

Sustainability Appraisal of the Stratford-on-Avon Alternative Strategic Options

ED.3.7

SA Report

January 2014



LEPUS CONSULTING

Sustainability Appraisal of the Stratford-on-Avon Alternative Strategic Options

Consultation Report

Client	Stratford-on-Avon District Council
Report Title	Sustainability Appraisal of the Stratford-on-Avon Alternative Strategic Options: Consultation Report
Status	Final
Filename	LC-0005_Stratford_SA_Consultation_7_270114DKF.docx
Date	27 th January 2014
Author	DKF
Checked	NJD
Approved	NJD

Front cover: M40 motorway at Gaydon, Stratford-on-Avon

Contents

1	Introduction.....	1
1.1	Background	1
1.2	About Stratford-on-Avon.....	1
1.3	The Options	2
2	Appraisal Methodology	3
2.1	An integrated approach to Sustainability Appraisal and Strategic Environmental Assessment.....	3
2.2	Best Practice Guidance	3
2.3	The Sustainability Appraisal Framework	4
2.4	Approach to the appraisal	5
2.5	Explaining the Detailed Assessment Matrices	6
3	Appraisal Findings	7
3.1	Timeframe of the Core Strategy.....	7
3.2	Total number of homes.....	7
3.3	Option A: Further Dispersal.....	8
3.4	Option B: Gaydon/Lighthorne Heath	10
3.5	Option C: Long Marston Airfield.....	14
3.6	Option D: South East Stratford.....	18
3.7	Option E.1: North of Southam.....	22
3.8	Option E.2: West of Southam (Stoneythorpe)	26
4	Significant effects and mitigation.....	29
4.1	Significant effects, mitigation and uncertainty.....	29
4.2	Prescribed mitigation.....	29
4.3	Option B: Gaydon/Lighthorne Heath	29
4.4	Option C: Long Marston Airfield.....	31
4.5	Option D: South East Stratford.....	32
4.6	Option E.1: North of Southam.....	33
4.7	Option E.2: West of Southam (Stoneythorpe)	34
5	Conclusions and next steps	37
5.1	Residual Adverse Effects.....	37
5.2	Conclusions.....	37
5.3	Next steps	38

APPENDIX A	Standards used in the assessment process
APPENDIX B	Detailed Assessment Matrix (DAMs)
APPENDIX C	Mapping analysis for accessibility
APPENDIX D	Mapping analysis for biodiversity
APPENDIX E	Mapping analysis for health and wellbeing
APPENDIX F	Mapping analysis for population and quality of life

Maps

Map 1	Constraints and assets map for Gaydon/Lighthorne Heath
Map 2	Constraints and assets map for Long Marston Airfield
Map 3	Constraints and assets map for South East Stratford
Map 4	Constraints and assets map for North Southam
Map 5	Constraints and assets map for West Southam

Tables

Table 1.1	List of the five alternative strategic options
Table 2.1	Sustainability Appraisal Objectives
Table 2.2	Criteria for the assessment of significant effects (reproduced from Annex II of the SEA Directive)
Table 2.3	Key to the matrix assessment
Table 5.1	Summary of SA results for Options B-E

Abbreviations

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
ASNW	Ancient Semi-Natural Woodland
DAM	Detailed Assessment Matrix
DCLG	Department of Communities and Local Government
GI	Green Infrastructure
LWS	Local Wildlife Site
MAGIC	Multi Agency Geographic Information for the Countryside
NPPF	National Planning Policy Framework
RIGS	Regionally Importance Geological Sites
SA	Sustainability Appraisal
SEA	Strategic Environmental Assessment
SDC	Stratford-on-Avon District Council
SUDS	Sustainable Urban Drainage Systems

1 Introduction

1.1 Background

1.1.1 Lepus Consulting is conducting the Sustainability Appraisal (SA) process for the Stratford-on-Avon Core Strategy on behalf of Stratford-on-Avon District Council (SDC). SA is the process of informing and influencing the development of the Core Strategy to maximise the sustainability value of the document. SA is integrated with the Strategic Environmental Assessment (SEA) process so that the requirements of both assessment processes are prepared simultaneously.

1.1.2 This report is to support the further consultation undertaken by SDC in January 2014. The consultation is framed around a change in the timeframe of Core Strategy, an increase in total housing numbers, as well as five alternative strategic options for meeting the increased housing requirements.

1.2 About Stratford-on-Avon

1.2.1 The district of Stratford-on-Avon covers an area of 979 square kilometres of rural south Warwickshire. Amongst the largest of England's lowland districts, it is one of the five Warwickshire districts and boroughs and lies within the West Midlands. The district's population of 118,900 is split between the main settlement of Stratford-upon-Avon (which has a population of 26,150), important rural centres of the district such as Alcester, Shipston-on-Stour and Southam, and approximately 250 further communities of various sizes.

