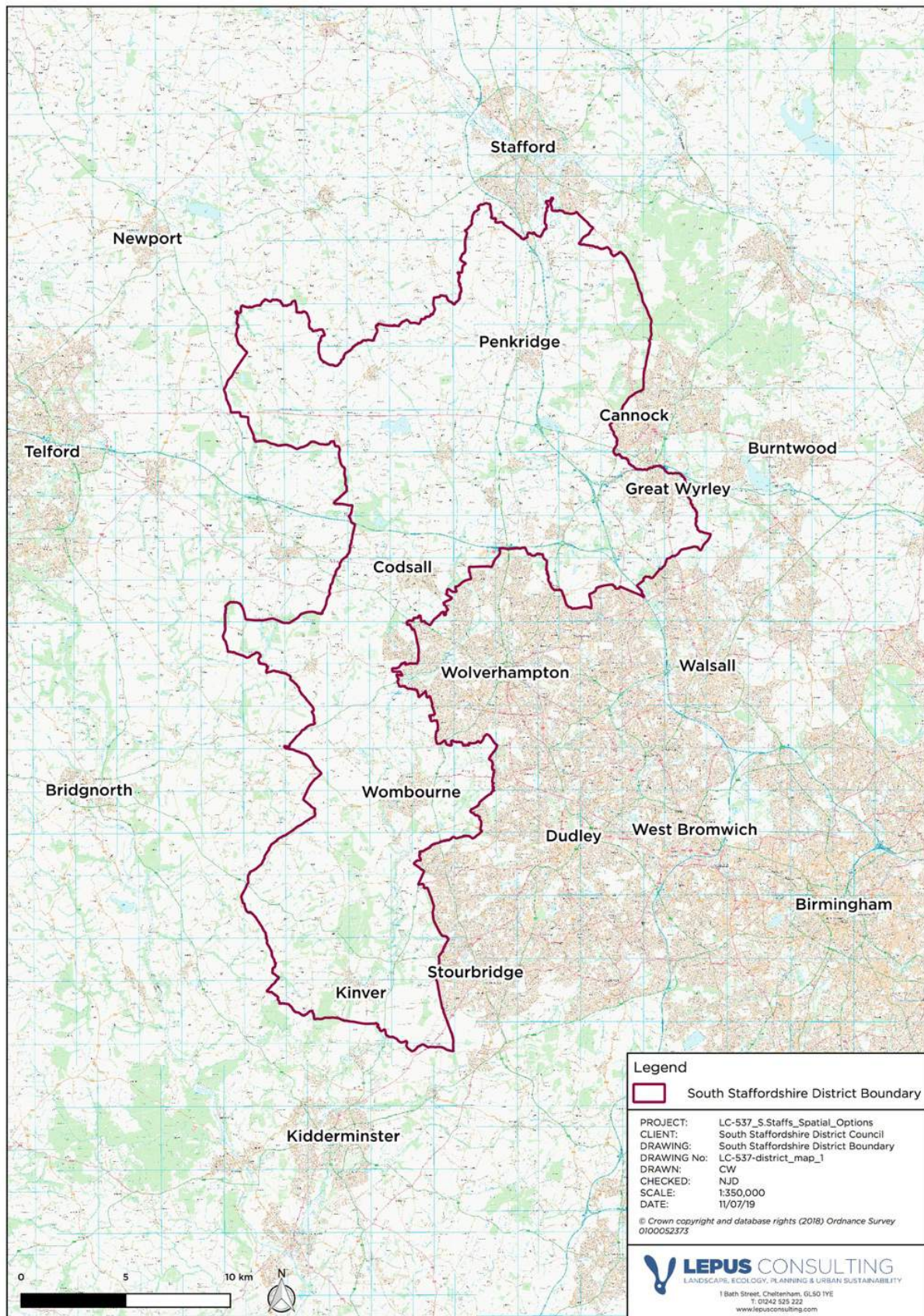


Figure 1.1: South Staffordshire District boundary

1.3 Integrated approach to SA and SEA

- 1.3.1 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both obligations using a single appraisal process.
- 1.3.2 The European Union Directive 2001/42/EC⁷ (SEA Directive) applies to a wide range of public plans and programmes on land use, energy, waste, agriculture, transport and more (see Article 3(2) of the Directive for other plan or programme types). The objective of the SEA procedure can be summarised as follows: *“the objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development”*.
- 1.3.3 The SEA Directive has been transposed into English law by The Environmental Assessment of Plans and Programmes Regulations 2004⁸ (SEA Regulations). Under the requirements of the SEA Directive and SEA Regulations, specific types of plans that set the framework for the future development consent of projects must be subject to an environmental assessment. Therefore, it is a legal requirement for the LPR to be subject to SEA throughout its preparation.

⁷ SEA Directive. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN> [Date Accessed: 11/07/19]

⁸ The Environmental Assessment of Plans and Programmes Regulations 2004. Available at: <http://www.legislation.gov.uk/uksi/2004/1633/contents/made> [Date Accessed: 16/07/19]

1.3.4 SA is a UK-specific procedure used to appraise the impacts and effects of development plans in the UK. It is a legal requirement as specified by S19(5) of the Planning and Compulsory Purchase Act 2004⁹ and should be an appraisal of the economic, social and environmental sustainability of development plans. The present statutory requirement for SA lies in The Town and Country Planning (Local Planning) (England) Regulations 2012¹⁰. SA is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision-making.

1.3.5 Public consultation is an important aspect of the integrated SA/SEA process.

1.4 Best Practice Guidance

1.4.1 Government policy recommends that both SA and SEA are undertaken under a single sustainability appraisal process, which incorporates the requirements of the SEA Directive. This can be achieved through integrating the requirements of SEA into the SA process. The approach for carrying out an integrated SA and SEA is based on best practice guidance:

- European Commission (2004) Implementation of Directive 2001/42 on the assessment of the effects of certain plan and programmes on the environment¹¹.
- Office of Deputy Prime Minister (2005) A Practical Guide to the SEA Directive¹².
- Ministry of Housing, Communities and Local Government (2018) National Planning Policy Framework (NPPF)¹³.

⁹ Planning and Compulsory Purchase Act 2004. Available at: <https://www.legislation.gov.uk/ukpga/2004/5/contents> [Date Accessed: 11/07/19]

¹⁰ The Town and Country Planning Regulations 2012. Available at: <http://www.legislation.gov.uk/uksi/2012/767/contents/made> [Date Accessed: 11/07/19]

¹¹ European Commission (2004) Implementation of Directive 2001/42 on the assessment of the effects of certain plan and programmes on the environment. Available at: http://ec.europa.eu/environment/archives/eia/pdf/030923_sea_guidance.pdf [Date Accessed: 11/07/19]

¹² Office of Deputy Prime Minister (2005) A Practical Guide to the SEA Directive. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf [Date Accessed: 11/07/19]

¹³ National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date Accessed: 11/07/19]

- Ministry of Housing, Communities and Local Government (2018) Planning Practice Guidance (PPG)¹⁴.
- Royal Town Planning Institute (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans¹⁵.

1.5 Sustainability Appraisal

1.5.1 This document is a component of the SA of the LPR. It provides an assessment of the likely effects of reasonable alternatives, as per Stage B of **Figure 1.2**, according to Planning Practice Guidance.

¹⁴ Planning practice guidance. Available at: <https://www.gov.uk/government/collections/planning-practice-guidance> [Date Accessed: 11/07/19]

¹⁵ Royal Town Planning Institute (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans. Available at: <http://www.rtpi.org.uk/media/2668152/sea-sapracticeadvicefull2018c.pdf> [Date Accessed: 11/07/19]

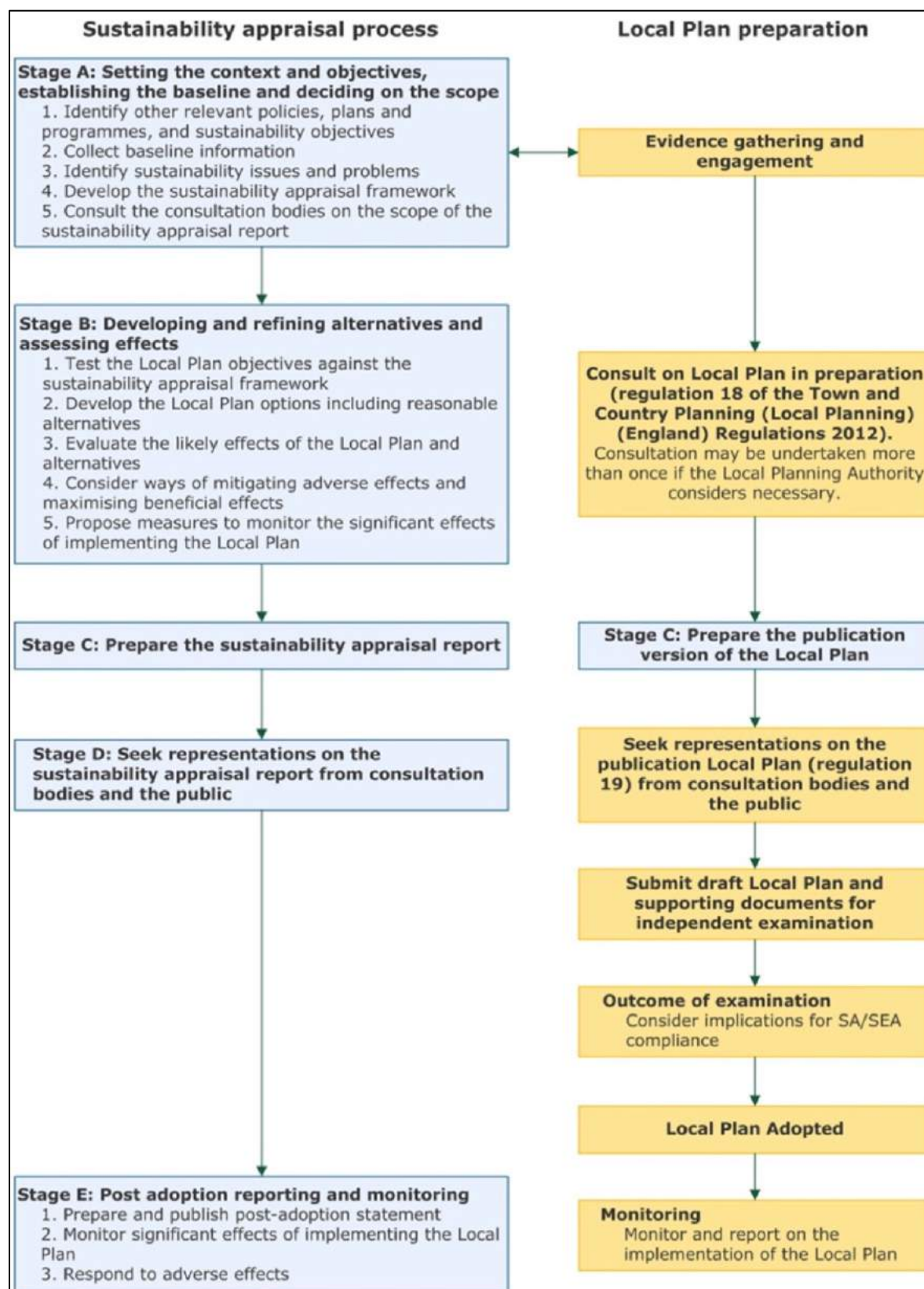


Figure 1.2: Sustainability appraisal process¹⁶

¹⁶ MHCLG (2015) Planning practice guidance: Strategic environmental assessment and sustainability appraisal. Paragraph 013. Reference ID: 11-013-20140306. Available at: <http://planningguidance.communities.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/> [Date Accessed: 11/07/19]

1.6 The SA process so far

- 1.6.1 The South Staffordshire LPR will include the overall strategy for development in the District for the period 2018 - 2037, including a vision for the future, relevant objectives, site allocations, site-based policies and development management policies.
- 1.6.2 The purpose of the LPR is to review existing planning policy documents and evidence base and determine the development needed within the District up until 2037. It will also set out policies which will guide the determination of planning applications. The Issues and Options paper was the first stage of the LPR. The Spatial Housing Strategy and Infrastructure Delivery document is the second stage of the LPR. It refines the spatial options assessed at the Issues and Options stage and offers the Council a chance to consult with the public on the spatial strategy alternatives.
- 1.6.3 **Table 1.1** below presents a timeline of stages of the LPR and SA process undertaken to date. These represent Stages A and B of the SA process set out in **Figure 1.2**.

Table 1.1: The Local Plan and Sustainability process so far¹⁷

Date	Local Plan Stage	Sustainability Appraisal
November 2017		SA Scoping Report This report sets out the key issues in relation to sustainability across South Staffordshire. It also presents the SA Framework against which future sustainability appraisals will be based on.
September/October 2018	Local Plan Review Issues and Options This document sets out the aims of the LPR, presents the options for levels of growth, locations for growth and policies considered by the SSDC.	Issues and Options SA Report This report assesses five options for levels of residential growth, two options for gypsy and traveller growth, three options of employment growth, six options of residential distribution, four options for employment distribution and 34 options for policies to be included in the LPR.
July/August 2019	Local Plan Review Spatial Housing Strategy and Infrastructure Delivery (not published) This document sets out the seven reasonable alternative spatial options considered by SSDC.	Spatial Housing Strategy and Infrastructure Delivery SA Report (this report) This report assesses the sustainability performance of the seven spatial options.

¹⁷ South Staffordshire Council (2019) Local Plan Review Available at: <https://www.sstaffs.gov.uk/planning/local-plan-review.cfm> [Date Accessed: 15/07/19]

1.7 SA Scoping Report

- 1.7.1 In order to identify the scope and level of detail of the information to be included in the SA process, a SA Scoping Report was produced by Lepus. Between November and December 2017, the authorities consulted with Historic England, Natural England, the Environment Agency and other relevant bodies on the content of the SA Scoping Report. These comments were taken into consideration and the SA Scoping Report amended where appropriate.

1.8 Issues and Options SA Report

- 1.8.1 An Issues and Options document was produced by SSDC in October 2018 which presented options that the Council considered in relation to:
- South Staffordshire's own objectively assessed housing need and the potential for housing supply to meet this need.
 - Employment land requirements for South Staffordshire.
 - South Staffordshire's potential role in meeting wider unmet housing and employment needs through the Duty to Cooperate.
 - The appropriateness of the existing settlement hierarchy and the strategic distribution of growth.
 - The need for further additional safeguarded housing and employment land for longer term development needs.
 - Gypsy, Traveller and Travelling Showpeople provision.
- 1.8.2 The Issues and Options SA Report assessed five options for levels of residential growth, two options for gypsy and traveller growth, three options of employment growth, six options of residential distribution, four options for employment distribution and 34 options for policies to be included in the LPR. This report was consulted upon between October and November 2018.
- 1.8.3 Following this consultation, comments were received from the three statutory bodies. **Table 1.2** below lists the comments received from the Environment Agency, Natural England and Historic England in relation to the Issues and Options SA Report.

Table 1.2: The comments provided by the Environment Agency, Natural England and Historic England in response to the Issues and Options SA Report¹⁸.

Statutory Body	Statutory Body Response	Incorporation into the Spatial Housing Strategy and Infrastructure Delivery SA
Environment Agency	We note that the indicators relating to climate change adaption all relate to impacts on the water environment and ecology, and query whether there are any indicators which can also reflect impacts on human health, infrastructure, transport etc.	Impacts of flooding on human health and infrastructure have been discussed for each spatial option under SA Objective 2 – Climate Change Adaptation.
	Section 3.54: Open countryside It is possible (if development is well designed) for developed land to have greater biodiversity value than green belt. In the case of intensive arable farming this is almost always the case as intensive farming practices leave very little space for biodiversity and the use of chemical fertilizers, pesticides etc. then pollute and poison what little remaining biodiversity is hanging on. Similarly, many brownfield sites that have been left untouched for many years also frequently have more biodiversity than the average urban park due to the intensive management and use of non-native species that parks traditionally use. To assume that greenbelt is always of biodiversity value and that a brownfield is not is nonsensical almost every site needs to be assessed for its own merits. For this reason, we support Option B.	No Action Required
	Section 5.35: Landscape character Linear features such as hedgerows, watercourses need to be afforded protection within the landscape but also given sufficient room to allow natural processes such as functioning floodplains to proceed unhindered. We would be happy to feed into related SPDs. Our preferred Option is therefore B.	No Action Required
	Section 3.56: Natural Environment We are supportive of any policy or strategy that would create a better connected green network, prevent biodiversity losses and allow adaptation to climate change. We also understand that the economic drivers are very difficult to manage in a way that can achieve this, due to perceived land take pressures. Consequently, it will be very important that any	No Action Required

¹⁸ South Staffordshire Council (2019) LPR Issues and Options Consultation Responses. Available at: <https://www.sstaffs.gov.uk/planning/lpr-issues-options-consultation-responses.cfm> [Date Accessed: 15/07/19]

Statutory Body	Statutory Body Response	Incorporation into the Spatial Housing Strategy and Infrastructure Delivery SA
	policy is very clear and steadfast in its approach. Furthermore, the acquisition of land in order to create re-placement habitats under “biodiversity offsetting” is also very difficult. This is often lead to habitat creation on land which already has habitat value. For example, creating a pond on land within a grassland in order to allow the developer to drain and fill a pond elsewhere is not really offsetting because there will still be a net loss of terrestrial habitat instead of aquatic.	
	Also, while agreements for appropriate management can be set up with the best intentions enforcing any long-term appropriate management is very difficult once the site is established and developer is long gone. Consequently, it is important that the practical aspects of long-term management is considered and if possible, habitats should be designed to require as minimum management as possible e.g. not planting trees too close together, allowing habitats such as long grass naturally succeed into scrub and woodland. Overall our preferred option would be Option B.	No Action Required
Historic England	3.59 - Historic Environment - The assessment for the historic environment is noted as well as the uncertainties in relation to the other SA objectives. We look forward to working with you on these as the Plan progresses.	No Action Required
	Appendix A - We look forward to developing the decision-making criteria and indicators for the historic environment as the Plan progresses and when it becomes more clear which options for growth will be pursued.	No Action Required
Natural England	The reliance on the private car for transport will need to be considered in relation to Sustainability Appraisal e.g. with regard to air quality impacts from increased traffic generation.	Residents' reliance on personal car use has been discussed for each spatial option under SA Objective 5 – Pollution and Waste and SA Objective 10 – Transport and accessibility.

1.9 Spatial Housing Strategy and Infrastructure Delivery SA Report

1.9.1 This SA report provides an appraisal of the reasonable alternative spatial options considered by the SSDC for the distribution of new housing growth in the Plan area. It will be subject to consultation alongside the Spatial Housing Strategy and Infrastructure Delivery document prepared by SSDC.

1.9.2 The consultation of this Spatial Housing Strategy and Infrastructure Delivery SA Report will enable interested persons to comment on the options for the spatial strategy. Comments received will provide the basis of any changes that may need to be made to the preferred spatial strategy.

1.9.3 The spatial options being considered by the Council in the Spatial Housing Strategy and Infrastructure Delivery document, and which are assessed in this report, are listed below:

- **Spatial Option A** – Maximise Open Countryside release;
- **Spatial Option B** – Prioritise Green Belt land release in areas of lesser Green Belt harm;
- **Spatial Option C** – Carry forward existing Core Strategy strategic approach to distribution;
- **Spatial Option D** – Maximise sites in areas identified in the Greater Birmingham Housing Market Area (GBHMA) Strategic Growth Study;
- **Spatial Option E** – Address local affordability issues and settlements with the greatest needs;
- **Spatial Option F** – Give first consideration to Green Belt land which is previously developed or well-served by public transport; and
- **Spatial Option G** – Infrastructure-led development with a garden village area of search beyond the plan period.

1.9.4 It should be noted that this SA Report focuses on assessing the seven spatial options in terms of the whole Plan delivery, and considers the allocation of new developments, as well as existing commitments and safeguarded land, using the SA objectives to inform this assessment. The role of the Spatial Housing Strategy and Infrastructure Delivery consultation document produced by SSDC is to highlight the planning advantages and disadvantages associated with the delivery of new development allocations under each Spatial Option (having regard to local opportunities and requirements set out in national planning policy), which may not be fully addressed within the SA framework.

1.10 Signposting for this report

- 1.10.1** This SA Report appraises reasonable alternatives provided by the plan-making team. This includes seven reasonable alternative spatial options.
- 1.10.2** **Chapter 2** of this report sets out the methodology used to present and assess the findings of the SA process.
- 1.10.3** **Chapters 3 to 9** of this report present the assessments of the seven reasonable alternative spatial options.
- 1.10.4** **Chapter 10** of this report provides a summary of the appraisal undertaken at this stage of the process. It also sets out the next steps of the SA process.

2 Methodology

2.1 Assessment of Reasonable Alternatives

- 2.1.1 The purpose of this SA Report is to provide an appraisal of the spatial option reasonable alternatives in line with Article 5 Paragraph 1 of the SEA Directive¹⁹:

“Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.”

- 2.1.2 Each reasonable alternative spatial option appraised in this report has been assessed for its likely impact on each SA Objective of the SA Framework. The SA Framework is presented in **Appendix A**.
- 2.1.3 This document also provides information in relation to the likely characteristics of effects, as per the SEA Directive (see **Table 2.1**).

¹⁹ SEA Directive. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0042> [Date Accessed: 11/07/19]

Table 2.1: Annex II of the SEA Directive²⁰

Criteria for determining the likely significance of effects (Article 3(5) of SEA Directive)
<p>The characteristics of plans and programmes, having regard, in particular, to:</p> <ul style="list-style-type: none"> the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources; the degree to which the plan or programme influences other plans and programmes including those in a hierarchy; the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development; environmental problems relevant to the plan or programme; and the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste management or water protection).
<p>Characteristics of the effects and of the area likely to be affected, having regard, in particular, to:</p> <ul style="list-style-type: none"> the probability, duration, frequency and reversibility of the effects; the cumulative nature of the effects; the transboundary nature of the effects; the risks to human health or the environment (e.g. due to accidents); the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected); the value and vulnerability of the area likely to be affected due to: special natural characteristics or cultural heritage; exceeded environmental quality standards or limit values; intensive land-use; and the effects on areas or landscapes which have a recognised national, Community or international protection status.

2.2 Impact assessment and determination of significance

2.2.1 Significance of effect is a combination of impact sensitivity and magnitude. Impact sensitivity can be expressed in relative terms, based on the principle that the more sensitive the resource, the greater the magnitude of the change, and as compared with the do-nothing comparison, the greater will be the significance of effect.

²⁰ SEA Directive. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN> [Date Accessed: 11/07/19]

2.3 Impact sensitivity

- 2.3.1 Impact sensitivity has been measured through consideration as to how the receiving environment will be impacted by a plan proposal. This includes assessment of the value and vulnerability of the receiving environment, whether or not environmental quality standards will be exceeded, and for example, if impacts will affect designated areas or landscapes.
- 2.3.2 A guide to the range of scales used in determining impact sensitivity is presented in **Table 2.2**. For most receptors, sensitivity increases with geographic scale.

Table 2.2: Impact sensitivity

Scale	Typical criteria
International/ national	Designations that have an international aspect or consideration of transboundary effects beyond national boundaries. This applies to effects and designations/receptors that have a national, European or international dimension.
Regional	This includes the regional and sub-regional scale, including county-wide level and regional areas.
Local	This is the district and neighbourhood scale.

2.4 Impact magnitude

- 2.4.1 Impact magnitude relates to the degree of change the receptor will experience, including the probability, duration, frequency and reversibility of the impact. Impact magnitude has been determined on the basis of the susceptibility of a receptor to the type of change that will arise, as well as the value of the affected receptor (see **Table 2.3**).

Table 2.3: Impact magnitude

Impact magnitude	Typical criteria
High	<ul style="list-style-type: none"> • Likely total loss of or major alteration to the receptor in question; • Provision of a new receptor/feature; or • The impact is permanent and frequent.
Medium	<p>Partial loss/alteration/improvement to one or more key features; or</p> <p>The impact is one of the following:</p> <ul style="list-style-type: none"> • Frequent and short-term; • Frequent and reversible; • Long-term (and frequent) and reversible; • Long-term and occasional; or • Permanent and occasional.
Low	<p>Minor loss/alteration/improvement to one or more key features of the receptor; or</p> <p>The impact is one of the following:</p> <ul style="list-style-type: none"> • Reversible and short-term; • Reversible and occasional; or • Short-term and occasional.

2.5 Significant effects

2.5.1 A single value from **Table 2.4** has been allocated to each SA Objective for each reasonable alternative. Justification for the classification of the impact for each SA objective is presented in an accompanying narrative assessment text for all reasonable alternatives that have been assessed through the SA process. The assessment of impacts and subsequent evaluation of significant effects is in accordance with the footnote of Annex 1(f) of the SEA Directive, where feasible, which states:

“These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects”.

Table 2.4: Guide to scoring significant effects

Significance	Definition (not necessarily exhaustive)
Major Negative --	<p>The size, nature and location of a development proposal would be likely to:</p> <ul style="list-style-type: none"> • Permanently degrade, diminish or destroy the integrity of a quality receptor, such as a feature of international, national or regional importance; • Cause a very high-quality receptor to be permanently diminished; • Be unable to be entirely mitigated; • Be discordant with the existing setting; and/or • Contribute to a cumulative significant effect.
Minor Negative -	<p>The size, nature and location of development proposals would be likely to:</p> <ul style="list-style-type: none"> • Not quite fit into the existing location or with existing receptor qualities; and/or • Affect undesignated yet recognised local receptors.
Negligible 0	<p>Either no impacts are anticipated, or any impacts are anticipated to be negligible.</p>
Uncertain +/-	<p>It is entirely uncertain whether impacts would be positive or adverse.</p>
Minor Positive +	<p>The size, nature and location of a development proposal would be likely to:</p> <ul style="list-style-type: none"> • Improve undesignated yet recognised receptor qualities at the local scale; • Fit into, or with, the existing location and existing receptor qualities; and/or • Enable the restoration of valued characteristic features.
Major Positive ++	<p>The size, nature and location of a development proposal would be likely to:</p> <ul style="list-style-type: none"> • Enhance and redefine the location in a positive manner, making a contribution at a national or international scale; • Restore valued receptors which were degraded through previous uses; and/or • Improve one or more key elements/features/characteristics of a receptor with recognised quality such as a specific international, European, national or regional designation.

- 2.5.2 When selecting a single value to best represent the sustainability performance, and to understand the significance of effects of a spatial option in terms of the relevant SA Objective, the precautionary principle²¹ has been used. This is a worst-case scenario approach. If a positive effect is identified in relation to one criterion within the SA Framework (see the second column of the SA Framework in **Appendix A**) and a negative effect is identified in relation to another criterion within the same SA Objective, the overall impact has been assigned as negative for that objective. It is therefore essential to appreciate that the impacts are indicative summarily and that the accompanying assessment text provides a fuller explanation of the sustainability performance of the spatial option.
- 2.5.3 The assessment considers, on a strategic basis, the degree to which a location can accommodate change without adverse effects on valued or important receptors (identified in the baseline).
- 2.5.4 Significance of effect has been categorised as minor or major. **Table 2.4** sets out the significance matrix and explains the terms used. The nature of the significant effect can be either positive or negative depending on the type of development and the design and mitigation measures proposed.
- 2.5.5 Each reasonable alternative spatial option that has been identified in this report has been assessed for its likely significant impact against each SA Objective in the SA Framework, as per **Table 2.4**. Likely impacts are not intended to be summed.
- 2.5.6 It is important to note that the assessment scores presented in **Table 2.4** are high level indicators. The assessment narrative text should always read alongside the significance scores. Topic specific methods and assumptions in **Boxes 2.1 to 2.12** offer further insight into how each significant effect score was arrived at.

²¹ The European Commission describes the precautionary principle as follows: “If a preliminary scientific evaluation shows that there are reasonable grounds for concern that a particular activity might lead to damaging effects on the environment, or on human, animal or plant health, which would be inconsistent with protection normally afforded to these within the European Community, the Precautionary Principle is triggered”.

2.6 Limitations of predicting effects

- 2.6.1 SA/SEA is a tool for predicting potential significant effects. Predicting effects relies on an evidence-based approach and incorporates expert judgement. It is often not possible to state with absolute certainty whether effects will occur, as many impacts are influenced by a range of factors such as the design and the success of mitigation measures.
- 2.6.2 The assessments in this report are based on the best available information, including that provided to Lepus by SSDC and information that is publicly available. Every attempt has been made to predict effects as accurately as possible.
- 2.6.3 SA operates at a strategic level which uses available secondary data for the relevant SA Objective. All reasonable alternatives are assessed in the same way using the same method. Sometimes, in the absence of more detailed information, forecasting the potential impacts of development can require making reasonable assumptions based on the best available data and trends. However, all options must be assessed in the same way and any introduction of proposal-based detail should be made clear in the SA report as the new data could potentially introduce bias and skew the findings of the assessment process.
- 2.6.4 The assessment of development proposals is limited in terms of available data resources. For example, up to date ecological surveys and/or landscape and visual impact assessments have not been available.
- 2.6.5 All data used is secondary data obtained from SSDC or freely available on the Internet.

2.7 SEA Topic methodologies and assumptions

- 2.7.1 A number of topic specific methodologies and assumptions have been applied to the appraisal process for specific SA Objectives (see **Boxes 2.1 to 2.12**). These should be borne in mind when considering the assessment findings.

Box 2.1: SA Objective 1: Climate Change Mitigation assessment methodologies and assumptions

SA Objective 1: Climate Change Mitigation

1. Climate Change Mitigation:
Minimise the district's contribution to climate change.

Carbon Emissions

Proposals which would be likely to increase greenhouse gas (GHG) emissions in the local area will make it more difficult for the SSDC to reduce the Plan area's contribution towards the causes of climate change.

The carbon emission for South Staffordshire in 2016 was 897,600 tonnes CO₂/year. The carbon emission per person per year was 8.1 tonnes²². It is therefore assumed that new residents in South Staffordshire will have an annual carbon emission of 8.1 tonnes CO₂.

Assessments assume that dwellings in the Plan area have on average 2.31 residents per dwelling²³ and each resident will have a carbon emission of 8.1 tonnes/year. 1% of 897,600 tonnes is 8,976 tonnes, which at 8.1 tonnes per person would require an additional 1,108 residents.

At 2.31 residents per dwelling, proposals for the development of more than 480 homes may be likely to increase the Plan area's carbon emissions by 1% or more. Therefore, it is considered that any development comprising more than 480 dwellings would result in a significant increase in carbon emissions in South Staffordshire.

The development of 48 dwellings or more would be likely to increase the Plan area's carbon emissions by 0.1% or more. Therefore, any development comprising between 48 and 479 dwellings would be likely to increase carbon emissions by over 0.1% of the total carbon emissions for South Staffordshire.

Overall, Plan proposals which could potentially increase the Plan area's carbon emissions by 1% or more are expected to have a major negative impact for this objective. Plan proposals which may be likely to increase the Plan area's carbon emission by 0.1% or more are expected to have a minor negative impact for this objective. For the purpose of this report, the threshold has been deduced from available guidance²⁴.

The increase in GHG emissions caused by new residents is associated with impacts of the construction phase, the occupation and operation of homes and businesses, oil, gas and coal consumption and increases in local road

²² UK local authority and regional carbon dioxide emissions national statistics: 2005-2016. Available at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2016> [Date Accessed: 16/07/19]

²³ Based on 2011 census data. Available at: <https://www.nomisweb.co.uk/census/2011/qs406ew>. [Date Accessed: 16/07/19]

²⁴ DTA Publications (2017) The Habitats Regulations Assessment Journal: Air Pollution.

SA Objective 1: Climate Change Mitigation

transport with associated emissions. This impact is considered to be permanent and non-reversible.

Box 2.2: SA Objective 2: Climate Change Adaptation assessment methodologies and assumptions

SA Objective 2: Climate Change Adaptation

2. Climate Change Adaptation: Plan for the anticipated impacts of climate change.

Fluvial Flooding

The level of fluvial flood risk present across the Plan area is based on the Environment Agency's flood risk data²⁵, such that:

- Flood Zone 3: 1% - 3.3+% chance of flooding each year;
- Flood Zone 2: 0.1% - 1% chance of flooding each year; and
- Flood Zone 1: Less than 0.1% chance of flooding each year.

It is assumed that development proposals will be in perpetuity and it is therefore likely that development will be subject to the impacts of flooding at some point in the future, should it be situated on land at risk of fluvial flooding.

Where development proposals coincide with Flood Zone 2, a minor negative impact would be expected. This impact is considered to be occasional and short-term. Where development proposals coincide with Flood Zone 3, a major negative impact would be expected. This impact is considered to be frequent and short-term.

Where development proposals are located within Flood Zone 1, a minor positive impact is expected for climate change adaptation.

Pluvial Flooding

Areas determined to be at high risk of pluvial flooding have more than a 3.3% chance of flooding each year, medium-risk between 1% - 3.3%, and low-risk between 0.1% and 1% chance.

Development proposals in areas at low and medium risk of surface water flooding are assumed to have a minor negative impact on pluvial flooding. This impact is considered to be occasional and short-term. Development proposals within areas at high risk of surface water flooding are assumed to have a major negative impact on pluvial flooding. This impact is considered to be frequent and short-term.

²⁵ Environment Agency (2013) Flood Map for Planning Risk. Available at: <http://apps.environment-agency.gov.uk/wivby/cv/151263.aspx>
[Date Accessed: 16/07/19]

SA Objective 2: Climate Change Adaptation

Where development proposals are not located in areas determined to be at risk of pluvial flooding, a negligible impact is expected for climate change adaptation.

It is assumed that development proposals will be in perpetuity and it is therefore likely that development will be subject to the impacts of flooding at some point in the future, should it be situated on land at risk of surface water flooding.

Box 2.3: SA Objective 3: Biodiversity and Geodiversity assessment methodologies and assumptions

SA Objective 3: Biodiversity and Geodiversity

3. Biodiversity and Geodiversity: Protect, enhance and manage the flora, fauna, biodiversity and geodiversity assets of the district.

The biodiversity objective considers adverse impacts of the proposed development at a landscape-scale. It focuses on an assessment of development on a network of designated and undesignated sites, wildlife corridors and individual habitats within the Plan area. These ecological receptors include the following:

Designated Sites:

- Natura 2000 sites; Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites.
- Sites of Special Scientific Interest (SSSI).
- National Nature Reserves (NNR).
- Local Nature Reserves (LNR).
- Local Wildlife Sites (LWS).

Habitats and Species:

- Ancient woodland.
- Priority habitats.

The area within which development has the potential to have a direct/ indirect adverse impact on the integrity of a European site (SAC, SPA and Ramsar sites) is referred to as the buffer zone. For the purposes of this report, a 5km buffer zone has been used to consider pressures and threats on European sites as a result of the development proposed. Research suggests that this is the 'zone' in which public access/ disturbance threats and pressures are likely to be exacerbated at European sites as a result of development.

Where a development proposal is coincident with, adjacent to or located in close proximity of an ecological receptor, it is assumed that negative effects associated with development will arise to some extent. These negative effects include those that occur during the construction phase and are associated with the construction process and construction vehicles (e.g. habitat loss, habitat fragmentation, habitat degradation, noise, air, water and light

SA Objective 3: Biodiversity and Geodiversity

pollution) and those that are associated with the operation/occupation phases of development (e.g. public access associated disturbances, increases in local congestion resulting in a reduction in air quality, changes in noise levels, visual disturbance, light pollution, impacts on water levels and quality etc.). These negative impacts are anticipated to be long-term.

Negative impacts would be expected where the following ecological designations may be harmed or lost as a result of development proposals: SPAs, SACs, Ramsar site, SSSIs, ancient woodlands, NNRs, LNRs and LWSs as well as and priority habitats²⁶ protected under the 2006 NERC Act²⁷. The assessment is based on a consideration of the proximity of a development proposal to these ecological receptors.

For the purposes of this assessment, impacts on priority habitats have been considered in the context of Natural England's publicly available Priority Habitat Inventory database²⁸. It is acknowledged this may not reflect current local site conditions in all instances.

It is assumed that construction and occupation of previously undeveloped greenfield land will result in a net reduction in vegetation cover in the Plan area. Proposals which result in the loss of greenfield land are therefore expected to contribute towards a cumulative loss in vegetation cover. This would also be expected to lead to greater levels of fragmentation and isolation for the wider ecological network, such as due to the loss of stepping stones and corridors. This will restrict the ability of ecological receptors to adapt to the effects of climate change. These negative impacts are considered to be permeant but reversible. The loss of greenfield land is considered under the natural resources objective (SA Objective 6) in this assessment.

It should be noted that no detailed ecological surveys have been completed by Lepus to inform the assessments made in this report.

Protected species survey information is not available for the development proposals within the Plan area. It is acknowledged that data is available from the local biological records centre. However, it is noted that this data may be under recorded in certain areas. This under recording does not imply species absence. As a consequence, consideration of this data on a site-by-site basis within this assessment would have the potential to skew results – favouring

²⁶ Source Natural England Priority Habitat Inventory April 2012

²⁷ Natural Environment and Rural Communities Act 2006. Available at: <http://www.legislation.gov.uk/ukpga/2006/16/contents> [Date Accessed: 16/07/19]

²⁸ Natural England (2019) Priority Habitat Inventory (England). Available at: <https://data.gov.uk/dataset/4b6ddab7-6c0f-4407-946e-d6499f19fcde/priority-habitat-inventory-england> [Date Accessed: 16/07/19]

SA Objective 3: Biodiversity and Geodiversity

well recorded areas of the Plan area. As such impacts on protected species have not been assessed on a site-by-site basis.

It is anticipated that the SSDC will require detailed ecological surveys and assessments to accompany future planning applications. Such surveys will determine on a site-by-site basis the presence of Priority Species and Priority Habitats protected under the NERC Act²².

It is assumed that the loss of biodiversity assets, such as ancient woodland or an area of priority habitat, are permanent and irreversible effects.

It is assumed that mature trees and hedgerows will be retained where possible.

Natural England has developed Impact Risk Zones (IRZs) for each SSSI unit in the country. IRZs are a Geographical Information System (GIS) tool which allow a rapid initial assessment of the potential risks posed by development proposals to: SSSIs, SACs, SPAs and Ramsar sites. They define zones around each designated site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts²⁹. Where a development proposal falls within more than one SSSI IRZ the worst-case risk zone is reported upon in the assessment. The IRZ attribute data draws a distinction between rural and non-rural development. For the purposes of this assessment, non-rural proposals are considered to be those that are located within an existing built-up area. proposals at greenfield locations at the edge of a settlement or those that are more rural in nature have been considered to be rural. In this instance a worst-case approach has been taken in respect to the allocation of an IRZ classification.

Where development proposals coincide with a Natura 2000 site, a SSSI, NNR, LNR, LWS or ancient woodland, or are adjacent to a Natura 2000 site, SSSI or NNR, it is assumed that development would have a permanent and irreversible impact on these nationally important biodiversity assets, and a major negative impact would be expected.

Where development proposals coincide with priority habitats, are adjacent to an ancient woodland, LNR or LWS, are located within a SSSI IRZ which states to “consult Natural England” or are located in close proximity to a Natura 2000 site, SSSI, NNR, LNR or stand of ancient woodland, it is assumed that development would have an impact on these biodiversity assets, and a minor negative impact would be expected.

²⁹ Natural England (2017) Natural England's Impact Risk Zones for Sites of Special Scientific Interest, 12 February 2019. Available at: <https://data.gov.uk/dataset/5ae2af0c-1363-4d40-9d1a-e5a1381449f8/sssi-impact-risk-zones> [Date Accessed: 16/07/19]

SA Objective 3: Biodiversity and Geodiversity

Where a development proposal would not be anticipated to impact a biodiversity asset, a negligible impact would be expected for this objective.

Box 2.4: SA Objective 4: Landscape and Townscape assessment methodologies and assumptions

SA Objective 4: Landscape and Townscape

4. Landscape and Townscape: Conserve, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening their distinctiveness.

Impacts on landscape will be largely determined by the specific layout and design of development proposals, as well as the site-specific landscape circumstances, as experienced on the ground. Detailed proposals for each development proposal are uncertain at this stage of the assessment. Furthermore, this assessment comprises a desk-based exercise which has not been verified in the field. Therefore, the nature of the potential impacts on the landscape are, to an extent, uncertain. However, there is a risk of negative effects occurring, some of which may be unavoidable. As such, this risk has been reflected in the assessment as a negative impact where a development proposal is located in close proximity to sensitive landscape receptors. The level of impact has been assessed based on the nature and value of, and proximity to, the landscape receptor in question.

Where a development proposal would not be anticipated to impact a designated or local landscape, a negligible impact would be expected for this objective.

Cannock Chase AONB

The Cannock Chase AONB is located within the District to the north east. Potential negative impacts on the AONB have been assessed with regard to the Cannock Chase AONB Management Plan 2014-2019³⁰. Development proposals located adjacent to or in close proximity to the AONB are expected to result in negative impacts on the views experienced from the AONB and as a result, alter the setting of the designated landscape. These negative impacts are expected to be permanent and irreversible.

National/ Country Park:

Development proposals which coincide with a National Park have the potential to result in permanent and irreversible adverse impacts and therefore are assumed to have a major negative impact on the landscape objective.

Proposals that are located adjacent or in close proximity to a National or Country Park, and therefore could potentially adversely affect views from National or Country Parks, are assumed to have a minor negative impact on

³⁰ Department for Environment and Rural Affairs (2014) Cannock Chase Area of Outstanding Natural Beauty Management Plan 2014 – 2019. Available at: <http://www.cannock-chase.co.uk/assets/downloads/74646AONBmanagementplan2014-19.pdf> [Date Accessed: 16/07/19]

SA Objective 4: Landscape and Townscape

the landscape objective. These negative impacts are expected to be long-term and reversible.

Views:

Development proposals which may alter views of a predominantly rural or countryside landscape experienced by users of the Public Rights of Way (PRoW) network and/ or local residents are assumed to have minor negative impacts on the landscape objective. These negative impacts are expected to be occasional and reversible.

In order to consider potential visual effects of development it has been assumed that the proposals would, broadly, reflect the character of nearby development of the same type.

Potential views from residential properties are identified through the use of aerial photography.

It is anticipated that the SSDC will require developers to undertake Landscape and Visual Impact Assessments (LVIAs) to accompany any future proposals, where relevant. The LVIAs should seek to provide greater detail in relation to the landscape character of the proposal and its surroundings, the views available towards the development proposal, the character of those views and the sensitivity and value of the relevant landscape and visual receptors.

Urban Sprawl/ Coalescence:

Development proposals which are considered to increase the risk of future development spreading further into the wider landscape are assessed as having a minor negative impact on the landscape objective.

Development proposals which are considered to reduce the separation between existing settlements and increase the risk of the coalescence of settlements are assessed as having a potential minor negative impact on the landscape objective.

Both of these negative impacts are expected to be long term and irreversible.

Box 2.5: SA Objective 5: Pollution and Waste assessment methodologies and assumptions

SA Objective 5: Pollution and Waste

5. Pollution and Waste: Reduce waste generation, increase the reuse of, and recycling of,

Air Pollution:

Exposure of new residents to air pollution has been considered in the context of proposal location in relation to established Air Quality Management Areas (AQMAs) and main roads. It is widely accepted that the effects of air pollution from road transport decreases with distance from the source of pollution i.e.

SA Objective 5: Pollution and Waste

materials whilst minimizing the extent and impacts of water, air and noise pollution.

the road carriageway. The Department for Transport (DfT) in their Transport Analysis Guidance (TAG) consider that, “*beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*”³¹. This statement is supported by Highways England and Natural England based on evidence presented in a number of research papers^{32 33}. A buffer distance of 200m has therefore been applied in this assessment.

It is assumed that development would result in an increase in traffic and thus traffic generated air pollution. Both existing and future site end users would be exposed to this change in air quality. Residential proposals proposed for between ten and 99 dwellings would therefore be expected to have a minor negative impact on local air pollution³⁴. Residential proposals proposed for 100 dwellings or more would be expected to have a major negative impact. Non-residential proposals which are proposed for the development of between 1ha and 9ha would be expected to have a minor negative impact and proposals which propose 10ha or more would be expected to have a major negative impact.

Where a proposal is proposed for the development of less than nine dwellings or less than 0.99ha of employment floorspace, a negligible impact on local air quality would be anticipated.

The proximity of a proposal in relation to a main road determines the exposure level of site end users to road related air and noise emissions³⁵. In line with the DMRB guidance, it is assumed that site end users would be most vulnerable to these impacts within 200m of a main road. This distance has therefore been applied throughout this assessment to both existing road and rail sources.

Development proposals located within 200m of a main road are assumed to have a minor negative impact on local residents' exposure to air and/ or noise pollution. Development proposals located over 200m from a main road are

³¹ Department for Transport (2017) TAG unit A3 Environmental Impact Appraisal. Available at: <https://www.gov.uk/government/publications/webtag-tag-unit-a3-environmental-impact-appraisal-december-2015> [Date Accessed: 16/07/19]

³² Bignal, K., Ashmore, M & Power, S. 2004. The ecological effects of diffuse air pollution from road transport. English Nature Research Report No. 580, Peterborough.

³³ Ricardo-AEA, 2016. The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report No. 199.

³⁴ Institute of Air Quality Management (2017) Land-Use Planning & Development Control: Planning for Air Quality. Paragraph 5.8.

³⁵ Design Manual for Roads and Bridges, Volume 11: Environmental Assessment, Section 3: Environmental Assessment Techniques, Part 1: Air Quality, Annex D2: Road Type. Available at: <http://www.standardsforhighways.co.uk/ha/standards/dmr/vol11/section3/ha20707.pdf> [Date Accessed: 16/04/19]

SA Objective 5: Pollution and Waste

assumed to have a negligible impact on local residents' exposure to noise and vibration pollution.

Development proposals located within 200m of a railway line are assumed to have a minor negative impact on local residents' exposure to air and/ or noise pollution. Development proposals located over 200m from a railway line are assumed to have a negligible impact on local residents' exposure to noise and vibration pollution.

These negative impacts are expected to be long-term and irreversible.

Groundwater Pollution:

The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. Groundwater Source Protection Zones (SPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. As such, any proposal that is located within a groundwater SPZ could potentially have an adverse impact on groundwater sources.

Development proposals located within the total catchment (Zone III), outer zone (Zone II) or inner zone (Zone I) of an SPZ would be likely to have a minor negative impact on groundwater sources. This negative impact is considered to be occasional and medium-term.

Watercourse Pollution:

Construction activities in or near watercourses have the potential to cause pollution, impact upon the bed and banks of watercourses and impact upon the quality of the water³⁶. In this assessment, a 200m buffer zone was deemed appropriate.

An approximate 10m buffer zone from a watercourse should be used in which no works, clearance, storage or run-off should be permitted³⁷.

Development proposals located within 200m of a watercourse are assumed to have a minor negative impact on local water quality. This negative impact is considered to be occasional and medium-term.

³⁶ World Health Organisation (1996) Water Quality Monitoring - A Practical Guide to the Design and Implementation of Freshwater Quality Studies and Monitoring Programmes: Chapter 2 – Water Quality. Available at: https://www.who.int/water_sanitation_health/resourcesquality/wgmchap2.pdf [Date Accessed: 16/07/19]

³⁷ Department for Environment Food and Rural Affairs (2019) Advice and Information for planning approval on land which is of nature conservation value. Available at: <https://www.daera-ni.gov.uk/articles/advice-and-information-planning-approval-land-which-nature-conservation-value> [Date Accessed: 16/07/19]

SA Objective 5: Pollution and Waste

Waste:

For the purpose of this assessment, it is assumed that new residents in South Staffordshire will have an annual waste production of 412kg per person, in line with the England average³⁸.

South Staffordshire generated 43,631 tonnes of waste in 2017 to 2018, 1% of which is 436.31 tonnes/year. Assuming a rate of 412kg per person, development proposals which accommodate 1,059 new residents could potentially increase waste generation by 1% or more. At 2.31 people per dwelling, this would account for development proposals for 458 or more dwellings. Development proposals of 46 dwellings or more would increase waste production by 0.1% or more.

Minor negative impacts would be expected for proposals which would increase waste generation between 0.1% and 1% of existing levels (i.e. between 169 and 1,693 dwellings). A major negative impact would be expected for proposals which would increase waste generation over 1% (i.e. greater than 1,694 dwellings).

Box 2.6: SA Objective 6: Natural Resources assessment methodologies and assumptions

SA Objective 6: Natural Resources

6. Natural Resources:

Protect, enhance and ensure the efficient use of the district's land, soils and water.

Previously Developed Land:

In accordance with the core planning principles of the NPPF³⁹, development on previously developed land will be recognised as an efficient use of land. Development of previously undeveloped land is not considered to be an efficient use of land.

Development of an existing brownfield site would be expected to contribute positively to safeguarding greenfield land in South Staffordshire and have a minor positive impact on this objective.

Development proposals on previously undeveloped land are expected to pose a threat to soil within the proposal perimeter due to excavation, soil compaction, erosion and an increased risk of soil pollution and contamination

³⁸ Department for Environment Food and Rural Affairs (2017) Statistics on waste managed by local authorities in England in 2016/17. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664594/LACW_mgt_annual_stats_Note_Dec_2017.pdf [Date Accessed: 16/07/19]

³⁹ Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date Accessed: 16/07/19]

SA Objective 6: Natural Resources

during construction. This is expected to be a permanent and irreversible impact.

In addition, proposals which would result in the loss of greenfield land would be expected to contribute towards a cumulative loss of ecological habitat. This would be expected to lead to greater levels of habitat fragmentation and isolation for the local ecological network restricting the ability of ecological receptors to adapt to the effects of climate change. The loss of greenfield land has therefore been considered to have an adverse effect under this objective.

Agricultural Land Classification:

The Agricultural Land Classification (ALC) system classifies land into five categories according to versatility and suitability for growing crops. The top three grades, Grades 1, 2 and 3a, are referred to as the Best and Most Versatile (BMV) land⁴⁰.

Adverse impacts are expected for options which would result in a net loss of agriculturally valuable soils. Development proposals which are situated on Grade 1, 2 or 3 ALC land, and would therefore risk the loss of some of the Plan areas BMV land, would be expected to have a minor negative impact for this objective. This negative impact is considered to be permanent and irreversible.

Development proposals which are situated on Grade 4 and 5 ALC land, or land classified as 'urban' or 'non-agricultural' and would therefore help prevent the loss of the Plan areas BMV land, would be expected to have a minor positive impact for this objective.

Water:

It is assumed that proposals will be in accordance with the national mandatory water efficiency standard of 125 litres per person per day, as set out in the Building Regulations 2010⁴¹.

It is assumed that all housing proposals in the LPR will be subject to appropriate approvals and licensing for sustainable water supply from the Environment Agency.

Box 2.7: SA Objective 7: Housing assessment methodologies and assumptions

⁴⁰ MAFF. October 1988. Available at Natural England.

<http://publications.naturalengland.org.uk/publication/6257050620264448?category=5954148537204736>. [Date Accessed: 16/07/19]

⁴¹ The Building Regulations 2010. Available at: <http://www.legislation.gov.uk/uksi/2010/2214/contents/made> [Date Accessed: 16/07/19]

SA Objective 7: Housing

7. Housing:

Provide a range of housing to meet the needs of the community.

SSDC have prepared evidence documents in relation to the housing needs in South Staffordshire over the Plan period. Options are assessed for the extent to which they will help to meet the diverse needs of current and future residents of the Plan area.

Development proposals which would result in an increase of 99 dwellings or less would be likely to have a minor positive impact on the local housing provision. Development proposals which would result in an increase of 100 dwellings or more would be likely to have a major positive impact on the local housing provision.

Unless otherwise stated, it is assumed development options will provide a good mix of housing type and tenure opportunities.

Development proposals which would be expected to result in a net loss of housing across the Plan area would be expected to have an adverse impact on SSDC's ability to meet the required housing demand.

Development proposals which would result in the loss of nine dwellings or less would be likely to have a minor negative impact on local housing provision. Development proposals which would result in the loss of ten dwellings or more would be likely to have a major negative impact on the local housing provision.