1.2.2 The district enjoys a distinctive settlement hierarchy from Stratford-upon-Avon to the market towns and beyond into the many picturesque villages and hamlets. It also has a strong rural character which is reflected by vernacular building styles and clearly demarcated field patterns. The landscape includes features such as ridge and furrow, old and young hedgerows and undulating landscapes with relief features gently carved by the various watercourses flowing across the area. Much of the north of the district lies within the West Midland Green Belt, and the Cotswolds AONB extends into the southern fringes of the district. Central to its distinctive character, Stratford-on-Avon has a rich historic environment and cultural heritage resource, reflected by the 76 conservation areas, 3,332 listed buildings and 84 scheduled monuments located in the district. The historic and cultural legacies of the district's past, combined with the attractive rural landscapes are important economic drivers, to tourism and the visitor economy.

1.2.3 The character and natural environment of Stratford-on-Avon is distinguished by the many waterways which flow through the district. These include the Rivers Avon and its tributaries, the Alne, Arrow, Dene, Itchen and Stour, as well as the Grand Union, Oxford and Stratford-upon-Avon canals. The River Avon and its tributaries present a significant challenge in flood management terms, as highlighted by the floods of July 2007.

1.2.4 The district has a rich biodiversity resource, reflected by various statutory and non-statutory nature conservation designations, including 39 SSSIs. The various biodiversity assets in the district are also recognised and prioritised by the Warwickshire, Coventry and Solihull Local Biodiversity Action Plan (2007), which includes 26 species action plans and 24 habitat action plans.

1.2.5 Residents of Stratford-on-Avon generally have favourable levels of health, are highly skilled and enjoy a good quality of life. This however masks a number of socio-economic challenges for the district, including an ageing population, issues surrounding the affordability of housing, significant out-commuting for employment purposes and difficulties surrounding access and service provision in rural areas.

1.3 The Options

1.3.1 As part of the further consultation work in February/March 2014, there is a requirement for additional housing in the district. To meet this requirement SDC have proposed five alternative strategic options; these are shown in **Table 1.1**. The sustainability effects of these options are discussed in **Chapter 3**.

Table 1.1:List of the five alternative strategic options

Options	Option details and/or site locations
A	Further Dispersal
B	Gaydon / Lighthorne Heath
C	Long Marston Airfield
D	South East Stratford
E	1 North of Southam
	2 West of Southam (Stoneythorpe)

2 Appraisal Methodology

2.1 An integrated approach to Sustainability Appraisal and Strategic Environmental Assessment

- 2.1.1 The SEA Directive 2001/42/EC or 'SEA Directive' applies to a wide range of public plans and programmes on land use, energy, waste, agriculture, transport etc. (see Article 3(2) of the Directive for other plan or programme types). The SEA procedure can be summarised as follows: an environmental report is prepared in which the likely significant effects on the environment and the reasonable alternatives of the proposed plan or programme are identified. The public and the environmental authorities are informed and consulted on the draft plan or programme and the environmental report prepared.
- 2.1.2 The Directive has been transposed into English law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations, SI no. 1633).
- 2.1.3 Sustainability Appraisal is a UK-specific procedure used to appraise the impacts and effects of development plans in the UK. It is required by S19 (5) of the Planning and Compulsory Purchase Act 2004 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 2012.
- 2.1.4 SEA 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. 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 is to be achieved through integrating the requirements of SEA into the SA process.

2.2 Best Practice Guidance

- 2.2.1 The approach for carrying out the SA of the Stratford-on-Avon Core Strategy is based on current best practice and the following guidance:
- Office of the Deputy Prime Minister (September 2005): A Practical Guide to the SEA Directive;
 - Planning Advisory Service (December 2007): Local Development Frameworks Guidance on Sustainability Appraisal; and
 - Department for Communities and Local Government (DCLG; September 2009): DCLG Plan Making Manual: Sustainability Appraisal.
- The DCLG Plan Making Manual replaces the previous SA guidance for Local Development Frameworks (Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents). The Manual accompanies the revised Planning Policy Statement 12 and brings together council experience, advice and guidance in developing sustainability appraisals for local development frameworks.

2.2.2 The Manual is web-based, and can be accessed by following the link: <http://www.pas.gov.uk/pas/core/page.do?pagelid=152450>.

2.3 The Sustainability Appraisal Framework

2.3.1 For consistency throughout the SA process, the same SA objectives that were used in previous assessments will be utilised again. The objectives are shown in **Table 2.1**.

Table 2.1: Sustainability Appraisal Objectives

Sustainability Appraisal Objectives	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.
3	Protect, enhance and manage biodiversity and geodiversity.
4	Reduce the risk of flooding.
5	Minimise the district's contribution to climate change.
6	Plan for the anticipated levels of climate change.
7	Protect and conserve natural resources.
8	Reduce air, soil and water pollution.
9	Reduce waste generation and disposal, and promote the waste hierarchy of reduce, reuse, recycle/compost, energy recovery and disposal.
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.
11	Reduce barriers for those living in rural areas.
12	Protect the integrity of the district's countryside.
13	Provide affordable, environmentally sound and good quality housing for all.
14	Safeguard and improve community health, safety and wellbeing.
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.