Box 2.8: SA Objective 8: Health and Wellbeing assessment methodologies and assumptions

SA Objective 8: Health and Wellbeing

8. Health and Wellbeing:

Safeguard and improve the physical and mental health of residents.

Air Quality:

It is assumed that development proposals located in close proximity to main roads would expose site end users to transport associated noise and air pollution. In line with the DMRB guidance, it is assumed that receptors would be most vulnerable to these impacts located within 200m of a main road⁴². Negative impacts on the long-term health of residents is anticipated where residents will be exposed to air pollution.

Development proposals located within 200m of a main road are assumed to have a minor negative impact on local residents' exposure to air pollution. Development proposals located over 200m from a main road are assumed to have a minor positive impact on local residents' exposure to air pollution.

⁴² Design Manual for Roads and Bridges, Volume 11: Environmental Assessment, Section 3: Environmental Assessment Techniques, Part 1: Air Quality, Annex D2: Road Type. Available at: <http://www.standardsforhighways.co.uk/ha/standards/dmr/vol11/section3/ha20707.pdf> [Date Accessed: 16/07/19]

SA Objective 8: Health and Wellbeing

Air Quality Management Areas (AQMAs) are considered to be an area where the national air quality objective will not be met.

Development proposals which would locate site end users within 200m of an AQMA would be expected to have a minor negative impact on human health. Development proposals which would locate site end users over 200m from an AQMA would be expected to have a minor positive impact on human health.

Health Facilities:

In order to facilitate healthy and active lifestyles for existing and new residents, it is expected that SSDC should seek to ensure that residents have access to NHS hospitals, GP surgeries, leisure centres and a diverse range of accessible natural habitats and the surrounding PRow network. Sustainable distances to each of these necessary services are derived from Barton *et al.*⁴³.

Adverse impacts are anticipated where they would not be expected to facilitate active and healthy lifestyles for current or future residents.

For the purposes of this assessment, accessibility to a hospital has been taken as proximity to an NHS hospital with an A&E service. Distances of proposals to other NHS facilities (e.g. community hospitals and treatment centres) or private hospitals has not been taken into consideration in this assessment. There are no NHS hospitals with an A&E department located within South Staffordshire. The closest NHS hospitals with an A&E department include New Cross Hospital, Russell's Hall Hospital, County Hospital and Princess Royal Hospital.

Development proposals located within 5km of one of these hospitals are assumed to have a minor positive impact on site end users' access to emergency health services. Development proposals located over 5km from one of these hospitals would be likely to have a minor negative impact on site end users' access to emergency health care.

There are numerous GP surgeries located across the Plan area. Development proposals located within 800m of a GP surgery are assumed to have a minor positive impact on site end users' access to this essential health service. Development proposal located over 800m from a GP surgery would be likely to have a minor negative impact on site end users' access to essential health care.

Access to leisure centres can provide local residents with opportunities to facilitate healthy lifestyles through exercise. Development proposals located within 1.5km of a leisure centre are assumed to have a minor positive impact on site end users' access to these facilities. Development proposal located

⁴³ Barton, H., Grant, M. & Guise, R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

SA Objective 8: Health and Wellbeing

over 1.5km from a leisure centre would be likely to have a minor negative impact on site end users' access to these facilities.

Development proposals which would locate site end users in close proximity to one of the listed NHS hospitals, a GP surgery and a leisure centre would be expected to have a major positive impact for this objective.

Development proposals which would locate site end users away from the listed NHS hospitals, a GP surgery and a leisure centre would be expected to have a major negative impact for this objective. These negative impacts are considered to be occasional and reversible.

Green Network:

New development proposals have been assessed in terms of their access to the local PRow networks and public greenspace. In line with Barton *et al.*⁴⁴, a sustainable distance of 600m has been used for the assessments. Proposals that are located within 600m of a PRow/ cycle path or a public greenspace are assumed to have a minor positive impact on residents' access to a diverse range of natural habitats. Development proposals located over 600m from a PRow/ cycle path or a public greenspace could potentially have a minor negative impact on residents' access to natural habitats and therefore, have an adverse impact on the physical and mental health of local residents. This negative impact is anticipated to be occasional and reversible.

Box 2.9: SA Objective 9: Cultural Heritage assessment methodologies and assumptions

SA Objective 9: Cultural Heritage

9. Cultural Heritage:
Conserve, enhance and manage sites, features and areas of historic and cultural importance.

Impacts on heritage assets will be largely determined by the specific layout and design of development proposals, as well as the nature and significance of the heritage asset. There is a risk of adverse effects occurring, some of which may be unavoidable. As such, this risk has been reflected in the assessment as a negative impact where a proposal is in close proximity to heritage assets. The level of the impact has been assigned based on the nature and significance of, and proximity to, the heritage asset in question.

Adverse impacts are recorded for options which have the potential to have an adverse impact on sensitive heritage designations, including Listed Buildings, Scheduled Monuments (SM), Registered Parks and Gardens (RPG) and Conservation Areas.

It is assumed that where a designated heritage asset coincides with a proposal, the designated heritage asset will not be lost as a result of development (unless otherwise specified by SSDC). Adverse impacts on

⁴⁴ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

SA Objective 9: Cultural Heritage

heritage assets are predominantly associated with impacts on the existing setting of the asset and the character of the local area, as well as adverse impacts on views of, or from, the asset. These negative impacts are expected to be long-term and irreversible.

Setting:

Development which would be discordant with the local character or setting, for example; due to design, layout, scale or type, would be expected to adversely impact the setting of nearby heritage assets that are important components of the local area. Views of, or from, the heritage asset are considered as part of the assessment of potential impacts on the setting of the asset.

Designated Features:

Where a Grade I, Grade II* or Grade II Listed Building, a SM or an RPG coincides with a development proposal, it is assumed that the setting of these features will be permanently altered, and a major negative impact is expected. Where a development proposal is located adjacent to a Grade I Listed Building it is assumed that the proposal would also permanently alter the setting to the asset and a major negative impact on the historic environment is expected.

Where the development proposal is located adjacent to, or in close proximity to, a Grade II* or Grade II Listed Building, a SM, or an RPG, or where the development proposal is located in close proximity to a Grade I Listed Building, it is assumed there will be an adverse impact on the setting of the asset, to some extent, and a minor negative impact is expected. Potential impacts on Conservation Areas and their setting are recorded as minor negative impacts.

Where development proposals are not located in close proximity to any heritage asset, or the nature of development is determined not to affect the setting or character of the nearby heritage asset, a negligible impact is expected for this objective.

Heritage features identified on Historic England's Heritage at Risk Register may be identified as being at risk for a number of reasons, for example, due to dilapidation of the building fabric or other sources of risk such as coastal erosion, cultivation or scrub encroachment⁴⁵. Where Heritage at Risk assets could potentially be impacted by the proposed development, this has been stated.

It is anticipated that SSDC will require a Heritage Statement to be prepared to accompany future planning applications, where appropriate. The Heritage

⁴⁵ Historic England Heritage at Risk Register. Available at: <https://historicengland.org.uk/advice/heritage-at-risk/search-register> [Date Accessed: 16/07/19]

SA Objective 9: Cultural Heritage

Statement should describe the significance of any heritage assets affected by the proposals, including any contribution made by their settings.

Box 2.10: SA Objective 10: Transport and Accessibility assessment methodologies and assumptions

SA Objective 10: Transport and Accessibility

10. Transport and Accessibility:
Improve the choice and efficiency of sustainable transport in the district and reduce the need to travel.

Public Transport:

In line with Barton *et al.*'s sustainable distances, site end users should be situated within 2km of a railway station and 400m of a bus stop offering a frequent service. Bus service frequency and destination information was obtained from Google Maps^{46,47}.

In order for a positive impact to be anticipated with regard to access to public transport, consideration has been given to the proportion of a proposal within the target distance of these key transport services. To be sustainable, the bus stop should provide users with hourly services. Where a physical barrier prevents access to one of these services, this has been noted within the assessment text.

Development proposals located within the target distance to a railway station or bus stop are assumed to have a minor positive impact on local transport and accessibility. Development proposals located outside of the target distance to a railway station or a bus stop are assumed to have a minor negative impact on transport and accessibility. These negative impacts are considered to be long term and reversible.

Pedestrian Access:

New development proposals have been assessed in terms of their access to the surrounding footpath network. In order for a positive impact to be anticipated with regard to pedestrian access, consideration has been given to safe access to and from the proposal, e.g. footpath. This safe access is assessed to be suitable for wheelchair users and prams.

Development proposals which would be expected to provide site end users with adequate access to the surrounding footpath network would be expected to have a minor positive impact on pedestrian access. Development proposals which would not be anticipated to provide adequate access would be expected to result in a minor negative impact on pedestrian access. These negative impacts are considered to be occasional and reversible.

⁴⁶ Google Maps (no date) Available at: <https://www.google.co.uk/maps> [Date Accessed: 16/07/19]

⁴⁷ Live departure boards available from Google Maps have been used to assess the frequency of services at bus stops within the Plan area. These are obtained from local bus timetables.

SA Objective 10: Transport and Accessibility

Road Access:

New development proposals have been assessed in terms of their access to the surrounding road network. Development proposals which would be expected to provide site end users with adequate access to the surrounding road network would be expected to have a minor positive impact on road access. Development proposals which would not be anticipated to provide adequate access would be expected to have a minor negative impact on road access. This negative impact is considered to be occasional and reversible.

Overall:

Development proposals which would locate site end users in close proximity to all the above receptors would be expected to have a major positive impact for this objective.

Development proposals which would locate site end users away from all the above receptors would be expected to have a major negative impact for this objective.

Box 2.11: SA Objective 11: Education assessment methodologies and assumptions

SA Objective 11: Education

11. Education: Improve education, skills and qualifications in the district.

It is assumed that new residents in the Plan area require access to primary and secondary education services to help facilitate good levels of education, skills and qualifications of residents.

In line with Barton *et al.*'s sustainable distances⁴⁸, for the purpose of this assessment, 800m is assumed to be the target distance for travelling to a primary school and 1.5km to secondary schools. All schools identified are publicly accessible state schools.

It is recognised that not all schools within South Staffordshire are accessible to all pupils. For instance, independent and academically selective schools may not be accessible to all. Local primary schools may only be Infant or Junior schools and therefore not provide education for all children of primary school age. Some secondary schools may only be for girls or boys and therefore would not provide education for all. This has been considered within the assessment.

At this stage, there is not sufficient information available to be able to accurately predict the effect of new development on the capacity of local

⁴⁸ Barton, H., Grant, M. & Guise, R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010.

SA Objective 11: Education

schools, or to incorporate local education attainment rates into the assessment.

Development proposals which would locate site end users within the target distances of a primary school or secondary school would be expected to have a minor positive impact for this objective.

Development proposals which would locate site end users outside of the target distances of a primary or secondary school would be expected to have a minor negative impact for this objective.

Development proposals which would be located new residents within the target distance to both a primary and secondary school would be expected to have a major positive impact on the education objective.

Development proposals which would locate new residents outside of the target distance to both a primary and secondary school would be likely to have a major negative impact on the education objective. These negative impacts are expected to be medium-term and reversible.

Box 2.12: SA Objective 12: Economy and Employment assessment methodologies and assumptions

SA Objective 12: Economy and Employment

12. Economy and Employment: To support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.

Employment Opportunities:

Key employment areas are defined as locations which would provide a range of employment opportunities from a variety of employment sectors, including retail parks, industrial estates and major local employers.

The South Staffordshire Economic Development Needs Assessment (EDNA)⁴⁹ identified that approximately 21% of the District's working population live and work in South Staffordshire, with the majority commuting outside the District. As a result, a Rural Services and Facilities Audit⁵⁰ was completed to assess access to employment centres via rail and bus from areas within the District.

Hansen scores for public transport access to employment opportunities were used, which measured the number of destinations which could be accessed within 60 minutes journey time. For the use of this SA report, it is assumed that development proposals that would place site end users in locations with good or reasonable access to employment opportunities (the upper half

⁴⁹ South Staffordshire Council (2018) Economic Development Needs Assessment. Available at: <https://www.sstaffs.gov.uk/doc/179880/name/South%20Staffs%20EDNA%20Final%20Report%2007%2009.pdf/> [Date Accessed: 16/07/19]

⁵⁰ South Staffordshire Council (2018) Rural Services and Facilities Audit. Available at: <https://www.sstaffs.gov.uk/doc/179887/name/Rural%20Services%20%26%20Facilities%20Audit%20Final%202018.pdf/> [Date Accessed: 16/07/19]

SA Objective 12: Economy and Employment

Hansen scores) would have a minor positive impact on access to employment opportunities.

Employment Floorspace:

An assessment of current land use at all development proposals has been made through reference to aerial mapping and the use of Google Maps⁵¹.

Development proposals which result in a net increase in employment floorspace would be expected to have a major positive impact on the local economy. Development proposals which result in a net decrease in employment floorspace would be expected to have a major negative impact on the local economy. This negative impact is considered to be long-term and reversible.

Development proposals for employment floorspace that currently comprise employment floorspace would be likely to have an overall negligible impact on the economy objective.

⁵¹ Google Maps (no date) Available at: <https://www.google.co.uk/maps> [Date Accessed: 16/07/19]

3 Spatial Option A – Maximise Open Countryside release

Spatial Option A - Maximise Open Countryside release

This option has been prepared to allow the Council to consider the impacts for sustainable development of seeking to meet its housing needs by channelling growth beyond the Green Belt. It examines the additional capacity that could be met by maximising as much housing supply as possible in Open Countryside locations within the district, regardless of whether or not this pattern of development would be supported by local infrastructure, accord with other national policies or be considered a sustainable strategy.

This option would imply significant growth on all potential Open Countryside sites around Wheaton Aston; very large urban extensions north of Penkridge and south of Stafford; and a new garden village around Dunston. In other settlements surrounded by Green Belt, additional land is only released in non-Green Belt locations (i.e. safeguarded land and suitable sites within the development boundary). Even if all of these supply options could be maximised and had no deliverability issues the district would only deliver approximately 7,876 dwellings within the plan period, falling short of the preferred housing target of 8,845 dwellings. This would mean the Council would not be able to provide a contribution of up to 4,000 dwellings towards the unmet needs of the GBHMA, contrary to the proposed approach set out in the 2018 Issues and Options document.

- 3.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Penkridge, Bilbrook/ Codsall, a new settlement in the open countryside around Dunston and an urban extension south of Stafford. Over 100 dwellings would be directed to Cheslyn Hay/ Great Wyrley, Wombourne, Brewood, Kinver, Perton, Essington, Coven and Wheaton Aston. In addition, a smaller number of dwellings would be directed to Huntington, Featherstone, Pattingham, Swindon and Tier 4 settlements (see **Figure 3.1**).

Spatial Strategy: Option A

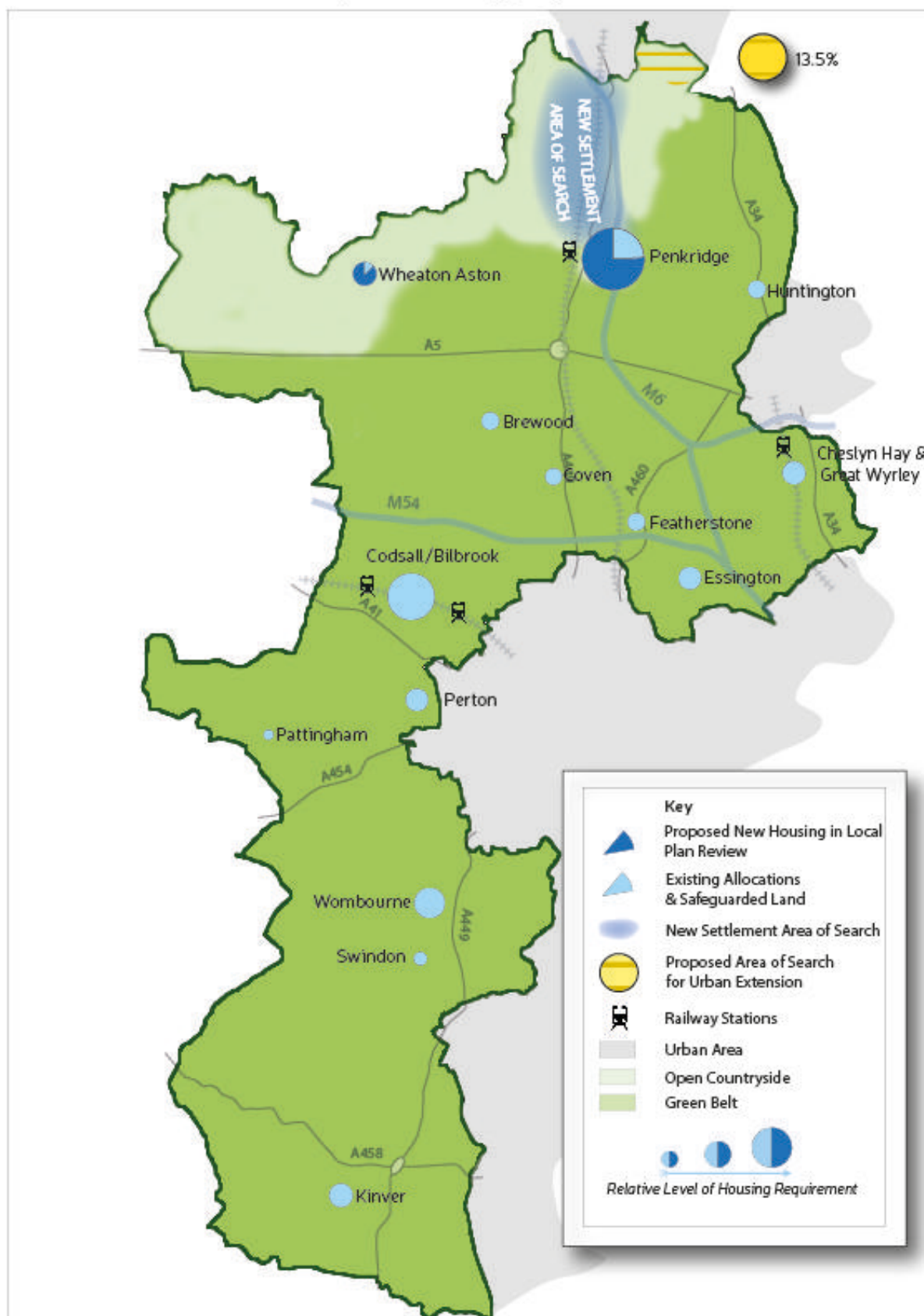


Figure 3.1: Spatial Strategy: Option A

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
-	-	-	-	-	-	+	-	-	-	+	-

3.2 SA Objective 1 – Climate Change Mitigation

3.2.1 The proposed development of 7,876 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 7,876 new dwellings could increase the local population by 18,194 people. The introduction of 18,194 new residents would therefore be expected to increase the annual carbon emissions of the Plan area by 42,028 tonnes, or 4.68%. Overall, a major negative impact on climate change mitigation would be expected.

3.3 SA Objective 2 – Climate Change Adaptation

3.3.1 The north east and west of Penkridge and the north west and north east of Bilbrook/ Codsall are located within Flood Zone 2 and 3. Although the location of a new settlement around Dunston is currently uncertain, there are also areas of Flood Zones 2 and 3 located to the east and west of this location. An urban extension to the south of Stafford is likely to be located within Flood Zone 1. Spatial Option A would direct the majority of development to these four locations, a proportion of new residents could therefore potentially be located within Flood Zones 2 or 3. New residents would be at risk of flooding and development would result in the loss of floodplain, reducing flood storage capacity in the area.

- 3.3.2 Given the location of development under Spatial Option A, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements to the north of South Staffordshire are likely to be located in areas at higher risk of surface water flooding than development proposals located to the south of the District.
- 3.3.3 As Spatial Option A directs development to open countryside, it is likely that the majority of development would be located on previously undeveloped land. Development proposals would be likely to result in a net loss of vegetation cover and permeable soils, which help to attenuate flood risk, and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health and safety.
- 3.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified at high risk of surface water flooding, a major negative impact would be expected.

3.4 **SA Objective 3 – Biodiversity and Geodiversity**

- 3.4.1 Potential adverse impacts on European sites following the development proposed under this Spatial Option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives which will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these sites. Development proposals located to the north east of Penkridge could potentially be located within 5km of Cannock Chase SAC. Huntington, the proposed new settlement around Dunston and the urban extension to the south of Stafford are located within 5km of Cannock Chase SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Mottley Meadows SAC.
- 3.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton, and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary. The south of Stafford urban extension is likely to be located in close proximity to Cannock Chase SSSI.

- 3.4.3 Mottey Meadows NNR is located in close proximity to Wheaton Ashton. Wombourne coincides with Wom Brook Walk LNR and South Staffordshire Railway Walk LNR. Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. The south of Stafford urban extension could potentially be located in close proximity to Brocton LNR. The north of Wombourne is adjacent to stands of ancient woodland.
- 3.4.4 Although Spatial Option A would be unlikely to result in the direct loss of designated biodiversity sites, a number of European, national and locally designated sites are located in close proximity to some of the identified locations for proposed for development. The proposed development at Penkridge, Huntington, Cheslyn Hay/ Great Wyrley, Wheaton Ashton, Kinver, Wombourne, the proposed urban extension south of Stafford and the proposed urban extension around Dunston could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

3.5 SA Objective 4 – Landscape and Townscape

- 3.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington and the proposed urban extensions south of Stafford could potentially be adjacent to the AONB. The proposed development around Penkridge and new settlement around Dunston would also be likely to be in close proximity to this AONB. Approximately 50 dwellings are proposed within Huntington, 1,500 dwellings at Penkridge and 1,200 dwellings are proposed at both the urban extensions south of Stafford and the new settlements around Dunston. Due to the proximity of these locations, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from, the AONB.
- 3.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the view experienced by users of the local PRoW network and local residents to some extent.

- 3.5.3 As the majority of development under this spatial option is likely to be located on previously undeveloped land, the proposed development would be expected to result in urban sprawl into the surrounding countryside. The proposed development in these locations could potentially be discordant with the local landscape character. Overall, a major negative impact on the local landscape cannot be ruled out.

3.6 SA Objective 5 – Pollution and Waste

- 3.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be in close proximity to a watercourse and could potentially increase the risk of water contamination.
- 3.6.2 The north of Wombourne is located within the inner and outer zones of a groundwater SPZ (Zones I and II). Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne and Coven are located within the catchment of a groundwater SPZ (Zone III). The south of Penkridge and the south of Stafford urban extension are also located within Zone III. The proposed development could potentially increase the risk of groundwater contamination at these locations.
- 3.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC (Cannock Chase District Council) AQMA 2'. The construction and occupation of residential development at these locations would be likely to expose site end users to poor local air quality. In addition, the proposed development could potentially further worsen local air quality through the introduction of additional people and associated car movements.

- 3.6.4 The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Wombourne. The new settlement proposed around Dunston would be likely to be located in close proximity to the M6 and A449. The urban extension proposed to the south of Stafford would be likely to be in close proximity to the A34. New residents located in these locations could potentially be exposed to higher levels of air and noise pollution associated with these main roads. As a rural district, it is anticipated that new residents would have a high reliance on personal car use which would be expected to exacerbate air pollution issues in these areas with adverse impacts for local air quality and resident's health.
- 3.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall, Cheslyn Hall/ Great Wyrley through the area where a new settlement around Dunston could potentially be located. The proposed development in these locations under this spatial option could potentially expose site end users to higher levels of noise and vibration associated with this railway line with adverse health effects.
- 3.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 7,876 people could be expected to increase the total annual waste generated in the Plan area by 7,496 tonnes, or 17.3%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

3.7 SA Objective 6 – Natural Resources

- 3.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as 'urban'. The south of Stafford urban extension could potentially be located on ALC Grade 3 land. The proposed new settlement located around Dunston would be likely to be located on ALC Grades 2 and 3 land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. Development proposed in these locations would be expected to result in the loss of this agriculturally important soil resource.

- 3.7.2 Under Spatial Option A, development would be directed towards the open countryside. Development proposals directed to previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this option would be likely to have a minor negative impact on soil resources within South Staffordshire.

3.8 SA Objective 7 – Housing

- 3.8.1 This spatial option does not meet the preferred housing target of the LPR. As a result, this option would be likely to make a contribution to the housing need across the Plan area and within the surrounding District but would not be expected to fully meet the identified need. Therefore, a minor positive impact on housing provision across the Plan area would be expected.

3.9 SA Objective 8 – Health and Wellbeing

- 3.9.1 As a primarily rural district, it is anticipated that the majority of new residents situated in the open countryside under this spatial option would have excellent access to a diverse range of natural habitats. In addition, all of the locations identified under this spatial option are in close proximity to a PRow. This would be expected to provide site end users with good opportunities to pursue a healthy lifestyle. Both of these factors would be expected to have physical and mental health benefits for local residents.
- 3.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. All locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Pattingham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.
- 3.9.3 By focusing development in the open countryside, it would be likely that development proposals would be located over 200m from main roads, railway lines and AQMA's and would therefore potentially locate site end users away from sources of air and noise pollution.

- 3.9.4 Overall, new residents situated in the open countryside would be expected to have excellent access to natural habitats. However, it would be expected that the majority of new residents would be located outside the sustainable travel distance to health care facilities, including an NHS hospital. Therefore, a minor negative impact on health and wellbeing as a result of directing development outside of the Development Boundaries in the countryside would be expected.

3.10 SA Objective 9 – Cultural Heritage

- 3.10.1 ‘Rodbaston Old Hall moated site and fishpond’ SM is located approximately 500m south of Penkridge. Although the location of a new settlement around Dunston is currently uncertain, ‘Moated site at Moat House Farm’ SM is located to the east of Dunston. Approximately 2,700 dwellings are proposed in and around these two locations. As a result, development proposals under this spatial option could potentially alter the setting of these two SMs.
- 3.10.2 Penkridge coincides with ‘Penkridge’ Conservation Area and ‘Codsall Bilbrook and Oaken’ Conservation Area is located to the west of Bilbrook/Codsall. Development proposals directed towards these two settlements could potentially have a minor negative impact on the setting of these Conservation Areas.
- 3.10.3 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at many of the locations identified under this spatial option would be likely to be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/or setting of local Listed Buildings.
- 3.10.4 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. By directing development to the open countryside, the development proposed under Spatial Option A would be expected to be situated on previously undeveloped land. Due to the close proximity of the identified locations under Spatial Option A to local heritage assets, a minor negative impact cannot be ruled out.

3.11 SA Objective 10 – Transport and Accessibility

- 3.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station, and Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option A could potentially located site end users in areas with limited access to rail services.
- 3.11.2 By directing a higher proportion of development to the Tier 3 and 4 settlements under this spatial option, it is considered likely that new residents in these locations would have limited access to sustainable transport options. New residents would be likely to be outside the sustainable travel distance to a bus stop providing regular services to surrounding towns and villages. Bus services in rural settlements are likely to be less frequent than services in larger settlements, and as such, residents would rely heavily on private cars.
- 3.11.3 Development proposals under this spatial option would be located in more rural locations, in particular off country roads and narrow lanes. These roads typically do not have footpath or safe pedestrian access. As a result, by directing residents to more rural locations under this spatial option, it increase the likelihood that residents would not have safe pedestrian access.
- 3.11.4 Approximately 1,000 dwellings would be directed towards Tier 3 and 4 settlements under Spatial Option A. The remainder of development proposals would be situated outside the development boundaries of Tier 1 and 2 settlements and towards urban extensions. Therefore, new residents in Tier 3 and 4 settlements would be expected to have limited access to bus services, rail services and pedestrian access and as such, rely heavily on personal car use. Therefore, this spatial option would be expected to have a minor negative impact on transport and accessibility.

3.12 SA Objective 11 – Education

- 3.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.

- 3.12.2 Secondary schools within South Staffordshire are primarily located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Wombourne and Kinver would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at, Brewood, , Perton, Essington, Coven, Wheaton Aston, Huntington, Featherstone, Pattingham and Swindon would however be likely to situate new residents in locations with limited access to secondary education.
- 3.12.3 There are numerous primary and secondary schools located to the south of Stafford. The proposed urban extension south of Stafford would be likely to situate new residents in close proximity to these education facilities.
- 3.12.4 St Leonards First School is located in Dunston. Although the location of a new settlement around Dunston is currently uncertain, it is considered likely that the proposed development would be located in close proximity to this primary school. However, the development of over 1,000 dwellings within this new settlement would be likely to cause over-capacity issues at this primary school. In addition, it is assumed that a new primary school would be developed as part of a new settlement proposal which would be expected to ensure primary school capacity in the local area.
- 3.12.5 Under this spatial option, over 1,000 dwellings will be directed towards Penkridge, Bilbrook/ Codsall, a new settlement in the open countryside around Dunston and as an urban extension south of Stafford. New residents located in Penkridge, Bilbrook. Codsall and south of Stafford would be expected to have excellent access to primary and secondary education. New residents situated at Wheaton Ashton and in a new settlement around Dunston would be expected to have limited access to secondary education. Therefore, an overall minor positive impact on access to education would be expected for Spatial Option A.

3.13 SA Objective 12 – Economy and Employment

- 3.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Shareshill, Coven and Brewood would be expected to have reasonable access to out-of-District employment areas.
- 3.13.2 Overall, approximately 3,500 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas. As less than half of development proposals would be located in areas with good or reasonable sustainable access to employment opportunities, Spatial Option A would be likely to have a minor negative impact on the local economy.

4 Spatial Option B – Prioritising Green Belt land release in areas of lesser Green Belt harm

Spatial Option B - Prioritising Green Belt land release in areas of lesser Green Belt harm

This option meets the preferred housing target of 8,845 dwellings between 2018 and 2037. Under this option, 75% of development in the plan period would occur in the district's rural villages, whilst 25% would occur in urban extensions to neighbouring urban areas or the wider rural area. Under this option, additional growth is allocated to broad locations where it could be delivered without the release of any 'high' or 'very high' harm areas of Green Belt, as identified in the South Staffordshire Green Belt Study 2019. This means that the growth apportioned to each broad location under this option would be accommodated on areas of Green Belt land of 'moderate – high' harm or less, or Open Countryside beyond the Green Belt where this is available.

In apportioning growth between the area's rural settlements, this option also reflects each settlement's role in the district's revised settlement hierarchy, giving higher levels of growth to higher tiers of the settlement hierarchy. Therefore, the size of new allocations to individual settlements reflects each settlement's role in the hierarchy, unless it is clear from the Green Belt Study 2019 that this level of growth would require the release of 'high' or 'very high' harm areas of Green Belt.

Equally, this option also seeks growth in areas adjacent to neighbouring towns and cities where this can be accommodated without the release of any 'high' or 'very high' harm areas of Green Belt, recognising the relative sustainability of these areas. The apportionment of growth between different areas of search for urban extensions reflects the extent to which there are opportunities to accommodate growth on less harmful Green Belt sites or areas of Open Countryside beyond the Green Belt. This option also has regard to the relative performance of the Green Belt between the district's rural settlements and the urban edge of adjacent towns and cities. This means the district's rural areas share a greater proportion of the planned growth, as they generally contain less areas of 'high' or 'very high' Green Belt harm.

- 4.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Penkridge, Bilbrook/ Codsall, Wombourne and as an urban extension south of Stafford. Over 100 dwellings would be directed towards Cheslyn Hay/ Great Wyrley, Brewood, Kinver, Perton, Essington, Coven, Featherstone, Wheaton Ashton, Pattingham, Swindon, Tier 4 settlements, as an urban extension north or Black Country conurbation and as an urban extension at the western edge of the Black Country. In addition, a smaller number of dwellings would be directed to Huntington and Sharesill (see **Figure 4.1**).

Spatial Strategy: Option B

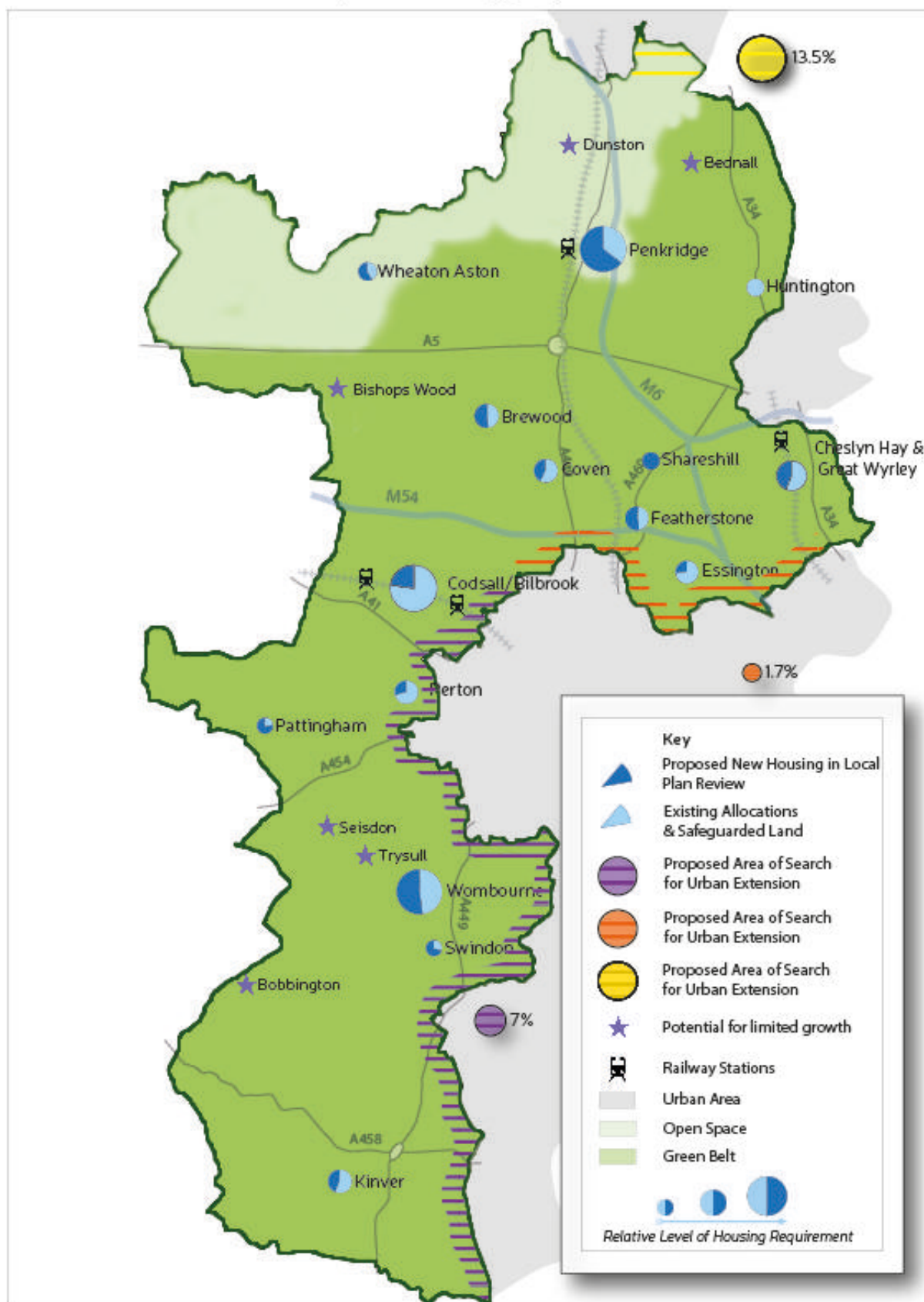


Figure 4.1: Spatial Strategy: Option B

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
--	--	-	--	--	-	++	-	-	-	++	-

4.2 SA Objective 1 – Climate Change Mitigation

4.2.1 The proposed development of 8,845 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 8,845 new dwellings could increase the local population by 20,432 people. The introduction of 20,432 new residents would therefore be expected to increase the annual carbon emission of the Plan area by 47,198 tonnes, or 5.26%. Overall, a major negative impact on climate change mitigation would be expected.

4.3 SA Objective 2 – Climate Change Adaptation

4.3.1 The north east and west of Penkridge, the north west and north east of Bilbrook/ Codsall and the centre and the north west of Wombourne are located within Flood Zone 2 and 3. An urban extension to the south of Stafford is likely to be located within Flood Zone 1. Spatial Option B would direct the majority of development to these four locations, a proportion of new residents could potentially be located within Flood Zones 2 or 3. New residents would be at risk of flooding and development would result in the loss of floodplain, reducing flood storage capacity in the area.

- 4.3.2 Given the location of development under Spatial Option B, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements to the north of South Staffordshire would be likely to be located in areas at higher risk of surface water flooding than development proposals located to the south of the District. This would be likely to lead to health and safety issues and also result in a reduction in surface water storage capacity.
- 4.3.3 As Spatial Option B directs development to Green Belt land, it is likely that the majority of it would be on previously undeveloped land. Development proposals would be likely to result in a net loss of vegetation cover and permeable soils and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health and safety.
- 4.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified as being at high risk of surface water flooding, a major negative impact would be expected.

4.4 **SA Objective 3 – Biodiversity and Geodiversity**

- 4.4.1 Potential adverse impacts on European sites following the development proposed under this Spatial Option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives which will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these sites. Development proposals located to the north east of Penkridge could potentially be located within 5km of Cannock Chase SAC. Huntington and the urban extension to the south of Stafford are located within 5km of Cannock Chase SAC. The urban extension at the western edge of Black Country could potentially be located within 5km of Fens Pools SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Motte Meadows SAC.

- 4.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary. The south of Stafford urban extension is likely to be located in close proximity to Cannock Chase SSSI. The urban extension to the west of the Black Country could potentially be located in close proximity to the Gospel End Road Cutting SSSI.
- 4.4.3 Motte Meadows NNR is located in close proximity to Wheaton Ashton. Wrens Nest NNR could potentially be located within 3km of the urban extension to the west of the Black Country.
- 4.4.4 Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. Wombourne coincides with Wom Brook Walk LNR and South Staffordshire Railway Walk LNR. The south of Stafford urban extension could potentially be located in close proximity to Brocton LNR. The urban extension to the west of the Black Country could potentially be located in close proximity to Baggeridge Country Park LNR.
- 4.4.5 The north of Wombourne is situated adjacent to stands of ancient woodland. The likely location of the urban extensions to the north and west of the Black Country could potentially be located in close proximity to these stands of ancient woodland.
- 4.4.6 Although Spatial Option B would be unlikely to result in the direct loss of a designated site, a number of European, national and locally designated sites are located in close proximity to some of the identified locations for development. The proposed development at Penkridge, Huntington, Cheslyn Hay/ Great Wyrley, Wheaton Aston, Wombourne, Kinver and the proposed urban extensions to the north and west of the Black Country and the south of Stafford could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

4.5 SA Objective 4 – Landscape and Townscape

- 4.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington and the proposed urban extensions south of Stafford could potentially be located adjacent to the AONB. The proposed development around Penkridge would also be likely to be in close proximity to this AONB. Approximately 50 dwellings are proposed within Huntington, 1,500 dwellings at Penkridge and 1,200 dwellings are proposed at the urban extensions south of Stafford. Due to the proximity of these locations, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from, the AONB.
- 4.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the views experienced by users of the local PRow network and local residents to some extent.
- 4.5.3 As the majority of development under this spatial option is likely to be located on previously undeveloped land, the proposed development would be expected to result in urban sprawl into the surrounding countryside. The proposed development in these locations could potentially be discordant with the local landscape character.
- 4.5.4 Overall, a major negative impact on the local landscape cannot be ruled out.

4.6 SA Objective 5 – Pollution and Waste

- 4.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be located in close proximity to a watercourse and could potentially increase the risk of water contamination.
- 4.6.2 Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne, Coven, the south of Penkridge and the south of Stafford urban extension are located within the catchment of a groundwater SPZ (Zone III). The north of Wombourne is located within the inner and outer zones of a groundwater SPZ (Zones I and II). Proposed development could potentially increase the risk of groundwater contamination at these locations.

- 4.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC AQMA 2'. The north of Black Country urban extension is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The construction and occupation of residential development at these locations would be likely to expose site end users to poor local air quality. In addition, the proposed development could potentially further worsen local air quality through the introduction of additional people and associated car movements.
- 4.6.4 The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Wombourne. The urban extension proposed to the south of Stafford would be in close proximity to the A34. The urban extension to the west of the Black Country is likely to be located in close proximity to the A463. New residents in these locations could potentially be exposed to high levels of air and noise pollution associated with these main roads. As a rural district with somewhat limited sustainable transport options, it is anticipated that new residents would rely heavily on personal car use. This would be expected to exacerbate local air pollution issues in these areas having adverse impacts on local air quality and subsequently resident's health.
- 4.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall, Cheslyn Hall/ Great Wyrley and the urban extension to the north of the Black Country. Development in these locations under this spatial option could potentially expose site end users to high levels of noise and vibration associated with this railway line with adverse health impacts.
- 4.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 8,845 people could be expected to increase the total annual waste generated in the Plan area by 8,418 tonnes, or 19.4%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

4.7 SA Objective 6 – Natural Resources

4.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land, with the exception of Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley which are primarily located on ALC land classed as ‘urban’. The south of Stafford urban extension could potentially be located on ALC Grade 3 land. The west of the Black Country urban extension could potentially be located on ALC Grade 3 land. The north of the Black Country urban extension would be likely to be located on ALC Grades 2 and 3 land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. The proposed development in these locations would be expected to result in the loss of this agriculturally important soil resource.

4.7.2 Under Spatial Option B, development would be directed towards the Green Belt. Development proposals directed to previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this option would be likely to have a minor negative impact on soil resources within South Staffordshire.

4.8 SA Objective 7 – Housing

4.8.1 By aiming to meet the housing target of 8,845 dwellings over the Plan period, this spatial option would enable the LPR to deliver enough housing to satisfy the local need as well as make a significant contribution towards meeting the housing needs identified within surrounding Districts. Therefore, a major positive impact on housing provision across the Plan area would be expected.

4.9 SA Objective 8 – Health and Wellbeing

4.9.1 As a primarily rural district, it is anticipated that by siting new residents in the Green Belt, this spatial option would provide site end users with excellent access to a diverse range of natural habitats. In addition, all of the locations identified under this spatial option are in close proximity to a PRow. This would be expected to provide site end users with good opportunities to pursue a healthy lifestyle. Both of these factors would be expected to have physical and mental health benefits for local residents.

- 4.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. The urban extension to the north of the Black Country conurbation is likely to be located within 5km of the new Cross Hospital in Wolverhampton. The urban extension to the west of the Black Country is likely to be located within 5km of Russell's Hall Hospital in Dudley. New residents situated in these locations would be likely to have good access to emergency health care. Due to their rural nature, all other locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Pattingham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.
- 4.9.3 By focusing development towards the Green Belt, it would be likely that development proposals would be located over 200m from main roads, railway lines and AQMA's which could potentially avoid site end user's exposure to air and noise pollution.
- 4.9.4 Overall, new residents situated in the Green Belt would be expected to have excellent access to natural habitats. However, it would be expected that the majority of new residents would be located outside the sustainable distance to health care facilities, including an NHS hospital. Therefore, a minor negative impact on health and wellbeing as a result of directing development outside of the Development Boundaries in the countryside would be expected.

4.10 SA Objective 9 – Cultural Heritage

- 4.10.1 'Rodbaston Old Hall moated site and fishpond' SM is located approximately 500m south of Penkridge. Approximately 1,100 dwellings are proposed at Penkridge. As a result, development proposals under this spatial option could potentially alter the setting of this SM.
- 4.10.2 'Himley Hall' RPG is located approximately 300m south east of Wombourne. Approximately 1,200 dwellings are proposed at Wombourne. As a result, development proposals could potentially alter the setting of this RPG.

- 4.10.3 Penkridge coincides with ‘Penkridge’ Conservation Area and Wombourne coincides with ‘Wombourne’ Conservation Area. ‘Codsall Bilbrook and Oaken’ Conservation Area is located to the west of Bilbrook/ Codsall. The proposed development at these three locations could potentially result in the alteration of the setting of these three Conservation Areas.
- 4.10.4 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at any of the locations identified under this spatial option would be likely to be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/ or setting of local Listed Buildings.
- 4.10.5 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. Due to the close proximity of the identified locations under Spatial Option B to local heritage assets, a minor negative impact cannot be ruled out.

4.11 SA Objective 10 – Transport and Accessibility

- 4.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station, and Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option B could potentially locate site end users in areas with limited access to rail services.
- 4.11.2 By directing a higher proportion of development towards the Tier 3 and 4 settlements under this spatial option, it is considered likely that new residents in these locations would have limited access to sustainable transport options. New residents would be outside a sustainable travel distance to a bus stop which would provide regular services to surrounding towns and villages. Bus services in rural settlements are likely to be less frequent than services in larger settlements, and as such, residents would be expected to rely heavily on private cars.

- 4.11.3 Development proposals under this spatial option would be located in more rural locations, in particular off country roads and narrow lanes. These roads typically do not have footpath or safe pedestrian access. As a result, by directing residents to more rural locations under this spatial option, it increases the likelihood that residents would not have safe pedestrian access.
- 4.11.4 Approximately 1,300 dwellings would be directed towards Tier 3 and 4 settlements under Spatial Option B. The remainder of development proposals would be situated outside the development boundaries of Tier 1 and 2 settlements and towards urban extensions. Therefore, new residents in Tier 3 and 4 settlements would be expected to have limited access to bus services, rail services and pedestrian access and as such, rely heavily on personal car use. Therefore, this spatial option would be expected to have a minor negative impact on transport and accessibility.

4.12 SA Objective 11 – Education

- 4.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.
- 4.12.2 Secondary schools within South Staffordshire are primarily located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Kinver and Wombourne would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at Brewood, Perton, Essington, Coven, Featherstone, Wheaton Ashton, Pattingham, Swindon, Huntington and Shareshill would however be likely to situate new residents in locations with limited access to secondary education.
- 4.12.3 There are numerous primary and secondary schools located to the south of Stafford. The proposed urban extension south of Stafford would be likely to situate new residents in close proximity to these education facilities.

- 4.12.4 As the majority of the development proposed under this spatial option will be directed towards Penkridge, Bilbrook/ Codsall, Wombourne and as an urban extension south of Stafford, new residents in these locations would be expected to have excellent access to primary and secondary education. Therefore, a major positive impact on access to education across the District would be expected.

4.13 SA Objective 12 – Economy and Employment

- 4.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Shareshill, Coven, Brewood and the urban extension to the north of the Black Country would be expected to have reasonable access to out-of-District employment areas.
- 4.13.2 Overall, approximately 4,100 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas. As less than half of development proposals would be located in areas with good or reasonable sustainable access to employment opportunities, Spatial Option B would be likely to have a minor negative impact on the local economy.

5 Spatial Option C – Carry forward existing Core Strategy strategic approach to distribution

Spatial Option C - Carry forward existing Core Strategy strategic approach to distribution

This option meets the preferred housing target of 8,845 dwellings between 2018 and 2037. Under this option 100% of development in the plan period would occur in the district's rural villages, with 90% being directed to the district's more sustainable villages (Tier 1 & 2 settlements) with the remaining 10% being directed to Tier 3 villages.

This option adopts an approach similar to the 90/10 distribution of growth between the Main and Local Service Villages previously identified in the adopted Core Strategy. To achieve this, this option proposes that approximately 90% of growth in the plan period occurs in the District's Tier 1 and 2 settlements, recognising that these settlements are largely the same as the previous Main Service Villages which took 90% of growth in the Core Strategy. New land allocations are split evenly between all Tier 1 and 2 villages under this option, recognising that the previous spatial strategy did not split Main Service Villages into Tier 1 and 2 villages (unlike the current Rural Services and Facilities Audit 2019).

The remaining 10% of the plan target is focused towards the district's Tier 3 villages, as these are largely the same settlements as the previous Local Service Villages which took 10% of growth in the Core Strategy. New land allocations to meet this 10% requirement would be split equally between all Tier 3 villages.

This option does not allocate any growth in areas which would require urban extensions of the Black Country or other neighbouring towns and cities. This recognises that such areas were not identified for growth in the previous spatial strategy. For similar reasons, no new settlements are proposed in this option.

- 5.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Bilbrook/ Codsall and Wombourne. Over 100 dwellings would be directed towards Penkridge, Cheslyn Hay/ Great Wyrley, Brewood, Kinver, Perton, Huntington, Essington, Coven, Featherstone, Wheaton Ashton and Swindon. In addition, a smaller number of dwellings would be directed to Shareshill, Pattingham and Tier 4 settlements (see **Figure 5.1**).

Spatial Strategy: Option C

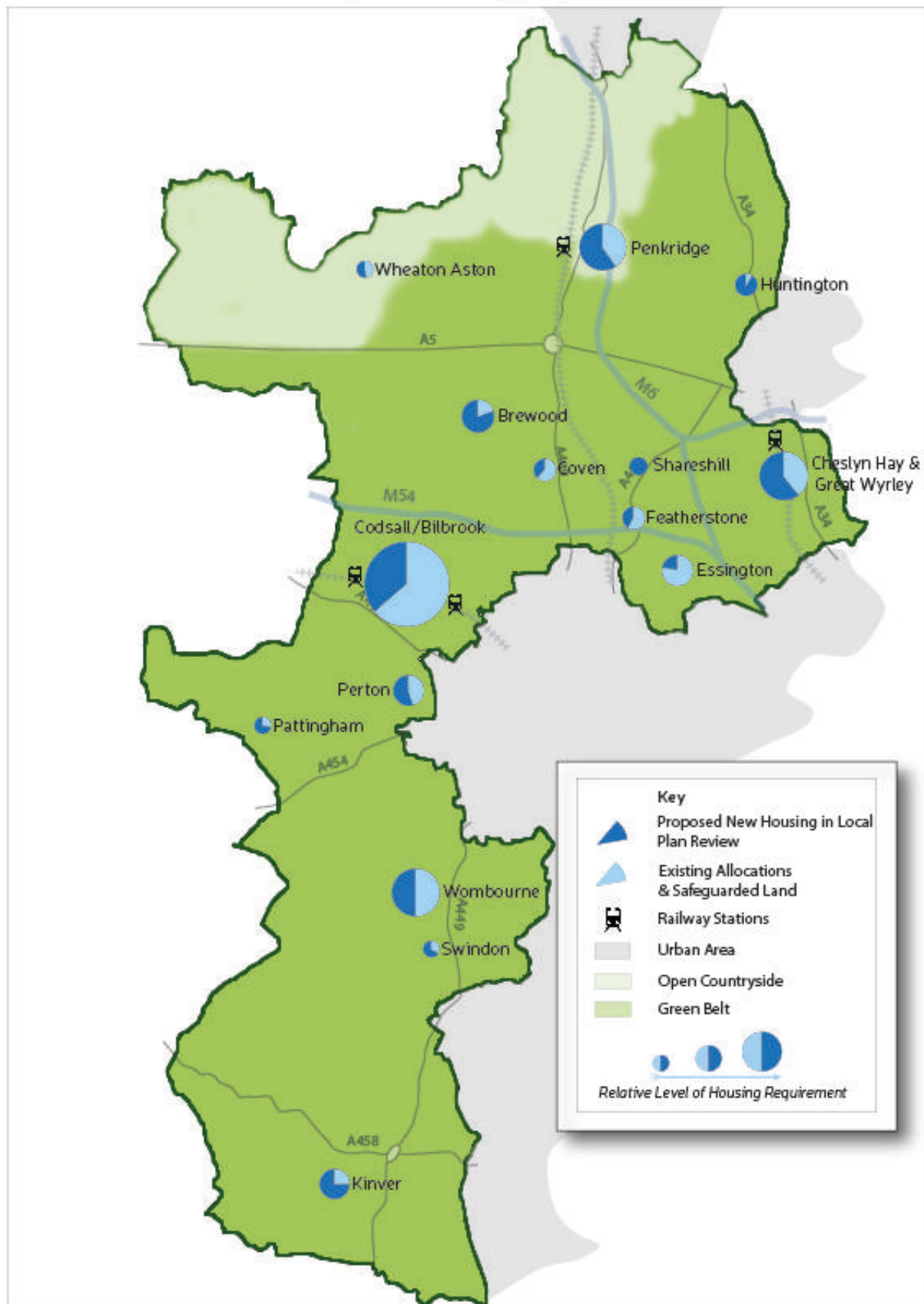


Figure 5.1: Spatial Strategy: Option C

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
--	--	-	--	--	-	++	-	-	-	++	+

5.2 SA Objective 1 – Climate Change Mitigation

5.2.1 The proposed development of 8,845 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 8,845 new dwellings could increase the local population by 20,432 people. The introduction of 20,432 new residents would therefore be expected to increase the annual carbon emission of the Plan area by 47,198 tonnes, or 5.26%. Overall, a major negative impact on climate change mitigation would be expected.