2.3.2 When a site is assessed, an additional SA Framework which includes the assessment criteria has been used. This ensures that the sites are assessed consistently. For transparency and clarity, this framework with criteria, has been included in **Appendix A**.

- 2.3.3 The criteria clearly set out what a site needs to achieve in order to be scored positively or adversely, this utilises standards where possible. The standards include suggested distances between amenities and new development as found in Shaping Neighbourhoods; a good practice design guide which incorporates sustainable master planning and urban design (Barton et al 2010). For example Shaping Neighbourhoods advises that optimally housing development should be within 800m of a primary school, with 1km the largest tolerable distance between the two, in order to ensure that the school is accessible.
- 2.3.4 It should be noted that while these standards are considered best practice for new development, they have not necessarily been endorsed by the Government. They are for discussion only. The services in and around each potential site are mapped and the standards are used as a buffer zone to visually display potential deficiencies in services. The abundance or lack of amenities in the area is then discussed in the commentary.
- 2.3.5 The criteria and standards may change when new information or research becomes available, the standards will be kept as up to date as possible.

2.4 Approach to the appraisal

- 2.4.1 The assessment of the Stratford-on-Avon Core Strategy has been undertaken using a combination of empirical evidence, and to a lesser extent, expert judgment.
- 2.4.2 The sites have been examined in detail using Detailed Assessment Matrices (DAMs) based on the criteria contained within Annex II of the SEA Directive¹. These criteria are presented in **Table 2.2**. These DAMs utilise the SA framework, criteria and standards explained in **Section 2.3** and provide an assessment result based on the information contained within the options. The full DAMs are available in **Appendix B**.

Table 2.2: Criteria for the assessment of significant effects (reproduced from Annex II of the SEA Directive)

<p>Criteria for determining the likely significance of effects referred to in Article 3(5) of the SEA Directive. The characteristics of plans and programmes, having regard, in particular, to</p> <ol 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;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).

¹This SA is being carried out in accordance with the requirements of the Directive 2001/42/EC, the SEA Directive.

Characteristics of the effects and of the area likely to be affected, having regard, in particular, to

- a. the probability, duration, frequency and reversibility of the effects;
- b. the cumulative nature of the effects;
- c. the transboundary nature of the effects;
- d. the risks to human health or the environment (e.g. due to accidents);
- e. the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- f. the value and vulnerability of the area likely to be affected due to:
 - g. special natural characteristics or cultural heritage;
 - h. exceeded environmental quality standards or limit values;
 - i. intensive land-use;
 - j. the effects on areas or landscapes which have a recognised national, Community or international protection status.

2.4.3 The findings of the DAMs have been transposed into a simpler matrix in the main body of the text, and this is accompanied by a commentary on identified effects taken directly from the DAMs. It should be made clear that the matrix is not a conclusive tool. Its main function is to show visually whether or not the proposed options are likely to bring positive, adverse or uncertain effects in relation to the SA Objectives. The commentary is then used to interpret the matrix findings. **Table 2.3** shows the key to identifying whether the effects of an option in a matrix are positive, adverse or uncertain.

Table 2.3: Key to the matrix assessment

Key:	
Likely strong positive effect	++
Likely positive effect	+
Neutral/no effect	0
Likely adverse effect	-
Likely strong adverse effect	--
Uncertain effects	+/-

2.5 Explaining the Detailed Assessment Matrices

2.5.1 The DAMs contain a column entitled ‘supporting comments / proposed mitigation’. Where the assessment process identifies an adverse impact against an SA objective, or where there are further ways of improving the sustainability value of the option, this column will be used to discuss mitigation proposals. This is not an exhaustive list and further mitigation, or alternative mitigation which achieves the same ends, can be utilised.

2.5.2 The final column in the DAMs is titled ‘best case scenario effect’. This displays the sustainability effect of the option if all of the proposed mitigation is implemented. It shows how sustainable an option could be, by highlighting any residual adverse effects which remain after mitigation has been put in place. The best case scenario effect column should not be confused with how an option currently performs.

3 Appraisal Findings

3.1 Timeframe of the Core Strategy

- 3.1.1 The consultation document refers to changes to the timeframe of the Core Strategy as the National Planning Policy Framework (NPPF) advises that Core Strategies should run for at least 15 years from the date of adoption. Due to delays in the adoption of the Stratford-on-Avon Core Strategy the current plan period is at least two years short of the required length. Therefore the plan period will be extended to 2031, with the start date changed to coincide with the expiration of the Local Plan in 2011.
- 3.1.2 There are unlikely to be any significant sustainability implications of changing the plan period timeframe. At the time of writing, we are not aware of anything that will significantly affect the sustainability of the plan.

3.2 Total number of homes

- 3.2.1 As part of the consultation document, SDC discuss the need to increase the total number of new homes that need to be built in the district. Previously, the Third Draft Core Strategy 2012 proposed a housing requirement of 8,000 dwellings, this was increased to 9,500 in the Intended Proposed Submission Core Strategy 2013. Since this time, more up-to-date population and household data has been published and the Government has also published national planning guidance setting out how it expects housing requirements to be calculated. In light of this additional information a higher level of new housing (10,800) has been proposed by SDC.
- 3.2.2 There are many sustainability implications of additional homes in the district. Additional dwellings in Stratford-on-Avon could cause congestion in the area, through intensification in traffic flow. Planning Service *Vehicle Access Standards* (1999) defined intensification as occurring “when a proposed development would increase the traffic flow using an access by 5% or more”. Increased congestion is likely to lead to a reduction in air quality.
- 3.2.3 Additional housing will increase the total amount of waste produced in the district. Depending on the location of this additional development, it could put pressure on the existing green space, the Green Infrastructure (GI) network, open space, the historic environment and natural resources in the district.
- 3.2.4 If the additional development makes it worthwhile to provide new facilities and amenities, more houses in the area could improve accessibility, the local economy and potentially reduce deprivation. There is also likely to be an increased provision in affordable housing.
- 3.2.5 The following five options discuss different means of allocating this additional development. The sustainability effects of each development option vary and are discussed in more detail below.

3.3 Option A: Further Dispersal

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
History, Cultural Heritage	Landscape	Biodiversity	Flood Risk	Climate Change Mitigation	Climate Change Adaptation	Natural Resource	Pollution	Waste	Transport	Rural Barriers	Countryside	Affordable Housing	Health, Wellbeing	Economy
+/-	+/-	+/-	+/-	--	+/-	+/-	-	0	-	-	-	++	+/-	+/-

- 3.3.1 The effect of the further dispersal of new homes across the district includes increasing the amount of development in the main town, main rural centres, local service villages as well as in the rural area.
- 3.3.2 The sustainability impacts of dispersal were discussed in Part 1 Options SA Report published in August 2011; the report examined a range of dispersal options.
- 3.3.3 Due to the high level strategic nature of the dispersal option, it is more difficult to establish the likely sustainability performance of this option, when comparing it to the remaining options. This is due to the sustainability effect of the option being largely dependent on the detailed location, design, layout and type of development proposed, and the additional and improved infrastructure and service provision introduced to support new growth areas in the district.
- 3.3.4 The Part 1 Options SA Report advised that the dispersal of development across the district in this manner would put strain on the local service villages and rural areas due to increasing demand on local services and facilities. Furthermore, as the new housing is dispersed it is less likely that there will be sufficient new development to support additional local services, facilities and amenities. For example, a single doctor has an average of 2,000-3,000 people on its books (Shaping Neighbourhoods 2010). Therefore a new site would not be able to support an additional doctors surgery if it proposes development which is smaller than this.
- 3.3.5 For many of the sustainability objectives, the effect of dispersal depends upon the extent to which new development will support accessibility to local services from rural areas; this depends on the degree to which new housing provision is accompanied by new facilities, amenities and job opportunities.
- 3.3.6 There could potentially be positive impacts of the dispersal option because of the aim to spread development around the towns and villages of the district. The dispersal option has the potential to limit concentrated effects on individual settlements, however it is difficult to confirm there will be no adverse effects without having further site details. However focusing on dispersal is likely to help increase the supply of affordable housing in rural communities, where need for affordable housing in the district is the highest.
- 3.3.7 Dispersal is less likely to have a significant adverse effect on the historic environment, landscape setting and important sites of biodiversity as development can be sited to avoid developing in sensitive areas, and due to the smaller amount of housing in each area, it could be easier to mitigate potential adverse effects. In addition, the option is less likely to significantly contribute to issues at existing air quality hotspots, as there will be smaller amounts of development at a greater variety of location.

3.3.8

Dispersing the development means that new houses are less likely to be concentrated in the areas with good access to services, amenities and public transport networks, or of insufficient size to warrant new facilities. This has the potential to increase the need to travel and encourage car-based commuting. Therefore a broad spread of development may increase car use through limiting accessibility to local and sub-regional services, facilities and amenities. So although dispersal may not add to place specific air pollution, it may have less tangible implications for air quality over a wider area.

3.4 Option B: Gaydon/Lighthorne Heath

3.4.1 The full DAM for Gaydon/Lighthorne Heath is shown in **Appendix B**, the sustainability effect of the option is reproduced below in a simplified matrix with the related commentary alongside. For further information and detail, please see **Appendix B**.