5.3 Sa Objective 2 – Climate Change Adaptation

5.3.1 The north west and north east of Bilbrook/ Codsall and the centre and the north west of Wombourne are located within Flood Zones 2 and 3. Spatial Option C would direct the majority of development to these two settlements, a proportion of new residents could potentially be located within Flood Zones 2 or 3. New residents would be at risk of flooding and development would result in the loss of floodplain, reducing flood storage capacity in the area.

5.3.2 Given the location of development under Spatial Option C, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements to the north of South Staffordshire are likely to be located in areas at higher risk of surface water flooding than development proposals located to the south of the District.

5.3.3 Under Spatial Option C, there is scope for some development proposals to be located on previously developed land. Nonetheless, due to the rural nature of South Staffordshire, this option would be likely to situate a significant quantity of development proposals on previously undeveloped land. This would be likely to result in a net loss of vegetation cover and permeable soils and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health and safety.

5.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified at high risk of surface water flooding, a major negative impact would be expected.

5.4 SA Objective 3 – Biodiversity and Geodiversity

5.4.1 Potential adverse impacts on European sites following the development proposed under this Spatial Option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives which will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these sites. Development proposals located to the north east of Penkridge could potentially be located within 5km of Cannock Chase SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Motte Meadows SAC.

5.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton, and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary.

5.4.3 Motte Meadows NNR is located in close proximity to Wheaton Ashton. Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. Wombourne coincides with Wombourne Brook Walk LNR and South Staffordshire Railway Walk LNR. The north of Wombourne is adjacent to stands of ancient woodland.

- 5.4.4 Although Spatial Option C would be unlikely to result in the direct loss of a designated site, a number of European, national and locally designated sites are located in close proximity to some of the identified locations for development. The proposed development at Penkridge, Cheslyn Hay/ Great Wyrley, Wheaton Ashton, Kinver and Wombourne could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

5.5 SA Objective 4 – Landscape and Townscape

- 5.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington and Penkridge would be likely to be in close proximity to the AONB. Approximately 625 dwellings are proposed within Huntington and 1,000 dwellings at Penkridge. Due to the proximity of these locations, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from, the AONB.
- 5.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the view experienced by users of the local PRow network and local residents to some extent.
- 5.5.3 As the majority of development under this spatial option is likely to be located on previously undeveloped land, the proposed development would be expected to result in urban sprawl into the surrounding countryside. The proposed development in these locations could potentially be discordant with the local landscape character. Overall, a major negative impact on the local landscape cannot be ruled out.

5.6 SA Objective 5 – Pollution and Waste

- 5.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be likely to be in close proximity to a watercourse and could potentially increase the risk of water contamination.

- 5.6.2 Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne, Coven and the south of Penkridge are located within the catchment of a groundwater SPZ (Zone III). The north of Wombourne is located within the inner and outer zones of a groundwater SPZ (Zones I and II). The proposed development could potentially increase the risk of groundwater contamination at these locations.
- 5.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC AQMA 2'. New residents directed towards these settlements would be likely to be exposed to higher levels of local air pollution and the proposed development could potentially further worsen local air quality through the introduction of additional people and associated car movements.
- 5.6.4 The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Kinver and Wombourne. The A34 passes through Huntington. New residents located in these settlements could potentially be exposed to higher levels of local air and noise pollution associated with these main roads. As a rural district, it is anticipated that new residents would rely heavily on personal car use which would be expected to exacerbate air pollution issues in these areas with adverse impacts for local air quality and resident's health.
- 5.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall and Cheslyn Hall/ Great Wyrley. The proposed development in these settlements under this spatial option could potentially expose site end users to higher levels of noise and vibration associated with this railway line with adverse health impacts.
- 5.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 8,845 people could be expected to increase the total annual waste generated in the Plan area by 8,418 tonnes, or 19.4%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

5.7 SA Objective 6 – Natural Resources

5.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as ‘urban’. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. The proposed development in these locations would be expected to result in the loss of this agriculturally important soil resource.

5.7.2 Under Spatial Option C, development would be primarily directed towards Tier 1 and 2 settlements. At this stage of the assessment, it is uncertain if the quantity of development that would be located on previously undeveloped land, however, it would be likely that a number of development proposals would be located in these areas. Development proposals directed to previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this option would be likely to have a minor negative impact on soil resources within South Staffordshire.

5.8 SA Objective 7 – Housing

5.8.1 By aiming to meet the housing target of 8,845 dwellings over the Plan period, this spatial option would enable the LPR to deliver enough housing to satisfy the local need as well as make a significant contribution towards meeting the housing needs identified within surrounding Districts. Therefore, a major positive impact on housing provision across the Plan area would be expected.

5.9 SA Objective 8 – Health and Wellbeing

5.9.1 As a primarily rural district, it is anticipated that a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. In addition, all of the locations identified under this spatial option are in close proximity to a PRoW. This would be expected to provide site end users with good opportunities to pursue an active lifestyle. Both of these factors would be expected to have physical and mental health benefits for local residents.

- 5.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. All locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Pattingham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.
- 5.9.3 By focusing development in towards rural villages, some new residents located in Wombourne, Kinver, Penkridge, Coven, Bilbrook/ Codsall, Cheslyn/ Hay Great Wyrley, Huntington and Featherstone could potentially be exposed to higher levels of air and noise pollution from the surrounding main roads (including the M6) and railway lines. New residents situated to the north east of Cheslyn Hay/ Great Wyrley and Penkridge would also be likely to be located in close proximity to surrounding AQMA's.
- 5.9.4 Overall, it would be expected that the majority of new residents would be located outside the sustainable travel distance to health care facilities, including an NHS hospital. In addition, some residents under this spatial option could potentially be exposed to higher levels of air and noise pollution. Therefore, a minor negative impact on health and wellbeing as a result of directing development outside of the Development Boundaries in the countryside would be expected.

5.10 SA Objective 9 – Cultural Heritage

- 5.10.1 'Himley Hall' RPG is located approximately 300m south east of Wombourne. Approximately 1,150 dwellings are proposed at Wombourne. As a result, development proposals could potentially alter the setting of this RPG.
- 5.10.2 Wombourne coincides with 'Wombourne' Conservation Area and 'Codsall Bilbrook and Oaken' Conservation Area is located to the west of Bilbrook/ Codsall. The proposed development at these two locations could potentially result in the alteration of the setting of these Conservation Areas.

5.10.3 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at any of the locations identified under this spatial option would be likely to be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/or setting of local Listed Buildings.

5.10.4 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. However, due to the close proximity of the identified locations under Spatial Option C to local heritage assets, a minor negative impact cannot be ruled out.

5.11 SA Objective 10 – Transport and Accessibility

5.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station, and Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option C could potentially locate site end users in areas with limited access to rail services.

5.11.2 Under Spatial Option C, approximately 90% of development proposals would be directed towards Tier 1 and 2 settlements. New residents in these locations would be expected to have good access to a range of sustainable transport options, including rail and bus services and safe pedestrian access to local shops and amenities.

5.11.3 Approximately 1,000 dwellings would be directed towards Tier 3 and 4 settlements under Spatial Option C. The remainder of development proposals would be situated outside the development boundaries of Tier 1 and 2 settlements. Therefore, new residents in Tier 3 and 4 settlements would be expected to have limited access to bus services, rail services and pedestrian access and as such, rely heavily on personal car use. Therefore, this spatial option would be expected to have a minor negative impact on transport and accessibility.

5.12 SA Objective 11 – Education

5.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.

5.12.2 Secondary schools within South Staffordshire are primarily located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at Perton, Huntington, Essington, Coven, Featherstone, Wheaton Ashton and Swindon, Shareshill and Patteringham would however be likely to situate new residents in locations with limited access to secondary education.

5.12.3 As the majority of the development proposed under this spatial option will be directed towards Bilbrook/ Codsall and Wombourne, new residents in these settlements would be expected to have excellent access to primary and secondary education. Therefore, a major positive impact in relation to access to education across the District would be expected.

5.13 SA Objective 12 – Economy and Employment

5.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Shareshill, Coven and Brewood would be expected to have reasonable access to out-of-District employment areas.

5.13.2 Overall, approximately 5,000 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas. Therefore, Spatial Option C would be likely to have a minor positive impact on the local economy.

6 Spatial Option D – Maximising sites in areas identified in the GBHMA Strategic Growth Study

Spatial Option D - Maximising sites in areas identified in the GBHMA Strategic Growth Study

This option meets the preferred housing target of 8,845 dwellings between 2018 and 2037. Under this option, growth is maximised at villages identified as having potential for strategic levels of growth in the GBHMA Strategic Growth Study, namely Penkridge and Codsall/Bilbrook. A single urban extension would be accommodated in the area to the north of the Black Country conurbation (in the i54/ROF Featherstone corridor) whilst smaller urban extensions are allocated to the Black Country conurbation's western edge. These reflect the opportunities for employment-led housing growth and dispersed housing sites in these locations in the Strategic Growth Study. Under this option 70% of development in the plan period would occur in the district's rural villages, whilst 30% would occur in urban extensions to neighbouring urban areas or the wider rural area.

The key locations identified in the GBHMA Strategic Growth Study within South Staffordshire are as follows:

- Urban extension: North of Penkridge (1,500 – 7,500 dwellings)
- Urban extension (employment-led): North of Wolverhampton in the vicinity of i54 (1,500 – 7,500 dwellings)
- Dispersed housing sites: Western edge of the conurbation between Stourbridge and Wolverhampton (500 – 2,500 dwellings)
- Dispersed housing sites: North of Codsall/Bilbrook (500 – 2,500 dwellings)

In each of these locations, this option seeks to maximise the amount of growth likely to be realised within the plan period (i.e. up to 2037). Whilst this has some regard to the likely availability of sites in each location, in some areas (e.g. north of Penkridge) there is not currently landowner agreement to deliver a comprehensive scheme representative of the findings of the GBHMA Strategic Growth Study. This is not reflected in this option as it would result in a level of growth below the minimum recommendations of the GBHMA Strategic Growth Study. This means that some levels of growth presented under this option may not currently be considered deliverable.

- 6.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Penkridge, Bilbrook/ Codsall and as an urban extension north of Black Country conurbation. Over 100 dwellings would be directed towards Cheslyn Hay/ Great Wyrley, Wombourne, Brewood, Kinver, Perton, Essington, Coven and as an urban extension at the western edge of the Black Country. In addition, a smaller number of dwellings would be directed to Huntington, Featherstone, Wheaton Ashton, Pattingham, Swindon and Tier 4 settlements (see **Figure 6.1**).

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
--	--	-	--	--	-	++	-	-	+	++	+

6.2 SA Objective 1 – Climate Change Mitigation

6.2.1 The proposed development of 8,845 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 8,845 new dwellings could increase the local population by 20,432 people. The introduction of 20,432 new residents would therefore be expected to increase the annual carbon emission of the Plan area by 47,198 tonnes, or 5.26%. Overall, a major negative impact on climate change mitigation would be expected.

6.3 SA Objective 2 – Climate Change Adaptation

6.3.1 The north east and west of Penkridge, the north west and north east Bilbrook/ Codsall and the north of the Black County conurbation urban extension are located within or surrounded by Flood Zones 2 and 3. Spatial Option D would direct the majority of development to these three locations. Therefore a proportion of new residents could potentially be situated within Flood Zones 2 or 3. New residents would be at risk of flooding and development would result in the loss of floodplain, reducing flood storage capacity in the area.

6.3.2 Given the location of development under Spatial Option D, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements located to the north of South Staffordshire are likely to be at higher risk of surface water flooding than development proposals located to the south of the District.

6.3.3 Under Spatial Option D, there is scope for some development proposals to be located on previously developed land. However, due to the rural nature of South Staffordshire, this option would be likely to situate a significant quantity of development on previously undeveloped land. This would be likely to result in a net loss of vegetation cover and permeable soils and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health and safety as well as the stability of the surrounding infrastructure.

6.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified at high risk of surface water flooding, a major negative impact would be expected.

6.4 SA Objective 3 – Biodiversity and Geodiversity

6.4.1 Potential adverse impacts on European sites following the development proposed under this Spatial Option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives which will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these sites. Development proposals located to the north east of Penkridge could potentially be located within 5km of Cannock Chase SAC. The urban extension at the western edge of Black Country could potentially be located within 5km of Fens Pools SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Motte Meadows SAC.

6.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary. The urban extension to the west of the Black Country could potentially be located in close proximity to the Gospel End Road Cutting SSSI.

6.4.3 Motte Meadows NNR is located in close proximity to Wheaton Ashton. Wrens Nest NNR could potentially be located within 3km of the urban extension to the west of the Black Country.

- 6.4.4 Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. Wombourne coincides with Wom Brook Walk LNR and South Staffordshire Railway Walk LNR. The urban extension to the west of the Black Country could potentially be located in close proximity to Baggeridge Country Park LNR.
- 6.4.5 The north of Wombourne is located adjacent to stands of ancient woodland. The likely location of the urban extensions to the north and west of the Black Country could potentially be located in close proximity to stands of ancient woodland.
- 6.4.6 Although Spatial Option D would be unlikely to result in the direct loss of a designated site, a number of European, national and locally designated sites are located in close proximity to some of the identified locations for development. The proposed development at Penkridge, Cheslyn Hay/ Great Wyrley, Wheaton Ashton, Kinver, Wombourne and the proposed urban extensions to the north and west of the Black Country could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

6.5 SA Objective 4 – Landscape and Townscape

- 6.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington and Penkridge would also be likely to be in close proximity to this AONB. Approximately 50 dwellings are proposed within Huntington and 1,600 dwellings at Penkridge. Due to the proximity of these locations, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from, the AONB.
- 6.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the view experienced by users of the local PRoW network and local residents to some extent.

- 6.5.3 As the majority of development under this spatial option is likely to be located on previously undeveloped land, the proposed development would be expected to result in urban sprawl into the surrounding countryside. The proposed development in these locations could potentially be discordant with the local landscape character. Overall, a major negative impact on the local landscape cannot be ruled out.

6.6 SA Objective 5 – Pollution and Waste

- 6.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be in close proximity to a watercourse and could potentially increase the risk of water contamination.
- 6.6.2 Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne, Coven, the south of Penkridge and the west of the urban extension to the north of the Black Country are located within the catchment of a groundwater SPZ (Zone III). Kinver and the north of Wombourne are located within the inner and outer zones of a groundwater SPZ (Zones I and II). The proposed development could potentially increase the risk of groundwater contamination at these locations.
- 6.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC AQMA 2'. The north of Black Country urban extension is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The construction and occupation of residential development at these locations would be likely to expose site end users to poor air quality. In addition, the proposed development could potentially further worsen local air quality through the introduction of people and car movements.

- 6.6.4 The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Wombourne. The urban extension to the north of the Black Country conurbation would be likely to be located in close proximity to the M54 and A460. The urban extension to the west of the Black Country would be likely to be located in close proximity to the A463. New residents located in these locations could potentially be exposed to higher levels of air and noise pollution associated with these main roads. As a rural district, it is anticipated that new residents would have heavily rely on personal car use which would be expected to exacerbate air pollution issues in these areas with adverse impacts for local air quality and resident's health.
- 6.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall, Cheslyn Hall/ Great Wyrley and the urban extension to the north of the Black Country. The proposed development in these locations under this spatial option could potentially expose site end users to higher levels of noise and vibration associated with this railway line with adverse health impacts.
- 6.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 8,845 people could be expected to increase the total annual waste generated in the Plan area by 8,418 tonnes, or 19.4%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

6.7 SA Objective 6 – Natural Resources

- 6.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as 'urban'. The west of the Black Country urban extension could potentially be located on ALC Grade 3 land. The north of the Black Country urban extension would be likely to be located on ALC Grades 2 and 3 land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. The proposed development in these locations would be expected to result in the loss of this agriculturally important soil resource.

- 6.7.2 Under Spatial Option D, development would be directed towards the Tier 1 and 2 settlements and urban extensions to the north and west of the Black Country. At this stage of assessment, the quantity of development proposed on previously developed land is uncertain. Due to the quantity of development proposed in and around Tier 1 and 2 settlements, it would be likely that a number of development proposals would be located in these areas. Development proposals directed towards the urban extensions to the Black Country are also likely to be located on greenfield land. Development proposals directed to previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this option would be likely to have a minor negative impact on soil resources within South Staffordshire.

6.8 SA Objective 7 – Housing

- 6.8.1 By aiming to meet the housing target of 8,845 dwellings over the Plan period, this spatial option would enable the LPR to deliver enough housing to satisfy the local need as well as make a significant contribution towards meeting the housing needs identified within surrounding Districts. Therefore, a major positive impact on housing provision across the Plan area would be expected.

6.9 SA Objective 8 – Health and Wellbeing

- 6.9.1 As a primarily rural district, it is anticipated a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. New residents situated in urban extensions to the north and the west of the Black Country conurbation could potentially have reduced access to natural habitats due to the close proximity to the urban area of the surrounding Black Country. All of the locations identified under this spatial option are in close proximity to a PRow. This would be expected to provide site end users with good opportunities to pursue an active lifestyle. Both of these factors would be expected to have physical and mental health benefits for local residents.

- 6.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. The urban extension to the north of the Black Country conurbation is likely to be located within 5km of the new Cross Hospital in Wolverhampton. The urban extension to the west of the Black Country is likely to be located within 5km of Russell's Hall Hospital. New residents situated in these locations would be likely to have good access to emergency health care. All other locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Patteringham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.
- 6.9.3 The north of the Black Country urban extension is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. New residents at these locations, as well as in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne, Kinver and Coven would be likely to be exposed to higher levels of air and noise pollution from nearby main roads, railway lines and AQMA's.
- 6.9.4 Under this spatial option, a large proportion of new development would be directed towards Penkridge and Bilbrook/ Codsall. New residents situated in existing? settlements would be expected to have good access to healthcare facilities, with the exception of an NHS hospital, have good access to the PRow network and natural habitats but also be exposed to high levels of air and noise pollution.
- 6.9.5 Approximately 1,200 dwellings under this spatial option would be directed towards an urban extension to the north of the Black Country conurbation. New residents at this location would be expected to have good access to an NHS hospital and could potentially be located within a sustainable travel distance of a GP surgery in Featherstone. New residents would also be expected to have good access to the PRow network and natural habitats. However, development proposals in this location would be expected to be in close proximity to the M54 and an AQMA, which would expose site end users to higher levels of air and noise pollution.

- 6.9.6 Overall, under Spatial Option D would be likely to situate a proportion of new residents in close proximity to main roads and AQMA's which would be likely to increase the risk of exposure to air and noise pollution. New residents could potentially have limited access to healthcare facilities. Therefore, a minor negative impact cannot be ruled out.

6.10 SA Objective 9 – Cultural Heritage

- 6.10.1 'Rodbaston Old Hall moated site and fishpond' SM is located approximately 500m south of Penkridge. Approximately 1,500 dwellings are proposed at Penkridge. As a result, development proposals could potentially alter the setting of this SM.
- 6.10.2 The location of development as an urban extension at the western edge of the Black Country is currently uncertain. Therefore, it is also uncertain if development proposals would be located in areas which could potentially result in negative impacts on RPG's including 'Himley Hall'. As approximately 1,200 dwellings are proposed at this location, it is likely that development proposals could potentially alter the setting of this RPG.
- 6.10.3 Penkridge coincides with 'Penkridge' Conservation Area and 'Codsall Bilbrook and Oaken' Conservation Area is located to the west of Bilbrook/ Codsall. The proposed development at these two locations could potentially result in the alteration of the setting of these Conservation Areas.
- 6.10.4 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at any of the locations identified under this spatial option would be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/ or setting of local Listed Buildings.
- 6.10.5 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. However, due to the close proximity of the identified locations under Spatial Option D to local heritage assets, a minor negative impact cannot be ruled out.

6.11 SA Objective 10 – Transport and Accessibility

6.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station, and Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option D could potentially located site end users in areas with limited access to rail services.

6.11.2 Under this spatial option, the majority of development proposals would be directed towards Tier 1 and 2 settlements within South Staffordshire and to urban extensions to the north and west of the Black Country. It is considered likely that new residents in these locations would have good access to rail service, bus services and safe pedestrian routes to local amenities. This would also be expected to reduce site end users' reliance on personal car use. Approximately 500 dwellings would be directed to more rural locations where access to sustainable transport options would be limited.

6.11.3 Overall, Spatial Option D would be expected to have a minor positive impact on transport accessibility in and around South Staffordshire.

6.12 SA Objective 11 – Education

6.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.

6.12.2 Secondary schools within South Staffordshire are primary located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at Brewood, Perton, Essington, Coven, Huntington, Featherstone, Wheaton Ashton, Pattingham and Swindon would however be likely to situate new residents in locations with limited access to secondary education.

6.12.3 There are numerous primary and secondary schools located to the north of Wolverhampton. The proposed urban extension to the north of the Black Country conurbation would be likely to situate new residents in close proximity to these education facilities.

6.12.4 As the majority of the development proposed under this spatial option will be directed towards Penkridge, Bilbrook/ Codsall and as an urban extension north of Black Country conurbation, new residents in these locations would be expected to have excellent access to primary and secondary education. Therefore, a major positive impact on access to education across the District would be expected.

6.13 SA Objective 12 – Economy and Employment

6.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Shareshill, Coven, Brewood and the urban extension to the north of the Black Country would be expected to have reasonable access to out-of-District employment areas.

6.13.2 Overall, approximately 6,300 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas. Therefore, Spatial Option D would be likely to have a minor positive impact on the local economy.

7 Spatial Option E – Addressing local affordability issues and settlements with the greatest needs

Spatial Option E - Addressing local affordability issues and settlements with the greatest needs

This option meets the preferred housing target of 8,845 dwellings between 2018 and 2037. This option seeks to distribute new housing growth in a manner which reflects the locations from which housing needs are generated, having regard to local affordability ratios, where the district's younger population is concentrated and the location of unmet needs arising from neighbouring authorities. Unlike the options which reflect local infrastructure opportunities and environmental constraints (e.g. Spatial Option G) or which reflect the findings of a strategic cross-authority study of sustainability and environmental/Green Belt capacity (e.g. Spatial Housing Options D), this option focuses solely on how housing growth may be distributed to meet needs where they arise.

Growth to the villages is dispersed across all four village tiers under this option, with allocations only being made within each tier at the district's less affordable rural settlements or in those with larger proportions of younger residents. The remainder of housing growth is focused in urban extensions. Large urban extensions are focused to the north of the Black Country conurbation recognising that this broad location sits in close proximity to Wolverhampton and Walsall, which have unmet housing needs. The remaining housing requirement is split between the western edge of the Black Country and Cannock, recognising that these areas are generally not adjacent to local authorities with unmet housing needs, but are nonetheless adjacent to major population centres within the same housing market area as South Staffordshire.

Under this option approximately 60% of development in the plan period would occur in the district's rural villages, whilst approximately 40% would occur in urban extensions to neighbouring urban areas or the wider rural area. The split between village growth and urban extensions seeks to provide a split between the amount of dwellings delivered adjacent to neighbouring areas and the rural settlements of South Staffordshire which reflects the split between the district's own needs and the unmet needs of other areas. This means that growth in South Staffordshire's villages is limited to an amount necessary to address the district's own needs, whilst the level of growth outside of the Tier 1-4 settlements adjacent to the neighbouring GBHMA towns and cities is more reflective of the potential 4,000 dwelling contribution to the unmet needs of the housing market area.

- 7.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Bilbrook/ Codsall and as an urban extension north of Black Country conurbation. Over 100 dwellings would be directed towards Penkridge, Cheslyn Hay/ Great Wyrley, Wombourne, Brewood, Kinver, Perton, Essington, Coven, Tier 4 settlements, as an urban extension west of Cannock and as an urban extension at the western edge of the Black Country. In addition, a smaller number of dwellings would be directed to Huntington, Featherstone, Wheaton Ashton, Pattingham and Swindon (see **Figure 7.1**).