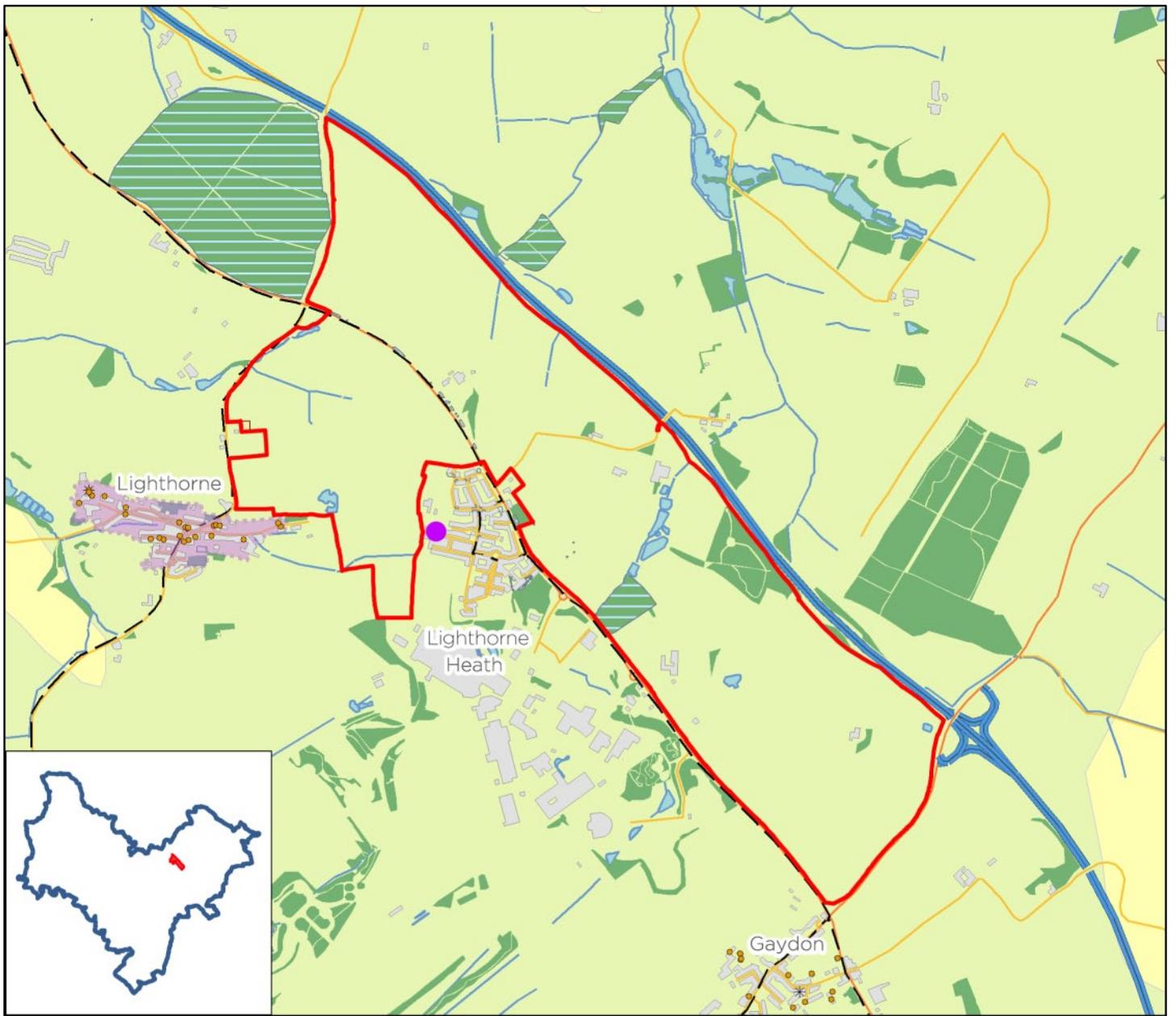
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
History, Cultural Heritage	Landscape	Biodiversity	Flood Risk	Climate Change Mitigation	Climate Change Adaptation	Natural Resource	Pollution	Waste	Transport	Rural Barriers	Countryside	Affordable Housing	Health, Wellbeing	Economy
-	--	+	++	+	+	-	0	0	+	++	--	++	-	++

3.4.2 The Historic Environment Assessment (2012) identifies a small area of High to Medium Archaeological Sensitivity, immediately to the North East of Gaydon, but within the proposed site allocation. There are listed buildings in the vicinity of the site, within the settlements of Gaydon and Lighthorne, and the setting of these will be a consideration when any development is considered in more detail. Effects on local heritage assets, such as the listed buildings in the vicinity, are likely to occur in the short term due to the effect of development and the consequent noise and disturbance effects, including HGVs. The built character of Lighthorne Heath lacks historic distinctiveness and does not contain any listed buildings.

3.4.3 The site is characterised by open countryside which ranges in quality according to the diversity of landscape features. These include nearby woodlands (Chesterton Wood) at the northern end of the site and hedgerows. Parts of the landscape are lower quality for example near junction 12 of the M40. The Landscape Sensitivity Study (2012) identifies that the site includes areas of medium and high to medium landscape sensitivity.

3.4.4 Chesterton Wood is a Local Wildlife Site (LWS) and part of it is ancient semi-natural woodland (ASNW). Whilst it is outside of the development location, it is an important feature that should be retained, enhanced and protected. Woodlands are robust habitat features, but can suffer in quality if not managed or if they are affected by 'urban edge' effects which can include fires, predation from cats and litter.

3.4.5 Biodiversity levels are likely to be low in association with the larger arable fields, however hedgerows are likely to be of value to biodiversity and should be retained. Other important relevant biodiversity features are the ASNW at Gaydon Coppice LWS, near the centre of the site and the lakes that lie to the north of this wood. The lakes have not been surveyed as part of this SA but may be important for protected species including amphibians and or reptiles. Another constraint is the LWS at the former quarry.



Gaydon/Lighthorne Heath

- | | | | | | |
|---|--------------------------|---|--------------------------------|---|------------------|
|  | Gaydon/Lighthorne Heath |  | Listed building |  | Bus routes |
|  | Stratford District |  | Scheduled monument |  | Railway Station |
|  | Secondary schools |  | Traditional Orchard |  | Railway |
|  | Primary schools |  | Allotments |  | Woodland |
|  | Doctor surgery |  | Environmentally Sensitive Area |  | Surface Water |
|  | Hospital |  | Green Belt |  | Grade 1 |
|  | Leisure or Sports Centre |  | AONB |  | Grade 2 |
|  | Place of Worship |  | Country Parks |  | Grade 3 |
|  | Police Station |  | Park and Garden |  | Grade 4 |
|  | Built area |  | A roads |  | Grade 5 |
|  | Conservation Areas |  | B roads |  | Non Agricultural |
|  | SSSI |  | Local, minor roads | | |
|  | Local Nature Reserve |  | Motorways | | |
|  | Tree Preservation Orders |  | Primary roads | | |

- 3.4.6 The centre and northern part of the site is within a 500m buffer zone of woodland (a standard suggested by Shaping Neighbourhoods 2010). The presence of woodland in and around the site offers potential for sustainable access to biodiversity in the area. The option proposes to incorporate parks, open space and community woodland, as well as introducing a local nature reserve on the former quarry. This will add to the biodiversity value of the area in the long term.
- 3.4.7 The site is in Flood Risk Zone 1 and it would benefit from incorporating Sustainable Urban Drainage.
- 3.4.8 There are bus stops on the B4100 along the west of the site. This improves the accessibility of the proposal and ensures that there are alternatives to car travel available. However not all of the site is within 400m of a bus stop (a standard suggested by Shaping Neighbourhoods 2010). Existing bus services could be improved due to the size of the proposed development.
- 3.4.9 Additional housing will produce additional emissions in the short term through the transport of building materials and the embodied energy in the materials themselves. The houses themselves will also create emissions through heating and water needs. This effect will be replicated in all of the sites.
- 3.4.10 The development is mixed-use and is comprised of housing, employment land, a main centre, a local centre and a primary school. The mixed-use nature of the site could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car.
- 3.4.11 The size of the development means there will also be potential for local energy generation, and District Heating from renewable / low carbon sources.
- 3.4.12 A site of this size provides the opportunity to provide Green Infrastructure, including the proposed parks, open space and community woodland, in the medium term.
- 3.4.13 Loss of soil at this site (as with all sites) represents a loss of natural resources - an irreversible effect. The site includes land of Grade 3a value.
- 3.4.14 The proposal includes the introduction of a main centre (comprising of a range of shops, services, community and leisure facilities), a local centre and a primary school which will improve accessibility in the longer term. There are no health facilities within range of the site. For example, there are doctor's surgeries in large villages to the north east and the south west, but these are well beyond the 800m buffer suggested by Shaping Neighbourhoods 2010.
- 3.4.15 There is currently a primary school in Lighthorne Heath, which would serve part of the site. However there would be insufficient capacity at existing facilities to meet the demand created by 3,000 new homes. The introduction of a primary school on site and a secondary school off site will help meet this additional demand.

- 3.4.16 A mixed use development, including employment, local and main centres and a primary school will help ensure that a self-sufficient community is created, this could reduce the need for travel via car.
- 3.4.17 The nearby employment centres of Aston Martin, Jaguar, Land Rover and the Heritage Museum all provide employment opportunities. These and related facilities will be expanded by a further 100ha. The option also proposes a main and local centre which would include shops and services, further contributing to employment opportunities.
- 3.4.18 The site is close to small villages but not within the vicinity of larger towns, therefore providing housing and employment development in this area together is likely to help provide opportunities in the wider area.
- 3.4.19 This is a greenfield site in the countryside. In the long term this location could provide 3,000 dwellings. A large influx of new residents and housing is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car.

Overall effect

- 3.4.20 The development is proposed on an area of greenfield land, with areas of high biodiversity value, and areas of less biodiversity value. There are currently limited local services in the area, although the proposal includes the implementation of new amenities. The site is located close to the M40 motorway providing an opportunity for travel; there are also opportunities for travel via bus. As part of the proposal, both housing and employment development will take place providing affordable housing and further employment opportunities.
- 3.4.21 Although the proposal is likely to affect the character of the area, the area is not recognised as being an exemplar for character, therefore implementing stringent design guides will help mitigate any adverse effects, and potentially improve the feel of the area. Whilst the use of cars at this location could be an issue in the short term, the site is strategically linked to the settlements of Stratford-upon-Avon, Banbury, Leamington Spa and Warwick. If these links are capitalised on using sustainable modes of transportation, the effect on employment, quality of life and wellbeing could be significant.