Spatial Strategy: Option E

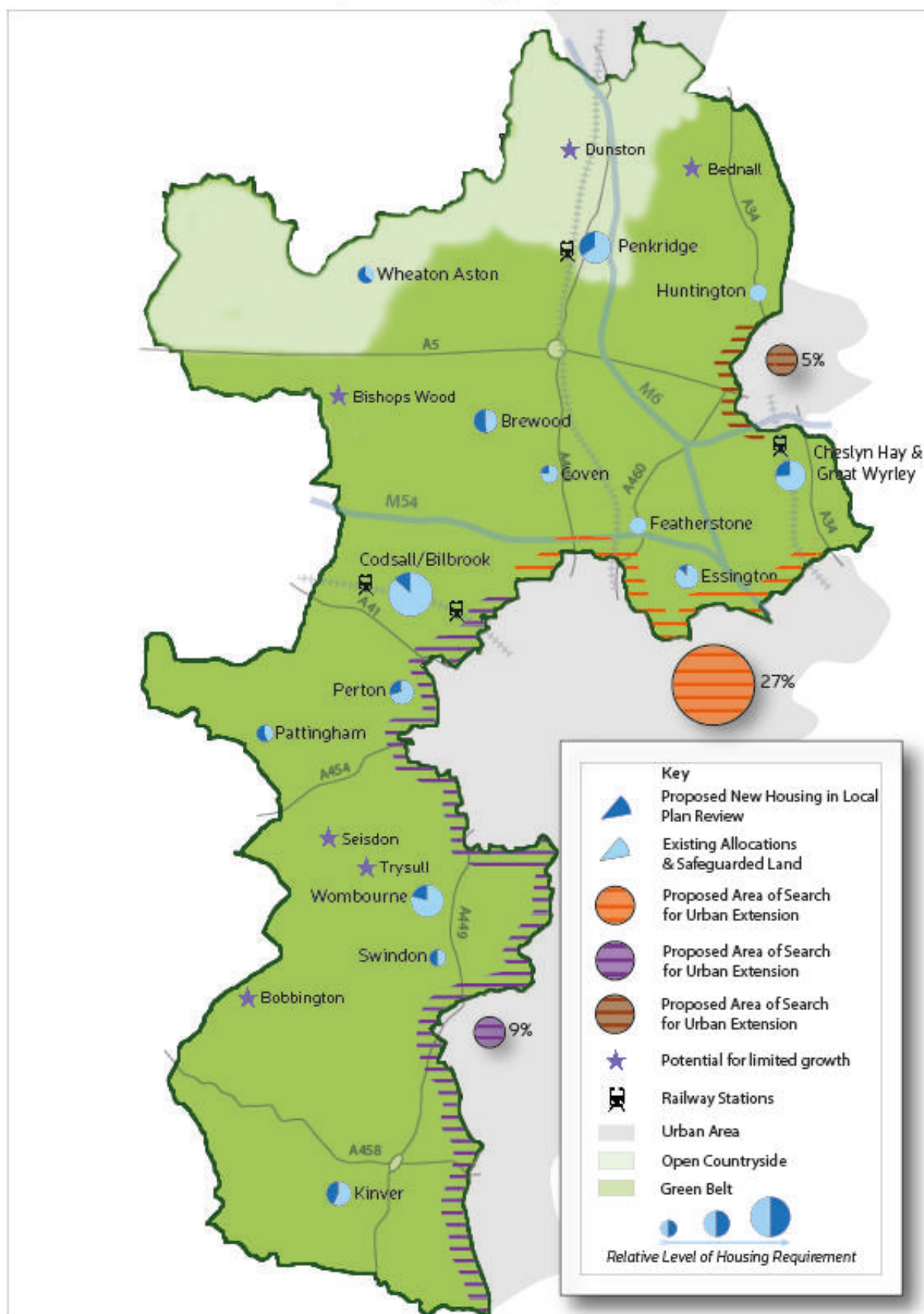


Figure 7.1: Spatial Strategy: Option E

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
--	--	-	--	--	-	++	-	-	+	++	+

7.2 SA Objective 1 – Climate Change Mitigation

7.2.1 The proposed development of 8,845 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 8,845 new dwellings could increase the local population by 20,432 people. The introduction of 20,432 new residents would therefore be expected to increase the annual carbon emission of the Plan area by 47,198 tonnes, or 5.26%. Overall, a major negative impact on climate change mitigation would be expected.

7.3 SA Objective 2 – Climate Change Adaptation

7.3.1 The north west and north east Bilbrook/ Codsall and the north of the Black County conurbation urban extension are located within or surrounded by Flood Zones 2 and 3. Spatial Option E would direct the majority of development to these two locations, a proportion of new residents could therefore potentially be situated within Flood Zones 2 or 3.

7.3.2 Given the location of development under Spatial Option E, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements located to the north of South Staffordshire are likely to be at higher risk of surface water flooding than development proposals located to the south of the District.

7.3.3 Under Spatial Option E, there is scope for some development proposals to be located on previously developed land. Nonetheless, due to the rural nature of South Staffordshire, this option would be likely to situate a significant quantity of development proposals on previously undeveloped land. This would be likely to result in the net loss of vegetation cover and permeable soils and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health as well as the stability of surrounding infrastructure.

7.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified at high risk of surface water flooding, a major negative impact would be expected.

7.4 SA Objective 3 – Biodiversity and Geodiversity

7.4.1 Potential adverse impacts on European sites following the development proposed under this Spatial Option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives which will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these sites. Development proposals located to the north east of Penkridge could potentially be located within 5km of Cannock Chase SAC. The urban extension at the western edge of Black Country could potentially be located within 5km of Fens Pools SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. The proposed urban extension to the west of Cannock could potentially be located within 5km of Cannock Chase SAC and Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Motte Meadows SAC.

7.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary. The urban extension to the west of the Black Country could potentially be located in close proximity to the Gospel End Road Cutting SSSI. Stowe Pool and Walk Mill Clay Pit SSSI is located to the south east of the A5, in close proximity to where the urban extension to the west of Cannock could potentially be located.

- 7.4.3 Motte Meadows NNR is located in close proximity to Wheaton Ashton. Wrens Nest NNR could potentially be located within 3km of the urban extension to the west of the Black Country.
- 7.4.4 Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. Wombourne coincides with Wom Brook Walk LNR and South Staffordshire Railway Walk LNR. The urban extension to the west of the Black Country could potentially be located in close proximity to Baggeridge Country Park LNR. The west of Cannock urban extension could potentially be located in close proximity to Shoal Hill Common LNR.
- 7.4.5 The north of Wombourne is adjacent to stands of ancient woodland. The likely location of the urban extension to the west of the Black Country could potentially be located in close proximity to stands of ancient woodland. The urban extension to the north of the Black Country conurbation could potentially be located in close proximity to stands of ancient woodland.
- 7.4.6 Although Spatial Option E would be unlikely to result in the direct loss of a biodiversity site, a number of European, national and locally designated sites are located in close proximity to some of the identified locations for development. The proposed development at Penkridge, Cheslyn Hay/ Great Wyrley, Wheaton Ashton, Kinver, Wombourne and the proposed urban extensions to the north and west of the Black Country and to the west of Cannock could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

7.5 SA Objective 4 – Landscape and Townscape

- 7.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington, Penkridge and the proposed urban extensions west of Cannock would be likely to be in close proximity to the AONB. Approximately 50 dwellings are proposed within Huntington, 600 dwellings at Penkridge and 400 dwellings are proposed at both the urban extensions west of Cannock. Due to the proximity of these locations, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from, the AONB.

7.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the view experienced by users of the local PRoW network and local residents to some extent.

7.5.3 As the majority of development under this spatial option is likely to be located on previously undeveloped land, the proposed development would be expected to result in urban sprawl into the surrounding countryside. The proposed development in these locations could potentially be discordant with the local landscape character. Overall, a major negative impact on the local landscape cannot be ruled out.

7.6 SA Objective 5 – Pollution and Waste

7.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be likely to be in close proximity to a watercourse and could potentially increase the risk of water contamination.

7.6.2 Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne, Coven, the south of Penkridge and the west of the urban extension to the north of the Black Country are located within the catchment of a groundwater SPZ (Zone III). Kinver and the north of Wombourne are located within the inner and outer zones of a groundwater SPZ (Zones I and II). The proposed development could potentially increase the risk of groundwater contamination at these locations.

- 7.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC AQMA 2'. The urban extension west of Cannock is located in close proximity to 'Cannock Chase AQMA', 'AQMA No.4 (Wedges Mills)' and 'AQMA No 5 Oak Farm'. The north of Black Country urban extension is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The construction and occupation of residential development at these locations would be likely to expose site end users to poor air quality. In addition, the proposed development could potentially further worsen local air quality through the introduction of people and car movements.
- 7.6.4 The urban extension to the west of Cannock would be likely to be located in close proximity to the A5. The urban extension to the north of the Black Country conurbation would be likely to be located in close proximity or the M54 and A460. The urban extension to the west of the Black Country would be likely to be located in close proximity to the A463. The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Wombourne. New residents located in these locations could potentially be exposed to higher levels of air and noise pollution associated with these main roads. As a rural district, it is anticipated that new residents would have a high reliance on personal car use which would be expected to exacerbate air pollution issues in these areas with adverse impacts for local air quality and resident's health.
- 7.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall, Cheslyn Hall/ Great Wyrley and the urban extension to the north of the Black Country. The proposed development in these locations under this spatial option could potentially expose site end users to higher levels of noise and vibration associated with this railway line with adverse health impacts.

- 7.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 8,845 people could be expected to increase the total annual waste generated in the Plan area by 8,418 tonnes, or 19.4%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

7.7 SA Objective 6 – Natural Resources

- 7.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as ‘urban’. The west of Cannock urban extension could potentially be located on ALC Grade 3 land. The west of the Black Country urban extension could potentially be located on ALC Grade 3 land. The north of the Black Country urban extension would be likely to be located on ALC Grades 2 and 3 land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. The proposed development in these locations would be expected to result in the loss of this agriculturally important soil resource.
- 7.7.2 At this stage of assessment, the quantity of development proposed on previously developed land is uncertain. Due to the quantity of development proposed in and around South Staffordshire’s rural settlements, it would be likely that a number of development proposals would be located in these areas. Development proposals directed towards the urban extensions to the north and west of the Black Country and to the west of Cannock are also likely to be located in greenfield land. Development proposals directed to previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this option would be likely to have a minor negative impact on soil resources within South Staffordshire.

7.8 SA Objective 7 – Housing

- 7.8.1 By aiming to meet the housing target of 8,845 dwellings over the Plan period, this spatial option would enable the LPR to deliver enough housing to satisfy the local need as well as make a significant contribution towards meeting the housing needs identified within surrounding Districts. Therefore, a major positive impact on housing provision across the Plan area would be expected.

7.9 SA Objective 8 – Health and Wellbeing

- 7.9.1 As a primarily rural district, it is anticipated a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. New residents situated in an urban extension to the north of the Black Country conurbation could potentially have reduced access to natural habitats due to the close proximity to the urban area of the surrounding Black Country. All of the locations identified under this spatial option are in close proximity to a PRow. This would be expected to provide site end users with good opportunities to pursue active lifestyles. Both of these factors would be expected to have physical and mental health benefits for local residents.
- 7.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. The urban extension to the north of the Black Country conurbation is likely to be located within 5km of the new Cross Hospital in Wolverhampton. The urban extension to the west of the Black Country is likely to be located within 5km of Russell's Hall Hospital in Dudley. New residents situated in these locations would be likely to have good access to emergency health care. All other locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Patteringham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.

7.9.3 The urban extension west of Cannock in close proximity to ‘Cannock Chase AQMA’, ‘AQMA No.4 (Wedges Mills)’ and ‘AQMA No 5 Oak Farm’. The north of Black Country urban extension is located in close proximity to ‘Wolverhampton Air Quality Management Area 2005’. The western edge to the Black Country urban extension is located in close proximity to ‘Dudley AQMA’. The south east of Bilbrook/ Codsall is located in close proximity to ‘Wolverhampton Air Quality Management Area 2005’. Approximately 4,500 new residents would be directed to these locations under Spatial Option E and therefore, these residents could potentially be exposed to higher levels of local air pollution.

7.9.4 Development proposals directed towards Bilbrook/ Codsall, Penkridge, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver, as well as the proposed urban extensions west of Cannock, north of the Black Country and at the western edge of the Black Country, would be likely to expose a proportion of new residents to higher levels of air and noise pollution from nearby main roads and railway lines.

7.9.5 All of the locations identified under this spatial option would be expected to provide new residents with good access to the local PRow network and natural habitats. A number of the identified locations would be likely to provide good access to a GP surgery, and new residents in urban extensions to the north and west of the Black Country would be expected to have good access to an NHS hospital. However, the majority of development proposals would be expected to expose site end users to higher levels of air and noise pollution from nearby main roads, railway lines or AQMA’s. Therefore, a minor negative impact on the health and wellbeing of new residents under this spatial option cannot be ruled out.

7.10 SA Objective 9 – Cultural Heritage

7.10.1 The exact location of development as an urban extension at the western edge of the Black Country is currently uncertain at this stage of the plan-making process. Therefore, it is also uncertain if development proposals would be located in areas which could potentially result in negative impacts on RPG’s including ‘Himley Hall’. As approximately 800 dwellings are proposed at this location under this spatial option, it cannot be ruled out that development proposals could potentially alter the setting of this RPG.

- 7.10.2 'Codsall Bilbrook and Oaken' Conservation Area is located to the west of Bilbrook/ Codsall. The proposed development at this location could potentially result in the alteration of the setting of this Conservation Area.
- 7.10.3 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at any of the locations identified under this spatial option would be likely to be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/or setting of local Listed Buildings.
- 7.10.4 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. Due to the close proximity of the identified locations under Spatial Option E (such as Bilbrook/ Codsall) to local heritage assets, a minor negative impact cannot be ruled out.

7.11 SA Objective 10 – Transport and Accessibility

- 7.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station, and Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option E could potentially locate site end users in areas with limited access to rail services.
- 7.11.2 Under this spatial option, approximately 4,200 dwellings would be directed towards Tier 1 and 2 settlements within South Staffordshire and approximately 3,600 dwellings towards urban extensions to the north and west of the Black Country and to the west of Cannock. It is considered likely that new residents in these locations would have good access to rail services, bus services and safe pedestrian routes to local amenities. This would also be expected to reduce site end users' reliance on car use. Approximately 800 dwellings would be directed to more rural locations where access to sustainable transport options would be limited.
- 7.11.3 Overall, Spatial Option E would be expected to have a minor positive impact on transport accessibility in and around South Staffordshire.

7.12 SA Objective 11 – Education

- 7.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.
- 7.12.2 Secondary schools within South Staffordshire are primarily located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at Brewood, Perton, Essington, Coven, Huntington, Featherstone, Wheaton Ashton, Pittingham and Swindon would however be likely to situate new residents in locations with limited access to secondary education.
- 7.12.3 There are numerous primary and secondary schools located to the north of Wolverhampton. The proposed urban extension to the north of the Black Country conurbation would be likely to situate new residents in close proximity to these education facilities.
- 7.12.4 As the majority of the development proposed under this spatial option will be directed towards Bilbrook/ Codsall and as an urban extension north of Black Country conurbation, new residents in these locations would be expected to have excellent access to primary and secondary education. Therefore, a major positive impact on access to education across the District would be expected.

7.13 SA Objective 12 – Economy and Employment

- 7.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Shareshill, Coven, Brewood and the urban extension to the north of the Black Country would be expected to have reasonable access to out-of-District employment areas.

- 7.13.2 Overall, approximately 5,500 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas. Therefore, Spatial Option E would be likely to have a minor positive impact on the local economy.

8 Spatial Option F – Giving first consideration to Green Belt land which is previously developed or well-served by public transport

Spatial Option F - Giving first consideration to Green Belt land which is previously developed or well-served by public transport

This option meets the preferred housing target of 8,845 dwellings between 2018 and 2037. Under this option approximately 60% of development in the plan period would occur in the district's rural villages, whilst approximately 40% would occur in urban extensions to neighbouring urban areas or the wider rural area. Additional allocations are only made to villages with the best public transport links (i.e. Tier 1 villages) or villages with significant opportunities to expand onto previously developed land in the Green Belt (i.e. Wombourne). The remaining plan requirement is allocated to sites on the fringes of housing market area towns and cities (i.e. the Black Country and Cannock), recognising that these settlements offer public transport links in the closest proximity to higher order service centres in these areas.

The aim of this Spatial Option is to present a strategy that focuses solely on the NPPF requirement to give first consideration to “*land which has been previously-developed and/or is well-served by public transport*” when releasing Green Belt. Therefore, additional allocations are only made to settlements with the best public transport links (i.e. Tier 1 settlements) or settlements with significant opportunities to expand onto previously developed land in the Green Belt (i.e. Wombourne). The remaining plan requirement is allocated to sites on the fringes of housing market area towns and cities (i.e. the Black Country and Cannock), recognising that these settlements offer public transport links in the closest proximity to higher order service centres in these areas.

This Spatial Option also releases an amount of land within the wider Open Countryside which has regard to “*the consequences for sustainable development of channelling development ... towards locations beyond the outer Green Belt boundary*”, in accordance with the NPPF. To achieve this, allocations are also made within Open Countryside locations where there is available and potentially deliverable land to deliver growth through urban extensions or allocations to Tier 1 and 2 settlements. This recognises that such Tier 1 and 2 settlements and urban extensions to neighbouring areas performed particularly well in the 2018 Issues and Options consultation Sustainability Appraisal.

- 8.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Bilbrook/ Codsall and as an urban extension north of Black Country conurbation. Over 100 dwellings would be directed towards Penkridge, Cheslyn Hay/ Great Wyrley, Wombourne, Brewood, Kinver, Perton, Essington, Coven, as an urban extension west of Cannock, as an urban extension south of Stafford and as an urban extension at the western edge of the Black Country. In addition, a smaller number of dwellings would be directed to Huntington, Featherstone, Wheaton Ashton, Pattingham, Swindon and Tier 4 settlements (see **Figure 8.1**).

Spatial Strategy: Option F

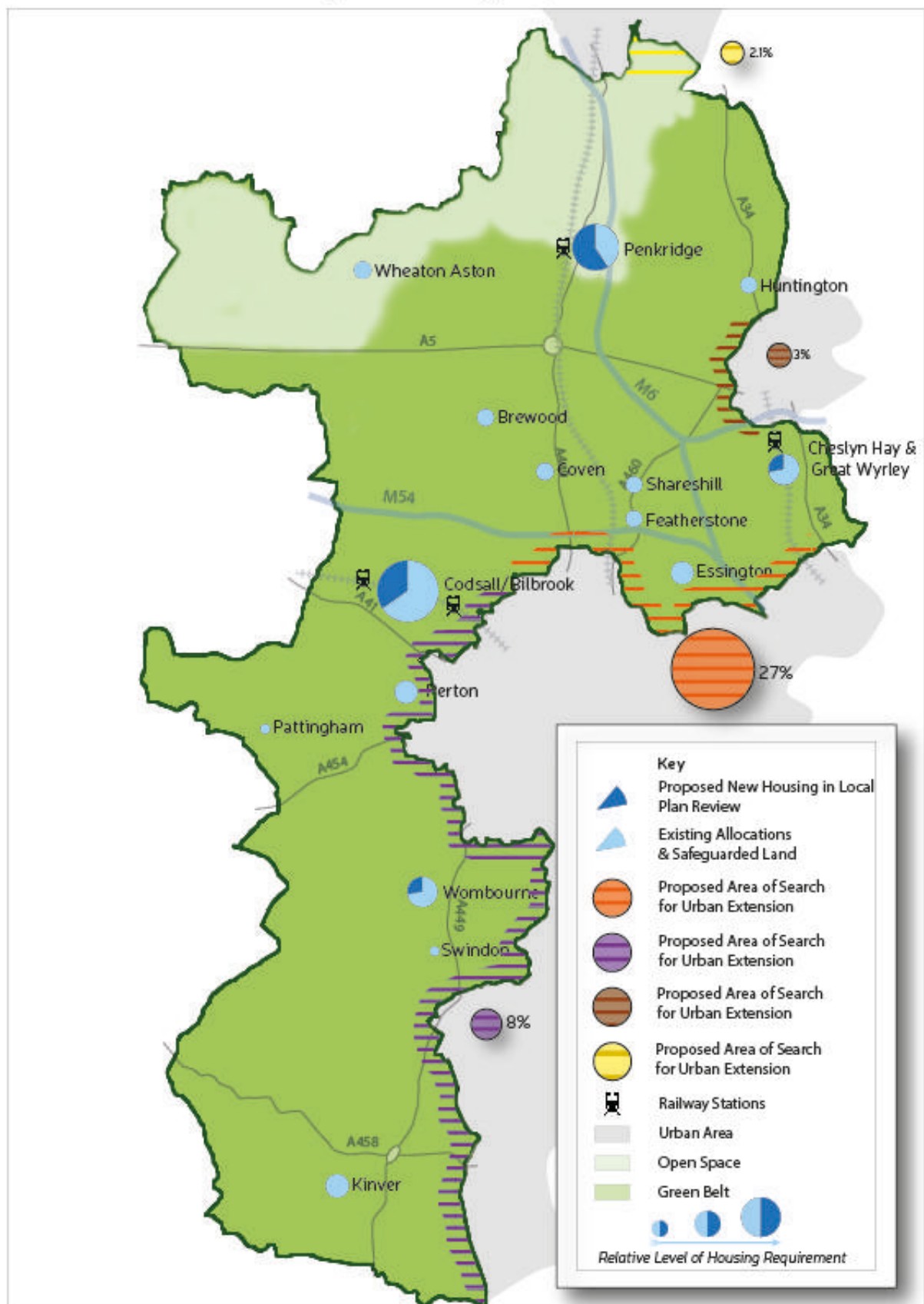


Figure 8.1: Spatial Strategy: Option F

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
--	--	-	--	--	-	++	-	-	+	++	+

8.2 SA Objective 1 – Climate Change Mitigation

8.2.1 The proposed development of 8,845 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 8,845 new dwellings could increase the local population by 20,432 people. The introduction of 20,432 new residents would therefore be expected to increase the annual carbon emission of the Plan area by 47,198 tonnes, or 5.26%. Overall, a major negative impact on climate change mitigation would be expected.

8.3 SA Objective 2 – Climate Change Adaptation

8.3.1 The north west and north east Bilbrook/ Codsall and the north of the Black County conurbation urban extension are located within or surrounded by Flood Zones 2 and 3. Spatial Option F would direct the majority of development to these two locations, a proportion of new residents could potentially be situated within Flood Zones 2 or 3. New residents would be at risk of flooding and development would result in the loss of floodplain, reducing flood storage capacity in the area.

8.3.2 Given the location of development under Spatial Option F, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements located to the north of South Staffordshire are likely to be at higher risk of surface water flooding than development proposals located to the south of the District.

- 8.3.3 Spatial Option F aims to direct a significant proportion of development towards villages with opportunities to expand onto previously developed land in the Green Belt. Nonetheless, due to the rural nature of South Staffordshire, this option would be likely to situate a quantity of development proposals on previously undeveloped land. Spatial Option F aims to promote development on previously developed land, however, with limited brownfield land available across the Plan area, with currently one potential brownfield location at Wombourne. Therefore, the proposed development under Spatial Option F would be likely to result in the net loss of vegetation cover and permeable soils and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health as well as the stability of surrounding infrastructure.
- 8.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified at high risk of surface water flooding, a major negative impact would be expected.

8.4 SA Objective 3 – Biodiversity and Geodiversity

- 8.4.1 Potential adverse impacts on European sites following the development proposed under this Spatial Option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives which will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these sites. Huntington and the urban extension to the south of Stafford are located within 5km of Cannock Chase SAC. Development proposals located to the north east of Penkridge could potentially be located within 5km of Cannock Chase SAC. The urban extension at the western edge of Black Country could potentially be located within 5km of Fens Pools SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. The proposed urban extension to the west of Cannock could potentially be located within 5km of Cannock Chase SAC and Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Motte Meadows SAC.

- 8.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary. The south of Stafford urban extension is likely to be located in close proximity to Cannock Chase SSSI. The urban extension to the west of the Black Country could potentially be located in close proximity to the Gospel End Road Cutting SSSI. Stowe Pool and Walk Mill Clay Pit SSSI is located to the south east of the A5, in close proximity to where the urban extension to the west of Cannock could potentially be located.
- 8.4.3 Motte Meadows NNR is located in close proximity to Wheaton Ashton. Wrens Nest NNR could potentially be located within 3km of the urban extension to the west of the Black Country.
- 8.4.4 Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. Wombourne coincides with Wom Brook Walk LNR and South Staffordshire Railway Walk LNR. The urban extension to the west of the Black Country could potentially be located in close proximity to Baggeridge Country Park LNR. The west of Cannock urban extension could potentially be located in close proximity to Shoal Hill Common LNR. The south of Stafford urban extension could potentially be located in close proximity to Brocton LNR.
- 8.4.5 The north of Wombourne is adjacent to stands of ancient woodland. The likely location of the urban extension to the west of the Black Country could potentially be located in close proximity to stands of ancient woodland. The urban extension to the north of the Black Country conurbation could potentially be located in close proximity to stands of ancient woodland.

- 8.4.6 Although Spatial Option F would be unlikely to result in the direct loss of a designated site, a number of European, national and locally designated sites are located in close proximity to some of the identified locations for development. The proposed development at Penkridge, Huntington, Cheslyn Hay/ Great Wyrley, Wheaton Ashton, Kinver, Wombourne and the proposed urban extensions to the north and west of the Black Country, to the west of Cannock and to the south of Stafford could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

8.5 SA Objective 4 – Landscape and Townscape

- 8.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington could potentially be located adjacent to the AONB. The proposed development around Penkridge and the urban extensions to the west of Cannock and south of Stafford would also be located in close proximity to the AONB. Approximately 50 dwellings are proposed within Huntington, 900 dwellings at Penkridge, 250 dwellings at the urban extension west of Cannock and 200 dwellings at the urban extensions south of Stafford. Due to the proximity of these locations, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from, the AONB.
- 8.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the view experienced by users of the local PRoW network and local residents to some extent.
- 8.5.3 Under Spatial Option F, development would be initially focused on previously developed land. Development on previously developed would reduce the risk of potential negative impacts on the local landscape. However, there is limited brownfield land available for development within the Plan area. Therefore, the proposed development under this option would primarily be located on previously undeveloped land. This could potentially result in urban sprawl into the surrounding countryside and be discordant with the local landscape character. Overall a major negative impact on the local landscape cannot be ruled out.

8.6 SA Objective 5 – Pollution and Waste

- 8.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be likely to be in close proximity to a watercourse and could potentially increase the risk of water contamination.
- 8.6.2 Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne, Coven, the south of Penkridge, the urban extension to the south of Stafford and the west of the urban extension to the north of the Black Country are located within the catchment of a groundwater SPZ (Zone III). Kinver and the north of Wombourne are located within the inner and outer zones of a groundwater SPZ (Zones I and II). Proposed development could potentially increase the risk of groundwater contamination at these locations.
- 8.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC AQMA 2'. The urban extension west of Cannock is located in close proximity to 'Cannock Chase AQMA', 'AQMA No.4 (Wedges Mills)' and 'AQMA No 5 Oak Farm'. The north of Black Country urban extension is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The construction and occupation of residential development at these locations would be likely to expose site end users to poor air quality. In addition, the proposed development could potentially further worsen local air quality through the introduction of additional people and associated car movements.