3.5 Option C: Long Marston Airfield

3.5.1 The full DAM for Long Marston Airfield is shown in **Appendix B**, the sustainability effect of the option is reproduced below in a simplified matrix with the related commentary alongside. For further information and detail, please see **Appendix B**.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
History, Cultural Heritage	Landscape	Biodiversity	Flood Risk	Climate Change Mitigation	Climate Change Adaptation	Natural Resource	Pollution	Waste	Transport	Rural Barriers	Countryside	Affordable Housing	Health, Wellbeing	Economy
0	+/-	-	-	+	+	+	0	0	+/-	++	-	++	-	+

3.5.2 The airfield is located in an arable landscape and is part greenfield and part brownfield. It is not covered by any of the landscape sensitivity work undertaken by SDC. Initially there could be an adverse effect on the character and appearance of the landscape due to development. Although the proposal includes open space and managed ecological areas. The introduction of managed ecological areas could improve the biodiversity value of the area over the longer term.

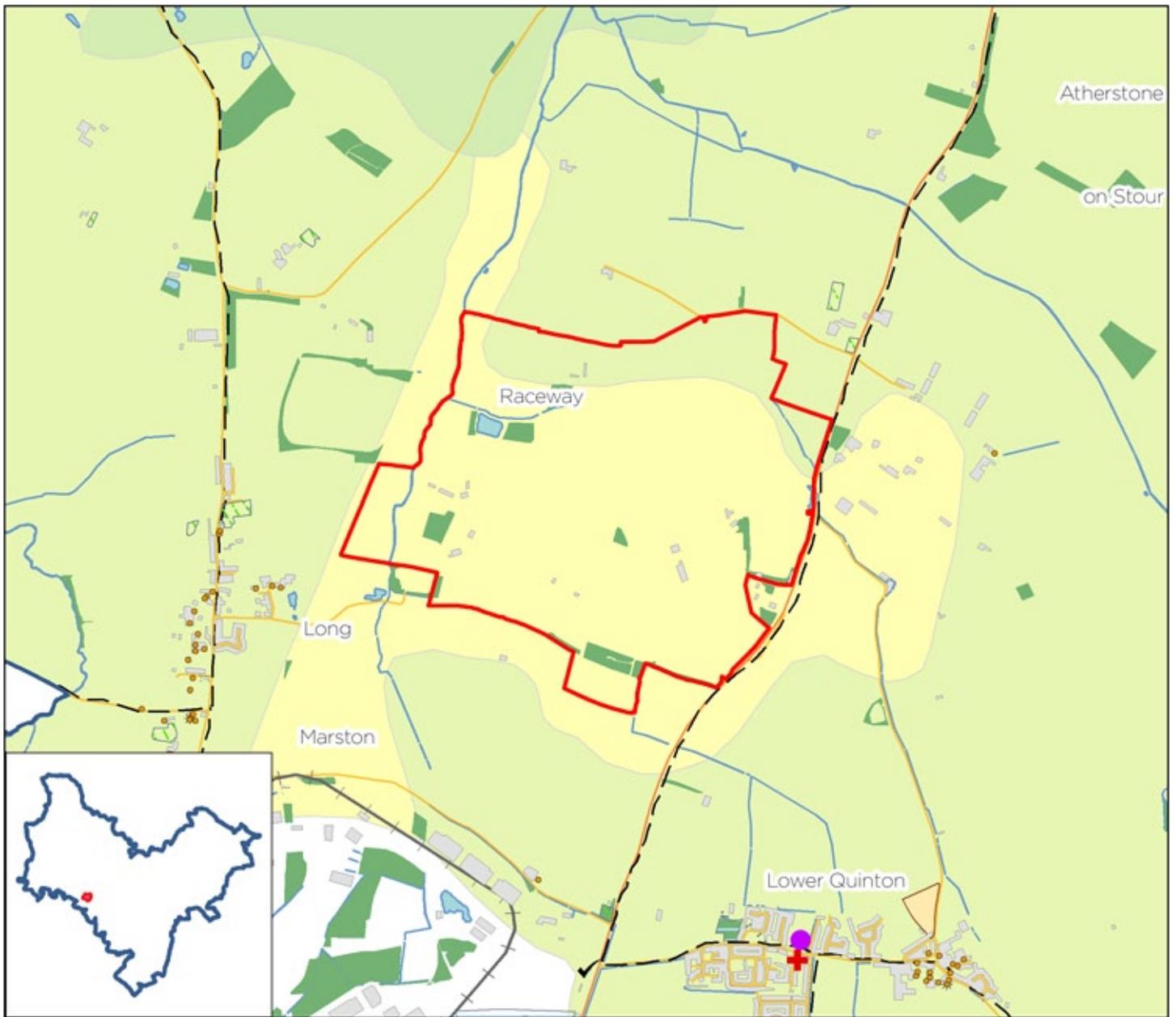
3.5.3 There are a few small areas of woodland and watercourses located on site, but none known to be of high biodiversity value. There are areas of woodland in the vicinity of the site; the southern part of the site is within 4km of an area of woodland over 20ha (a standard suggested by Shaping Neighbourhoods 2010). No available data was sourced with regard to biodiversity value of the grassland at the airfield, although almost the entire site is a proposed LWS. Based on the precautionary principle the option has been assessed as adverse against biodiversity.