- 8.6.4 The urban extension to the north of the Black Country conurbation would be likely to be located in close proximity to the M54 and A460. The urban extension to the west of the Black Country would be likely to be located in close proximity to the A463. The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Wombourne. New residents located in these locations could potentially be exposed to higher levels of air and noise pollution associated with these main roads. As a rural district, it is anticipated that new residents would rely heavily on personal car use which would be expected to exacerbate air pollution issues in these areas with adverse impacts for local air quality and resident's health.
- 8.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall, Cheslyn Hall/ Great Wyrley and the urban extension to the north of the Black Country. The proposed development in these locations under this spatial option could potentially expose site end users to higher levels of noise and vibration associated with this railway line with adverse health impacts.
- 8.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 8,845 people could be expected to increase the total annual waste generated in the Plan area by 8,418 tonnes, or 19.4%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

8.7 SA Objective 6 – Natural Resources

- 8.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land. Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as 'urban'. The south of Stafford urban extension could potentially be located on ALC Grade 3 land. The west of Cannock urban extension could potentially be located on ALC Grade 3 land. The west of the Black Country urban extension could potentially be located on ALC Grade 3 land. The north of the Black Country urban extension would be likely to be located on ALC Grades 2 and 3 land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. The proposed development in these locations would be expected to result in the loss of this agriculturally important soil resource.

- 8.7.2 Spatial Option F aims to give first consideration to development on brownfield land. Development proposals on previously developed land would be expected to help prevent the loss of ecologically and agriculturally important soil resources across South Staffordshire. However, there are limited brownfield locations within South Staffordshire which are available for development, the majority of development under Spatial Option F would be on previously undeveloped land. Development proposals directed towards previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this spatial option would be likely to have a minor negative impact on soil resources within South Staffordshire.

8.8 SA Objective 7 – Housing

- 8.8.1 By aiming to meet the housing target of 8,845 dwellings over the Plan period, this spatial option would enable the LPR to deliver enough housing to satisfy the local need as well as make a significant contribution towards meeting the housing needs identified within surrounding Districts. Therefore, a major positive impact on housing provision across the Plan area would be expected.

8.9 SA Objective 8 – Health and Wellbeing

- 8.9.1 As a primarily rural district, it is anticipated a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. New residents situated in urban extensions to the north and the west of the Black Country conurbation could potentially have reduced access to natural habitats due to the close proximity to the urban area of the surrounding Black Country. All of the locations identified under this spatial option are in close proximity to a PRow. This would be expected to provide site end users with good opportunities to pursue an active lifestyle. Both of these factors would be expected to have physical and mental health benefits for local residents.

- 8.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. The urban extension to the north of the Black Country conurbation is likely to be located within 5km of the new Cross Hospital in Wolverhampton. The urban extension to the west of the Black Country is likely to be located within 5km of Russell's Hall Hospital in Dudley. New residents situated in these locations would be likely to have good access to emergency health care. All other locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewwood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Patteringham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.
- 8.9.3 The north of Black Country urban extension is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. Approximately 4,600 new residents would be directed to these locations under this spatial option and therefore, these residents could potentially be exposed to higher levels of local air pollution.
- 8.9.4 Residents directed towards Bilbrook/ Codsall, Penkridge, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver, as well as the proposed urban extension south of Stafford, west of Cannock, north of the Black Country and at the western edge of the Black Country, would be likely to expose some new residents to higher levels of air and noise pollution from nearby main roads and railway lines.

- 8.9.5 All of the locations identified under this spatial option would be expected to provide new residents with good access to the local PRow network and natural habitats, and a number of the identified locations would be likely to provide good access to a GP surgery and new residents in urban extensions to the north and west of the Black Country would be expected to have good access to an NHS hospital. However, the majority of development proposals would be expected to expose site end users to higher levels of air and noise pollution from nearby main roads, railway lines or AQMA's. Therefore, a minor negative impact on the health and wellbeing of new residents under this spatial option cannot be ruled out.

8.10 SA Objective 9 – Cultural Heritage

- 8.10.1 The exact location of development as an urban extension at the western edge of the Black Country is currently uncertain. Therefore, it is also uncertain if development proposals would be located in areas which could potentially result in negative impacts on RPG's including 'Himley Hall'. As approximately 700 dwellings are proposed at this location under this spatial option, it cannot be ruled out that development proposals could potentially alter the setting of this RPG.
- 8.10.2 'Codsall Bilbrook and Oaken' Conservation Area is located to the west of Bilbrook/ Codsall. The proposed development within this area could potentially result in the alteration of the setting of these Conservation Areas.
- 8.10.3 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at any of the locations identified under this spatial option would be likely to be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/ or setting of local Listed Buildings.

- 8.10.4 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. As the majority of dwellings under this spatial option would be directed towards an urban extension north of the Black Country conurbation, it would be likely that there is scope to mitigate adverse impacts on heritage assets following the proposed development. This is primarily due to the fact that there are fewer heritage assets in this broad location. However, due to the close proximity of the identified locations under Spatial Option F (such as Bilbrook/ Codsall) to local heritage assets, a minor negative impact cannot be ruled out.

8.11 SA Objective 10 – Transport and Accessibility

- 8.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station. Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option A could potentially located site end users in areas with limited access to rail services.
- 8.11.2 Under this spatial option, approximately equal proportions of development would be directed towards Tier 1 and 2 settlements within South Staffordshire and to urban extensions to the north and west of the Black Country, south of Stafford and to the west of Cannock. It is considered likely that new residents in these locations would have good access to rail services, bus services and safe pedestrian routes to local amenities. A good selection of sustainable transport options would also be expected to reduce site end users' reliance on personal car use. As the exact location of an urban extension to the south of Stafford is currently unknown, it is uncertain if new residents at this location would have good access to sustainable transport options. However, approximately 500 dwellings would be directed to more rural locations where access to sustainable transport options would be limited.
- 8.11.3 Overall, Spatial Option F would be expected to have a minor positive impact on new residents' access to sustainable transport in and around South Staffordshire.

8.12 SA Objective 11 – Education

- 8.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.
- 8.12.2 Secondary schools within South Staffordshire are primarily located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at Brewood, Perton, Essington, Coven, Huntington, Featherstone, Wheaton Ashton, Patteringham and Swindon would however be likely to situate new residents in locations with limited access to secondary education.
- 8.12.3 There are numerous primary and secondary schools located to the north of Wolverhampton. The proposed urban extension to the north of the Black Country conurbation would be likely to situate new residents in close proximity to these education facilities.
- 8.12.4 As the majority of the development proposed under this spatial option will be directed towards Bilbrook/ Codsall and as an urban extension north of Black Country conurbation, new residents in these locations would be expected to have excellent access to primary and secondary education. Therefore, a major positive impact on access to education across the District would be expected.

8.13 SA Objective 12 – Economy and Employment

- 8.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Shareshill, Coven, Brewood and the urban extension to the north of the Black Country would be expected to have reasonable access to out-of-District employment areas.

- 8.13.2 Overall, approximately 6,000 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas. Therefore, Spatial Option F would be likely to have a minor positive impact on the local economy.

9 Spatial Option G – Infrastructure-led development with a garden village area of search beyond the plan period

Spatial Option G – Infrastructure-led development with a garden village area of search beyond the plan period

This option meets the preferred housing target of 8,845 dwellings between 2018 and 2037. Under this option, growth on strategic sites is prioritised in locations where it could help to meet local infrastructure needs and opportunities, with smaller allocations being made in other broad locations having regard to their local environmental constraints. Urban extensions are provided across all neighbouring authorities within the Greater Birmingham Housing Market Area (GBHMA) with unmet housing needs to ensure that the district's contribution to the GBHMA shortfall is met in locations from which households are being displaced.

Under this option approximately 60% of development in the plan period would occur in the district's rural villages, whilst approximately 40% would occur in urban extensions to neighbouring urban areas or other rural locations. An area of search for a new settlement to be delivered beyond the plan period would also be established along the A449 corridor. This recognises the potential longer term opportunities in this location which may be explored following the plan's adoption, through reviews of the Local Plan or a separate Garden Village Development Plan Document (DPD).

Growth in the villages is dispersed across all four village tiers under this option. A larger proportion of housing growth is focused on Tier 1 and 2 villages where significant opportunities to achieve infrastructure improvements through new development exist, having regard to other environmental constraints (e.g. historic settlements with extensive Conservation Areas or settlements constrained by a designated landscape).

Larger urban extensions are focused to the north of the Black Country conurbation, recognising the availability of larger sites in this location and the opportunities to deliver strategic infrastructure needs around the ROF strategic employment site. The remaining housing requirement is split between the western edge of the Black Country and south of Stafford, in a manner that recognises the Black Country's role in contributing to the unmet housing needs of the HMA.

- 9.1.1 Under this spatial option, over 1,000 dwellings would be directed towards Bilbrook/ Codsall and as urban extensions to the northern edge of the Black Country and for employment-led growth at ROF Featherstone. Over 100 dwellings would be directed towards Penkridge, Cheslyn Hay/ Great Wyrley, Wombourne, Brewood, Kinver, Perton, Essington, Coven, as an urban extension south of Stafford and as an urban extension at the western edge of the Black Country. In addition, a smaller number of dwellings would be directed to Huntington, Featherstone, Wheaton Ashton, Pattingham, Swindon and Tier 4 settlements. An area of search for a new settlement to be delivered beyond the Plan period is proposed along the A449 corridor (see **Figure 9.1**).

Spatial Strategy: Option G

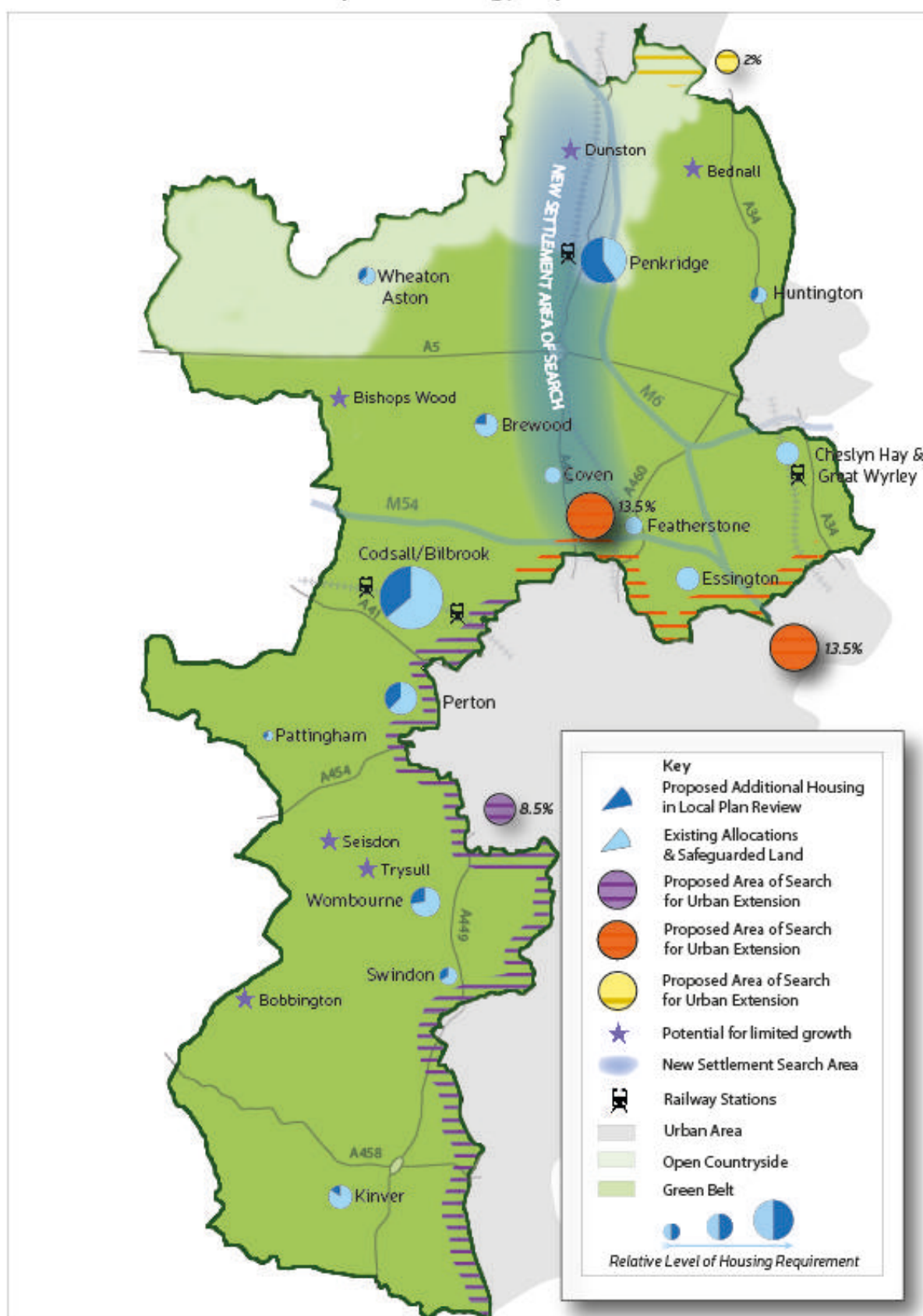


Figure 9.1: Spatial Strategy: Option G

1	2	3	4	5	6	7	8	9	10	11	12
C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
--	--	-	--	--	-	++	-	-	+	++	++

9.2 SA Objective 1 – Climate Change Mitigation

9.2.1 The proposed development of 8,845 new dwellings across the Plan area under this spatial option would be expected to result in the loss of greenfield land and vegetation cover which have carbon storage capabilities. It would also be expected to result in an increase in carbon emissions due to the construction and occupation of development. In 2016, South Staffordshire had a total annual carbon emission of 897,600 tonnes CO₂ per person, and residents had an average annual carbon emission of 8.1 tonnes CO₂ per person. At 2.31 people per dwelling, the development of 8,845 new dwellings could increase the local population by 20,432 people. The introduction of 20,432 new residents would therefore be expected to increase the annual carbon emission of the Plan area by 47,198 tonnes, or 5.26%. Overall, a major negative impact on climate change mitigation would be expected.

9.3 SA Objective 2 – Climate Change Adaptation

9.3.1 The north west and north east Bilbrook/ Codsall, the north of the Black County conurbation urban extension and the potential location for the urban extension for employment-led development at ROF Featherstone are located within or surrounded by Flood Zones 2 and 3. Spatial Option G would direct approximately 2,100 dwellings to these two locations, and therefore a proportion of new residents could potentially be situated within Flood Zones 2 or 3. New residents in these locations would be at risk of flooding and development would result in the loss of floodplain, reducing flood storage capacity in the area.

- 9.3.2 Given the proposed location of development under Spatial Option G, it would be likely that development would coincide with areas identified at risk of surface water flooding. Development proposals located in settlements located to the north of South Staffordshire are likely to be at higher risk of surface water flooding than development proposals located to the south of the District.
- 9.3.3 Under Spatial Option G, there is scope for a proportion of development proposals to be located on previously developed land. Nonetheless, due to the rural nature of South Staffordshire, this option would be likely to situate a significant quantity of development proposals on previously undeveloped land. This would be likely to result in the net loss of vegetation cover and permeable soils and therefore, would be expected to result in the exacerbation of flood risk across many of these locations. This could potentially result in detrimental impacts in regard to human health as well as the stability of surrounding infrastructure.
- 9.3.4 As it cannot be ruled out that development proposals under this option would not be located within Flood Zone 3 or on land identified at high risk of surface water flooding, a major negative impact would be expected.

9.4 SA Objective 3 – Biodiversity and Geodiversity

- 9.4.1 Potential adverse impacts on European sites following the development proposed under this spatial option will be considered in a Habitats Regulations Assessment (HRA) in the context of the Birds and Habitats Directives. This will inform the LPR. Some development proposals could potentially increase threats and pressures which could result in detrimental impacts on these designated sites. Huntington and the urban extension to the south of Stafford are located within 5km of Cannock Chase SAC. Development proposals located to the north east of Penkridge could potentially also be located within 5km of Cannock Chase SAC. The urban extension at the western edge of Black Country could potentially be located within 5km of Fens Pools SAC. Cheslyn Hay/ Great Wyrley are located within 5km of Cannock Extension Canal SAC. Wheaton Ashton is located within 5km of Motte Meadows SAC.

- 9.4.2 Cannock Extension Canal SSSI and Stowe Pool and Walk Mill Clay Pit SSSI are located in close proximity to Cheslyn Hay/ Great Wyrley. Motte Meadows SSSI is located in close proximity to Wheaton Ashton and Kinver Edge SSSI is located adjacent to the Kinver settlement boundary. The south of Stafford urban extension is likely to be located in close proximity to Cannock Chase SSSI. The urban extension to the west of the Black Country could potentially be located in close proximity to the Gospel End Road Cutting SSSI.
- 9.4.3 Motte Meadows NNR is located in close proximity to Wheaton Ashton. Wrens Nest NNR could potentially be located within 3km of the urban extension to the west of the Black Country.
- 9.4.4 Wyrley & Essington Canal LNR is located to the south west of Cheslyn Hay/ Great Wyrley. Wombourne coincides with Wom Brook Walk LNR and South Staffordshire Railway Walk LNR. The urban extension to the west of the Black Country could potentially be located in close proximity to Baggeridge Country Park LNR. The south of Stafford urban extension could potentially be located in close proximity to Brocton LNR.
- 9.4.5 The north of Wombourne is situated adjacent to stands of ancient woodland. The proposed urban extensions to the north and west of the Black Country and for employment-led growth at ROF Featherstone could potentially be located in close proximity to stands of ancient woodland.
- 9.4.6 Although Spatial Option G would be unlikely to result in the direct loss of a designated site, a number of European, national and locally designated sites are located in close proximity to some of the locations identified for development. The proposed development at Penkridge, Huntington, Cheslyn Hay/ Great Wyrley, Wheaton Ashton, Kinver, Wombourne and the proposed urban extensions to the north and west of the Black Country and to the south of Stafford could potentially increase the risk of development-related threats and pressures to surrounding biodiversity sites. As a result, the development proposals under this option could potentially result in a minor negative impact on local biodiversity.

9.5 SA Objective 4 – Landscape and Townscape

- 9.5.1 Cannock Chase AONB is located to the north east of South Staffordshire. The proposed development within Huntington could potentially be located adjacent to the AONB. The proposed development around Penkridge and the urban extension south of Stafford would also be located in close proximity to the AONB. Approximately 80 dwellings are proposed within Huntington, 900 dwellings at Penkridge and 200 dwellings at the urban extensions south of Stafford. Due to the proximity of these locations to the AONB, the proposed development could potentially be visible from, and therefore significantly alter the views experienced from the AONB.
- 9.5.2 It would be expected that the proposed development at any of the locations identified within this spatial option would alter the view experienced by users of the local PRow network and local residents to some extent.
- 9.5.3 As the majority of development under this spatial option is likely to be located on previously undeveloped land, the proposed development would be expected to result in urban sprawl into the surrounding countryside. The proposed development in these locations could potentially be discordant with the local landscape character. Overall, a major negative impact on the local landscape cannot be ruled out.

9.6 SA Objective 5 – Pollution and Waste

- 9.6.1 There is an extensive river network within South Staffordshire including the River Penk, the Staffordshire and Worcestershire Canal and Shropshire Union Canal. The proposed development at many of the locations identified under this spatial option would be in close proximity to a watercourse and could potentially increase the risk of water contamination.

- 9.6.2 Bilbrook/ Codsall, Pattingham, Perton, Swindon, Wombourne, Coven, the south of Penkridge, the urban extension to the south of Stafford and the west of the urban extensions to the north of the Black Country and for employment-led growth at ROF Featherstone are located within the catchment of a groundwater SPZ (Zone III). Kinver and the north of Wombourne are located within the inner and outer zones of a groundwater SPZ (Zones I and II). Proposed development at these locations could potentially increase the risk of groundwater contamination.
- 9.6.3 The north east of Penkridge is located in close proximity to 'AQMA No.1 (Woodbank)'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The north east of Cheslyn Hay/ Great Wyrley is located in close proximity to 'CCDC AQMA 2'. The urban extensions to the north of the Black Country and for employment-led growth at ROF Featherstone could potentially be located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The construction and occupation of residential development at these locations would be likely to expose site end users to poor air quality. In addition, the proposed development could potentially further worsen local air quality through the introduction of additional people and associated car movements.
- 9.6.4 The urban extensions to the north of the Black Country and for employment-led development at ROF Featherstone could be located in close proximity to the M54 and A460. The urban extension to the west of the Black Country would be likely to be located in close proximity to the A463. The A449 passes through Penkridge and the M6 is located to the east of the settlement. The A34 passes to the east of Great Wyrley and the M6 Toll is located to the north of Cheslyn Hay/ Great Wyrley. The A449 passes to the east of Wombourne. New residents located in these locations could potentially be exposed to higher levels of air and noise pollution associated with these main roads. As a rural district, it is anticipated that new residents would rely heavily on personal car use which would be expected to exacerbate air pollution issues in these areas having adverse impacts for local air quality and resident's health.

- 9.6.5 A railway line passes through or in close proximity to Penkridge, Bilbrook/ Codsall, Cheslyn Hall/ Great Wyrley and the urban extension to the north of the Black Country. The proposed development in these locations under this spatial option could potentially expose site end users to higher levels of noise and vibration associated with this railway line having adverse health impacts.
- 9.6.6 Between 2017 and 2018, a total of 43,361 tonnes of household waste was collected in South Staffordshire. The average household waste generated per capita in England in 2016 was 412kg. Assuming new residents generate 412kg per capita, 8,845 people could be expected to increase the total annual waste generated in the Plan area by 8,418 tonnes, or 19.4%. Therefore, a major negative impact on waste generation across the Plan area would be expected.

9.7 SA Objective 6 – Natural Resources

- 9.7.1 The majority of South Staffordshire is located on Grades 2 and 3 ALC land. Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as 'urban'. The south of Stafford urban extension could potentially be located on ALC Grade 3 land. The west of the Black Country urban extension could potentially be located on ALC Grade 3 land. The urban extensions to the north of the Black Country and for employment-led growth at ROF Featherstone could be located on ALC Grades 2 and 3 land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. The proposed development in these locations would be expected to result in the loss of this agriculturally important soil resource.

- 9.7.2 At this stage of assessment, the quantity of development proposed on previously developed land is uncertain. Due to the quantity of development proposed in and around South Staffordshire's rural settlements, it would be likely that a number of development proposals would be located in these areas. Development proposals directed towards the urban extensions to the north and west of the Black Country and employment-led growth at ROF Featherstone are also likely to be located on greenfield land. Development proposals directed towards previously undeveloped locations would be expected to result in a permanent and irreversible net loss of ecologically and agriculturally valuable soils caused by excavation, compaction, erosion, contamination and removal of vegetation cover. As a result, this option would be likely to have a minor negative impact on soil resources within South Staffordshire.

9.8 SA Objective 7 – Housing

- 9.8.1 By aiming to meet the housing target of 8,845 dwellings over the Plan period, this spatial option would enable the LPR to deliver enough housing to satisfy the local need as well as make a significant contribution towards meeting the housing needs identified within surrounding Districts. Therefore, a major positive impact on housing provision across the Plan area would be expected.

9.9 SA Objective 8 – Health and Wellbeing

- 9.9.1 As a primarily rural district, it is anticipated that a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. New residents situated in urban extensions to the north and west of the Black Country could potentially have reduced access to natural habitats due to the close proximity to the urban area of the surrounding Black Country. All of the locations identified under this spatial option are in close proximity to a PRoW. This would be expected to provide site end users with good opportunities to pursue an active lifestyle. Both of these factors would be expected to have physical and mental health benefits for local residents.

- 9.9.2 There are no NHS hospitals with an A&E department located within South Staffordshire. The proposed urban extensions to the north of the Black Country for employment-led growth at ROF Featherstone is likely to be located within 5km of the new Cross Hospital in Wolverhampton. The urban extension to the west of the Black Country is likely to be located within 5km of Russell's Hall Hospital in Dudley. New residents situated in these locations would be likely to have good access to emergency health care. All other locations identified under this spatial option would be likely to situate new residents in a location with limited access to emergency health care. Development proposals located in Penkridge, Wheaton Ashton, Brewood, Cheslyn Hay/ Great Wyrley, Bilbrook/ Codsall, Essington, Featherstone, Perton, Pattingham, Wombourne and Kinver would be likely to situate new residents in close proximity to a GP surgery. Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley and Wombourne are located in close proximity to a leisure centre. New residents in these locations would be expected to have good access to these services.
- 9.9.3 The proposed urban extensions to the north of the Black Country and for employment-led development at ROF Featherstone could potentially be located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. The western edge to the Black Country urban extension is located in close proximity to 'Dudley AQMA'. The south east of Bilbrook/ Codsall is located in close proximity to 'Wolverhampton Air Quality Management Area 2005'. Approximately 3,500 new residents would be directed to these locations under this spatial option and therefore, these residents could potentially be exposed to higher levels of local air pollution.
- 9.9.4 Residents directed towards Bilbrook/ Codsall, Penkridge, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver, as well as the proposed urban extensions south of Stafford, at the northern and western borders of the Black Country and at ROF Featherstone, would be likely to expose some new residents to higher levels of air and noise pollution from nearby main roads and railway lines.

- 9.9.5 All of the locations identified under this spatial option would be expected to provide new residents with good access to the local PRoW network and natural habitats, and a number of the identified locations would be likely to provide good access to a GP surgery and new residents in urban extensions to the north and west of the Black Country would be expected to have good access to an NHS hospital. However, the majority of development proposals would be expected to expose site end users to higher levels of air and noise pollution from nearby main roads, railway lines or AQMA's. Therefore, a minor negative impact on the health and wellbeing of new residents under this spatial option cannot be ruled out.

9.10 SA Objective 9 – Cultural Heritage

- 9.10.1 The exact location of development as an urban extension at the western edge of the Black Country is currently uncertain at this stage of the plan-making process. Therefore, it is also uncertain if development proposals would be located in areas which could potentially result in negative impacts on RPG's including 'Himley Hall'. As approximately 750 dwellings are proposed at this location under this spatial option, development proposals could potentially alter the setting of this RPG.
- 9.10.2 'Codsall Bilbrook and Oaken' Conservation Area is located to the west of Bilbrook/ Codsall. The proposed development at this location could potentially impact the setting of this Conservation Area.
- 9.10.3 There are numerous Grade I, II* and II Listed Buildings located across South Staffordshire. The proposed development at any of the locations identified under this spatial option would be likely to be situated in close proximity to a Listed Building. Therefore, development proposals could potentially have a negative impact on the character and/or setting of local Listed Buildings.
- 9.10.4 Negative impacts on local heritage assets would be largely dependent on the layout and design of development proposed. As a large number of dwellings under this spatial option would be directed towards an urban extension north of the Black Country conurbation, it would be likely that there is scope to mitigate adverse impacts on heritage assets following the proposed development. This is primarily due to the fact that there are fewer heritage assets in this broad location. Due to the close proximity of the identified locations under Spatial Option G (such as Bilbrook/ Codsall) to local heritage assets, a minor negative impact cannot be ruled out.

9.11 SA Objective 10 – Transport and Accessibility

- 9.11.1 There are four railway stations located within South Staffordshire. Penkridge is served by Penkridge Station, Bilbrook/ Codsall are served by Bilbrook Station and Codsall Station and Cheslyn Hay/ Great Wyrley are served by Landywood Station. All other locations identified for future development under Spatial Option G could potentially located site end users in areas with limited access to rail services.
- 9.11.2 Under this spatial option, approximately equal proportions of development would be directed towards Tier 1 and 2 settlements within South Staffordshire and to urban extensions to the north and west of the Black Country, south of Stafford and employment-led growth at ROF Featherstone. It is considered likely that new residents in these locations would have good access to rail services, bus services and safe pedestrian routes to local amenities. A good selection of sustainable transport options would also be expected to reduce site end users' reliance on personal car use. As the exact location of an urban extension to the south of Stafford is currently unknown, it is uncertain if new residents at this location would have good access to sustainable transport options. However, approximately 550 dwellings would be directed to Tier 3 settlements where access to sustainable transport options would be limited.
- 9.11.3 Overall, Spatial Option G would be expected to have a minor positive impact on new residents' access to sustainable transport in and around South Staffordshire.

9.12 SA Objective 11 – Education

- 9.12.1 All of the settlements identified for development under this spatial option would be expected to be situated in close proximity to a primary school providing education for children of all primary school ages.

- 9.12.2 Secondary schools within South Staffordshire are primary located in Tier 1 settlements. The proposed development in Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver would be expected to provide new residents with good access to secondary education. Some secondary schools are also located at the urban boundary of Stafford, Cannock, Wolverhampton and Stourbridge. The proposed development at Brewood, Perton, Essington, Coven, Huntington, Featherstone, Wheaton Ashton, Pattingham and Swindon would however be likely to situate new residents in locations with limited access to secondary education.
- 9.12.3 There are numerous primary and secondary schools located to the north of Wolverhampton. The proposed urban extensions to the north of the Black Country conurbation and for employment-led growth at ROF Featherstone would be likely to situate new residents in close proximity to these education facilities.
- 9.12.4 As the majority of the development proposed under this spatial option will be directed towards Bilbrook/ Codsall and as urban extensions north of Black Country for employment-led growth at ROF Featherstone, new residents in these locations would be expected to have excellent access to primary and secondary education. Therefore, a major positive impact on access to education across the District would be expected.

9.13 SA Objective 12 – Economy and Employment

- 9.13.1 Penkridge, Cheslyn Hay/ Great Wyrley, Featherstone and Bilbrook/ Codsall have been identified as key employment areas within the District. The majority of residents within South Staffordshire currently commute to employment opportunities in Wolverhampton, Dudley, Walsall and Birmingham. Development proposals directed towards Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to have good access to these out-of-District employment areas. Development proposals directed towards Essington, Featherstone, Coven, Brewood and the proposed urban extensions to the north of the Black Country and for employment-led growth at ROF Featherstone would be expected to have reasonable access to out-of-District employment areas. Overall, approximately 5,900 dwellings would be directed towards locations with good or reasonable sustainable access to employment opportunities either within the District or in surrounding areas.

9.13.2

As Spatial Option G proposes for development to be located in an urban extension for employment-led growth, it is considered likely that this development would help to facilitate the delivery of key infrastructure to support strategic employment allocations at ROF Featherstone, assisting in increasing employment land across the District. In addition, this option would locate employment opportunities within the District which would be expected to improve the local economy and reduce residents' need to travel for work. Therefore, a major positive impact on the local economy and employment opportunities would be expected under Spatial Option G.

10 Conclusions and Next Steps

10.1 Overview of spatial options

10.1.1 The SA impact matrix for the seven spatial options assessed above have been brought together in **Table 10.1**. These impacts reflect a ‘pre-mitigation’ scenario. The final LPR will propose policies which would be expected to help mitigate some of the adverse impacts identified. The mitigating impacts of LPR policy proposals will be taken into consideration at a later stage of the SA process, when the policies are finalised.

Table 10.1: SA impact matrix of the seven spatial options assessed in this report

	1	2	3	4	5	6	7	8	9	10	11	12
Spatial Option	C.C. Mitigation	C.C. Adaptation	Biodiversity & Geodiversity	Landscape & Townscape	Pollution & Waste	Natural Resources	Housing	Health & Wellbeing	Cultural Heritage	Transport & Accessibility	Education	Economy & Employment
A	--	--	-	--	--	-	+	-	-	-	+	-
B	--	--	-	--	--	-	++	-	-	-	++	-
C	--	--	-	--	--	-	++	-	-	-	++	+
D	--	--	-	--	--	-	++	-	-	+	++	+
E	--	--	-	--	--	-	++	-	-	+	++	+
F	--	--	-	--	--	-	++	-	-	+	++	+
G	--	--	-	--	--	-	++	-	-	+	++	++

10.1.2 The text below summarises the likely impact expected following the adoption of each of the seven spatial options. The summary of impacts are presented by SA Objective.

10.2 SA Objective 1 – Climate Change Mitigation

10.2.1 The development of over 7,000 dwellings proposed under each of the options would be anticipated to increase carbon emissions across the Plan area significantly. The construction and occupation of homes requires carbon resources, which includes fuel to power construction vehicles and gas to heat homes. As a result, all of the options would be likely to have a major negative impact on climate change mitigation.

Recommendations

- In line with the NPPF, any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.
- Policies should seek to prioritise renewable and low carbon energy sources, opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.
- Policies within the LPR should encourage the integration of sustainable transport options in the design of new development and therefore contribute towards a reduction in traffic-related emissions.
- SSDC should develop policies to encourage development to contribute towards the retention and provision of the multi-functional green infrastructure network, which would be expected to provide carbon storage capacity.

10.3 SA Objective 2 – Climate Change Adaptation

10.3.1 As the location of development is currently unknown, it is uncertain if development proposals would be situated in areas at risk of pluvial or fluvial flooding. However, as the majority of development would be likely to be located on the outskirts of the existing settlements, it is considered that development proposals surrounding Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne, Brewood, Kinver, Perton, Wheaton Ashton, Shareshill, Coven and Swindon could potentially situate residents in areas at risk of flooding. This could lead to an adverse impact on the stability of local infrastructure and present health and safety risks. As all of the spatial options would locate development in some of these locations, a major negative impact cannot be ruled out at this stage of the assessment.

Recommendations

- SSDC should not promote development proposals located within Flood Zone 3 or in an area of high surface water flood risk.
- Policies should be developed to require a flood risk assessment to be carried out prior to development.
- Development proposals should incorporate sustainable drainage measures, such as Sustainable Urban Drainage systems (SUDs), to help mitigate the effect of fluvial and pluvial flood risk.
- SSDC should implement policies which help to secure a network of green and blue infrastructure to improve connectivity, biodiversity and strengthen the resilience of the natural environment to the effects of climate change.

10.4

SA Objective 3 – Biodiversity and Geodiversity

10.4.1

Mottey Meadows SAC is the only Natura 2000 site located within South Staffordshire and is designated for its lowland hay meadows. The prioritised issues for the SAC include water pollution, hydrological changes, water abstraction and changes in land management⁵². The closest area proposed for development within the spatial options, Wheaton Ashton, is located just over 1km south east of the SAC. Other European sites are located outside the Local Plan area and include, Cannock Chase SAC, which is located adjacent to the District to the north east, Cannock extension Canal SAC, which is located approximately 1km east of the District and Fens Pool SAC, which is located approximately 3km to the south east of the District. Many of the locations for development identified within these seven spatial options would locate new development within 5km of one of these SAC's, which could potentially increase development-related threats and pressures, including a deterioration of air quality, increased recreational pressures and hydrological impacts. In addition to these European sites, numerous SSSIs, NNR, LNRs and stands of ancient woodland are located within South Staffordshire. Although the exact location and proposed use of development is not yet known, a minor negative impact on local biodiversity cannot be ruled out.

⁵² Natural England (2013) Site Improvement Plan: Mottey Meadows. Available at:
<http://publications.naturalengland.org.uk/publication/6519033218203648> [Date Accessed; 07/08/19]

Recommendations

- SSDC should implement policies to help avoid adverse impacts associated with development on Motte Meadows SAC and other nearby European designated sites.
- Policies should aim to conserve and enhance the natural environment, protected habitats and species.
- Biodiversity net gain across the plan area should be promoted and at the heart of development.
- SSDC should not promote development which coincides with or is located adjacent to the designated biodiversity asset. Development proposals should not be promoted where adverse impacts on biodiversity assets cannot be mitigated.
- SSDC should develop policies to encourage development to contribute towards the retention and provision of the multi-functional green and blue infrastructure network.
- The findings and conclusion of the Habitats Regulation Assessment (HRA) of the LPR should be incorporated into policies.

10.5

SA Objective 4 – Landscape and Townscape

10.5.1

Cannock Chase AONB is partially located within South Staffordshire to the north east of the Plan area. The proposed development within Huntington and Penkridge and the proposed urban extensions south of Stafford and west of Cannock could potentially be located adjacent to or in close proximity to the AONB. It is considered likely that development under all of the spatial options would direct development to the edge of existing settlements or outside of the Development Boundaries in the countryside. This has the potential to result in urban sprawl and increase the risk of coalescence between nearby settlements. Although the exact location of development proposals are uncertain at this stage, a major negative impact on the local landscape under all of the spatial options cannot be ruled out.

Recommendations

- Policies should be developed which aim to protect and enhance the character and setting of Cannock Chase AONB.
- SSDC should implement policies which contribute towards mitigating negative impacts, associated with development, on locally distinctive landscape character and seek to conserve and enhance the special qualities of these landscapes.

- Policies should be implemented to help minimise the impact on views experienced by users of the local PRow network and experienced by local residents.
- Policies should be developed to help reduce some negative impacts associated with transition of new development into the countryside and limit the impacts associated with urban sprawl and settlement coalescence.
- The protection of tranquillity in the Plan area should be integrated into LPR policy.
- SSDC should develop policies to encourage development to contribute towards the retention and provision of the multi-functional green infrastructure network which can act as ‘screening’ from new development.

10.6 SA Objective 5 – Pollution and Waste

10.6.1 There are three AQMA's located within South Staffordshire; 'AQMA No.1 (Woodbank)', 'AQMA No.4 (Wedges Mills)' and 'AQMA No 5 Oak Farm'. The entirety of the Black Country is also an AQMA. Several main roads run through the District, including the M6, M6 Toll, M54, A5, A34, A41, A449 and A545. Development proposed in close proximity to these areas would expose new residents to high levels of air and noise pollution having an adverse impact on human health. Development proposals in these areas would also be expected to exacerbate local air pollution, primarily due to the number of additional vehicles new development would be likely to create. This would be likely to have adverse impacts on human health and the local ecosystem. In addition, there is an extensive river network across South Staffordshire and a large proportion of the District is located within a groundwater SPZ. Depending on its location, development could potentially result in the contamination of rivers, streams and groundwater sources.

10.6.2 The occupation of over 7,000 dwellings would be anticipated to result in a significant increase of household waste generation throughout the Plan area. Therefore, it would be expected that development proposed under all of the options would be likely to result in a major negative impact on household waste generation. Policies should be developed which encourage recycling by easy access to waste recycling centres and improved recycling collection.

Recommendations

- Policies should aim to reduce local air pollution through the requirements of Air Quality Action Plan for the Plan area.
- Policies within the LPR should encourage the integration of sustainable transport options in the design of new development and therefore contribute towards a reduction in traffic-related emissions.
- Policies within the LPR should aim to reduce the need for travel by locating services, facilities and employment in close proximity to residential development.
- Policies should help to reduce noise, vibration and light pollution associated with development. Potential adverse impacts in regard to biodiversity and human health should be mitigated and options to promote an improved quality of life promoted.
- SSDC should implement a policy that seeks to protect and enhance water quality, through provision of SUDs, green infrastructure and appropriate mitigation measures.
- The provision of green infrastructure would be expected to act as a carbon sink and provide air filtering services.
- A policy should be developed to promote the minimisation of waste and permit the development of additional waste management systems, which would be likely to contribute towards a reduction in household waste generation.

10.7

SA Objective 6 – Natural Resources

10.7.1

The majority of South Staffordshire is located on Grades 2 and 3 ALC land. ALC Grades 1, 2 and 3 land is thought to be some of the best and most versatile within South Staffordshire. Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley are primarily located on ALC land classed as ‘urban’. As a large quantity of development would be likely to be located on previously undeveloped ALC Grade 2 and 3 land, the proposed development under all of the spatial options would result in the permanent loss of agriculturally and ecologically important soil. Therefore, a minor negative impact would be expected under all of the spatial options.

Recommendations

- SSDC should aim to prioritise development at previously developed locations and promote development on ‘urban’ or ‘non-agricultural’ ALC land. South Staffordshire’s best and most versatile land should be protected.

- Policies should be implemented to encourage the efficient use of land.

10.8 SA Objective 7 – Housing

- 10.8.1 All of the spatial options would be expected to make a significant and positive contribution to the housing provision within South Staffordshire. As Spatial Option A proposes the least number of dwellings, this option would be expected to have a minor positive impact, whereas all other options would be expected to result in a major positive impact.

10.9 SA Objective 8 – Health and Wellbeing

- 10.9.1 There are no NHS hospitals with an A&E department located within South Staffordshire. The nearest hospitals are County Hospital in Stafford, New Cross Hospital in Wolverhampton and Russell's Hall Hospital in Dudley. The majority of new development would be located outside the sustainable travel distance to one of these emergency health centres⁵³. A proportion of new residents would also be likely to be situated outside the sustainable travel distance to a GP surgery or leisure centre. In addition, many of the identified locations under these spatial options are situated in close proximity to main roads or AQMAs, which would be expected to expose site end users to high levels of local air pollution. However, as a rural District, it is anticipated that a number of new residents under this spatial option would have excellent access to a diverse range of natural habitats. Overall therefore, a minor negative impact on health and wellbeing could potentially be expected following the proposed development under these seven spatial options.

Recommendations

- SSDC should ensure that new residents have good public transport access to key health facilities and services.
- Where urban extension or new settlements are proposed, new facilities, including GP surgeries and leisure centres, should also be developed to avoid the need to travel.
- Policies should be implemented to help ensure that new residents are not exposed to high levels of air, noise and light pollution from nearby roads or railway lines.

⁵³ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

- SSDC should develop policies to ensure residents have access to open spaces and a diverse range of natural habitats. This should include the provision of green infrastructure.
- Policies should be implemented to ensure the retention and improvement of the public footpath and cycle ways throughout the Plan area.

10.10

SA Objective 9 – Cultural Heritage

10.10.1

There are numerous heritage assets located across the Plan area, including five Registered Parks and Gardens, 17 Conservation Areas, 24 Scheduled Monuments and 655 Listed Buildings. These Listed Buildings are scattered across South Staffordshire and as such, development proposed at any of the settlements identified under these seven spatial options would be likely to be located in close proximity to a Listed Building. At this stage of assessment, the exact location of the proposed development is unknown and therefore, it is uncertain if the proposed development would impact surrounding heritage assets. Due to the close proximity of the development locations identified under these spatial options to heritage assets, a minor negative impact on the local historic environment cannot be ruled out.

Recommendations

- Policies should be developed to ensure that development proposals located in close proximity to heritage assets are in-keeping with the local character and setting to help reduce potential adverse impacts.
- SSDC should develop policies which aim to result in positive gains to the local historic environment.
- Policies could be implemented which require the preparation of a Heritage Impact Assessment prior to development.

10.11 SA Objective 10 – Transport and Accessibility

10.11.1 There are four railway stations located within South Staffordshire; Penkridge, Bilbrook, Codsall and Landywood Railway Stations. As a result, development proposals located in Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley would be expected to locate new residents in an area with excellent access to rail services to travel around the District and into the surrounding towns and cities. Many new residents located towards Tier 1 and 2 settlements would also be expected to have good access to the local bus network. It is also assumed that new bus stops and services would be provided within proposed urban extensions. As a result, Spatial Options D, E, F and G would be expected to have a minor positive impact on transport and accessibility whereas Spatial Options A, B and C could potentially have a minor negative impact on transport and accessibility due to their more rural location.

Recommendations

- Policies should be implemented that aim to improve site end users' access to sustainable transport options.
- Improvements should be made to existing sustainable transport provisions, including new railway stations, electric bus services, electric car charging points and better infrastructure to permit working-from-home.
- SSDC should develop policies which aim to retain and increase the provision of public footpath and cycle ways across the Plan area.
- Where urban extensions or new settlements are proposed, new facilities, including local shops and bus stops, should also be developed to minimise the requirement for travel.
- Strong links should be made to the Local Transport Plan and Air Quality Action Plans.

10.12 SA Objective 11 – Education

10.12.1 There are a good range of primary and secondary schools located within South Staffordshire. All of the locations identified for development under the spatial options would be expected to be situated in close proximity to a primary school which can provide education for all children for primary age. Secondary schools are primarily located within the Tier 1 settlements, Penkridge, Bilbrook/ Codsall, Cheslyn Hay/ Great Wyrley, Wombourne and Kinver. As all options would direct some new residents to these locations, a positive impact in regard to access to education would be expected. However, Spatial Option A would be likely to situate fewer residents in areas with good access to both primary and secondary education, in particular due to the proposed development of a new settlement in an uncertain location, and therefore a minor positive impact would be expected.

Recommendations

- Where possible, including through the development of urban extensions or new settlements, new primary schools should be developed following a review of existing school capacities.
- Policies should be developed to ensure new residents have access to bus links or other sustainable transport options to secondary schools.

10.13 SA Objective 12 – Economy and Employment

10.13.1 It is noted that the majority of residents living within South Staffordshire commute to out of the District to employment opportunities within Wolverhampton, Dudley, Stafford and Birmingham. The towns of Penkridge, Bilbrook/ Codsall and Cheslyn Hay/ Great Wyrley have railway stations which would be expected to provide residents with good access to out-of-District employment opportunities. The proposed urban extensions would also be expected to ensure new residents have good access to these areas. Residents located in more rural locations could potentially have more restricted access to sustainable transport options out of the District. Spatial Options C, D, E, F and G direct over half of the development proposals in locations with good or reasonable sustainable access to the employment opportunities and as such, would be expected to have a minor positive impact on the local economy. As less than half of the proposed development under Spatial Options A and B would be directed towards locations with good or reasonable sustainable access to employment opportunities, a minor negative impact would be expected.

10.13.2 In addition, Spatial Option G proposes development at urban extension for employment-led growth at ROF Featherstone. This would be expected to help facilitate the delivery of key infrastructure to support strategic employment allocations at ROF Featherstone, assisting in increasing employment land across the District. This would also be expected to facilitate good access to local employment opportunities and have benefits to the local economy. A major positive impact would therefore be expected under Spatial Option G.

Recommendations

- Policies should be implemented to improve employment opportunities within the Plan area in line with the identified need. This could help mitigate the net loss of employment floorspace following residential development.
- Policies should be developed which encourage smart economic growth within the area. This could be encouraged through the use of technology and innovative ways of working to increase productivity without damaging people's quality of life or the environment. This may include the provision of high-speed broadband to encourage working at home.

10.14 Best performing option

10.14.1 Through the assessment process, it is clear that Spatial Options A, B and C would be expected to be the worst-performing options, as the proposed development under these three options could potentially result in a greater proportion of likely adverse impacts and a lower proportion of positive impacts than the other four options. The identified negative impacts are likely to be in regard to these options directing a higher proportion of new residents to more rural locations in South Staffordshire with limited access to essential services, such as education, employment and health centres.

10.14.2 It is difficult to differentiate between the sustainability performance of Spatial Options D, E, F and G, as the proposed development under all of these options would be likely to result in the same or similar sustainability impacts. Likely positive impacts of these spatial options are due to the provision of housing beyond the identified need in locations where the majority of new residents would be expected to have good access to education, employment opportunities and sustainable transport options, including rail and bus services. However, Spatial Option G has been identified as the best-performing option, as the proposed development would be likely to result in the greatest positive impacts in terms of sustainability, in particular in regard to access to education and employment.

10.15 **Next Steps**

10.15.1 This SA Report will be published by the Council for consultation. All responses on this consultation exercise should be sent to localplans@sstaffs.gov.uk.

10.15.2 The comments received from this consultation shall be considered and where appropriate, incorporated, into the next stage of the SA process.

10.15.3 The findings from this report should be used to inform the next stage of the plan-making process: the Preferred Options stage. This stage of the plan-making process would be subject to further SA.

Appendix A: SA Framework

#	SA Objective	Decision making criteria: Will the option/proposal...	Indicators include (but are not limited to)
1	Climate Change Mitigation: Minimise the district's contribution to climate change.	Increase energy consumption or GHG emissions? Generate or support renewable energy?	<ul style="list-style-type: none"> • Energy consumption; • GHG emissions; • Access to sustainable transport; • Green infrastructure (carbon sink).
2	Climate Change Adaptation: Plan for the anticipated impacts of climate change.	Increase the number of residents at risk of flooding? Increase the risk of flooding?	<ul style="list-style-type: none"> • EA Flood Map for Planning; • Surface water flood risk; • The number of developments given planning permission on floodplains contrary to EA advice; • Presence or loss of green infrastructure.
3	Biodiversity and Geodiversity: Protect, enhance and manage the flora, fauna, biodiversity and geodiversity assets of the district.	Result in a net loss of vegetation? Protect or enhance wildlife sites or biodiversity hotspots? Protect or enhance geodiversity hotspots?	<ul style="list-style-type: none"> • Number of planning approvals which generate adverse impacts on sites of biodiversity importance; • Length of greenways constructed; • Percentage of major development generating overall biodiversity enhancement; • Hectares of biodiversity habitat delivered through strategic site allocations; • Impacts on geodiversity sites.

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4	Landscape and Townscape: Conserve, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening their distinctiveness.	Protect or enhance the local landscape?	<ul style="list-style-type: none"> • Use of locally sourced materials; • Is development in-keeping with surroundings?; • Impacts on existing setting; • Alter the urban / rural fringe; • Increase the risk of coalescence; • Amount of new development in the AONB with commentary on likely impact.
		Protect or enhance the local townscape?	
5	Pollution and Waste: Reduce waste generation, increase the reuse of, and recycling of, materials whilst minimizing the extent and impacts of water, air and noise pollution.	Increase waste production? Increase the risk of air, noise or water pollution? Increase the number of residents exposed to the risk of air, noise or water pollution?	<ul style="list-style-type: none"> • Number of residents in areas of poor air quality; • Proximity to pollutants (e.g. busy roads, airports); • Quality of waterways in or adjacent to sites; • Local increases in road traffic or congestion; • The number of developments given planning permission contrary to Environment Agency advice relating to river water quality or the protection of groundwater; • Proximity to AQMAs and current AQMA status.
6	Natural Resources: Protect, enhance and ensure the efficient use of the district's land, soils and water.	Impact on demand capacity of local water sources?	<ul style="list-style-type: none"> • Proportion of previously developed land; • Use of existing buildings; • Likely impacts on soil fertility, structure and erosion; • Agricultural Land Classification;
		Use previously developed land or existing buildings?	

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		Result in the loss of local soils?	<ul style="list-style-type: none"> Mineral Safeguarding Sites; Re-use of contaminated land.
7	Housing: Provide a range of housing to meet the needs of the community.	<p>Ensure that residents will have the opportunity to meet in a home which meets their needs?</p> <p>Result in the loss of, or otherwise impact on, any existing housing?</p>	<ul style="list-style-type: none"> Proportion of affordable housing; Impacts on existing houses and estates; Number of care homes; Total number of homes planned for site.
8	Health and Wellbeing: Safeguard and improve the physical and mental health of residents.	<p>Provide residents with adequate access to necessary health facilities and services?</p> <p>Encourage healthy lifestyles?</p>	<ul style="list-style-type: none"> Access to health facilities; Percentage of District's population with access to a natural greenspace within 400m of their home; Local air quality; Hectares of accessible open space per 1,000 population.
9	Cultural Heritage: Conserve, enhance and manage sites,	Will the proposal conserve heritage assets/the historic environment?	<ul style="list-style-type: none"> Number of Listed Buildings adversely impacted by development; Number of Listed Buildings partially damaged or lost;

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	features and areas of historic and cultural importance.	Will the proposal enhance heritage assets/the historic environment?	<ul style="list-style-type: none"> Number of archaeological sites, scheduled monuments and registered parks adversely impacted by development; Quantity of development which is discordant with the relevant management plans but given planning permission in Conservation Areas.
10	Transport and Accessibility: Improve the choice and efficiency of sustainable transport in the district and reduce the need to travel.	Improve travel choice, reduce journey need and shorten the length and duration of journeys?	<ul style="list-style-type: none"> Distance and accessibility to public transport options; Distance and accessibility to key services and amenities, as well as employment opportunities; Suitability of existing routes of access into sites, considering anticipated increases in usage.
		Improve accessibility to key services and amenities for existing and new residents?	
11	Education: Improve education, skills and qualifications in the district.	<p>Raise educational attainment levels for residents in the district?</p> <p>Offer residents with frequent, affordable and sustainable access to educational facilities?</p>	<ul style="list-style-type: none"> Distance and accessibility to educational facilities, including primary and secondary schools; Local education attainment levels.

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12	Economy and employment: To support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.	Encourage sustainable economic growth?	<ul style="list-style-type: none"> • Access and distance to local employment opportunities; • Local employment rates; • Increases or decreases in quantity of employment land in the district; • Support for sustainable businesses.
		Ensure high and stable levels of employment?	



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