3.5.4 The western edge of the site has a significant chance of flooding. The chance of flooding each year is greater than 1.3% (1 in 75).

3.5.5 The development is mixed-use and is comprised of housing, employment land, a local centre, a primary school and a secondary school. The additional development in the area will increase emissions, both from the building stage and the embodied energy in the materials themselves. However the mixed-use nature of the site could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car.

3.5.6 The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources. It could also provide the opportunity to create Green Infrastructure, including open space and managed ecological areas in the medium term.

3.5.7 The site is Grade 3b Agricultural Land.



Long Marston Airfield



- 3.5.8 Wastewater capacity is at its limit in the area but the site is assessed on the basis that the necessary upgrades would be made in order to avoid significant environmental effects.
- 3.5.9 A development of this scale provides the opportunity to provide a high quality public transport network. As the site is proposed to be a mixed-use development, including employment and services, this could reduce the need for travel via car.
- 3.5.10 There are bus routes running down the B4632 which borders the site to the east, and Long Marston Road which is to the west of the site. Two of the bus stops on the route are in the vicinity of the site and could be utilised by new residents. However only a small amount of the site is within 400m of a bus stop (a standard suggested by Shaping Neighbourhoods 2010).
- 3.5.11 The Consultation report cites the potential for a new road linking Long Marston to Stratford. This recognises that Long Marston is poorly located in relation to the West Midlands urban area and the strategic road network. The promoters of this site state that development could make provision for a bypass to be built to the south of Stratford-upon-Avon between the A3400 Shipston Road and the B439 Evesham Road. It is suggested that such a road could help relieve some of the congestion in Stratford-upon-Avon town centre by giving more direct access to the primary road network for trips originating to the south of the town.
- 3.5.12 The SA findings are recorded as uncertain in this respect since over-reliance on car travel and further exacerbation of a busy wider West Midlands network could have several adverse effects. Any proposal for a new road would need to emphasise reliance on sustainable modes of transport and be subject to an environmental impact assessment.
- 3.5.13 There is currently a primary school in Lower Quinton and Welford-on-Avon. However there would be insufficient capacity at existing facilities to meet the demand created by 3,000 new homes.
- 3.5.14 The proposal includes the introduction of a local centre (comprising of a range of shops, services, community and leisure facilities), a primary school and a secondary school, which will improve accessibility over the wider area in the longer term.
- 3.5.15 The site includes previously developed land in the form of the airfield. This is a land use with little impact on the surrounding landscape and much of the site might reasonably be described as having a countryside feel.
- 3.5.16 The proposal suggests 3,500 dwellings in the long term. The proposal introduces a large amount of new housing to the area. As part of that, a percentage of the new housing will be affordable housing. Due to the introduction of 3,500 new homes, the surrounding roads are likely to be busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car.

3.5.17 There are no health facilities within the suggested (Shaping Neighbourhoods 2010) 800m range of the site. Although there is an existing doctor's surgery in Lower Quinton, this is further than 800m from the site and it is unknown whether the surgery has capacity for additional patients. There is the possibility for the proposal to include health facilities, but it is not confirmed that these will be included.

3.5.18 The proposal includes 13ha of employment land. The option also suggests a local centre which would include shops and services, further contributing to employment opportunities in the area.

Overall effect

3.5.19 As the site is located in open countryside, in an area associated with flood risk and few amenities, there are many adverse effect associated with the site. The site is partially greenfield and located in the countryside so is likely to have impacts on the character and landscape quality.

3.5.20 A further issue with the location is the distance to facilities, employment opportunities and services; currently the amenities in the area would not support a development of this size. This is likely to mean travel by car to get to jobs and shops. However the proposal suggests the implementation of both residential and commercial development, as well as the introduction of a local centre, a primary school and a secondary school; this will improve the sustainability value of the site. There are no significant effects on biodiversity or historical assets due to the lack of important biological or historical features in the vicinity.

3.6 Option D: South East Stratford

3.6.1 The full DAM for South East Stratford is shown in **Appendix B**, the sustainability effect of the option is reproduced below in a simplified matrix with the related commentary alongside. For further information and detail, please see **Appendix B**.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
History, Cultural Heritage	Landscape	Biodiversity	Flood Risk	Climate Change Mitigation	Climate Change Adaptation	Natural Resource	Pollution	Waste	Transport	Rural Barriers	Countryside	Affordable Housing	Health, Wellbeing	Economy
-	--	+	++	+	+	--	+/-	0	+	++	-	++	++	+

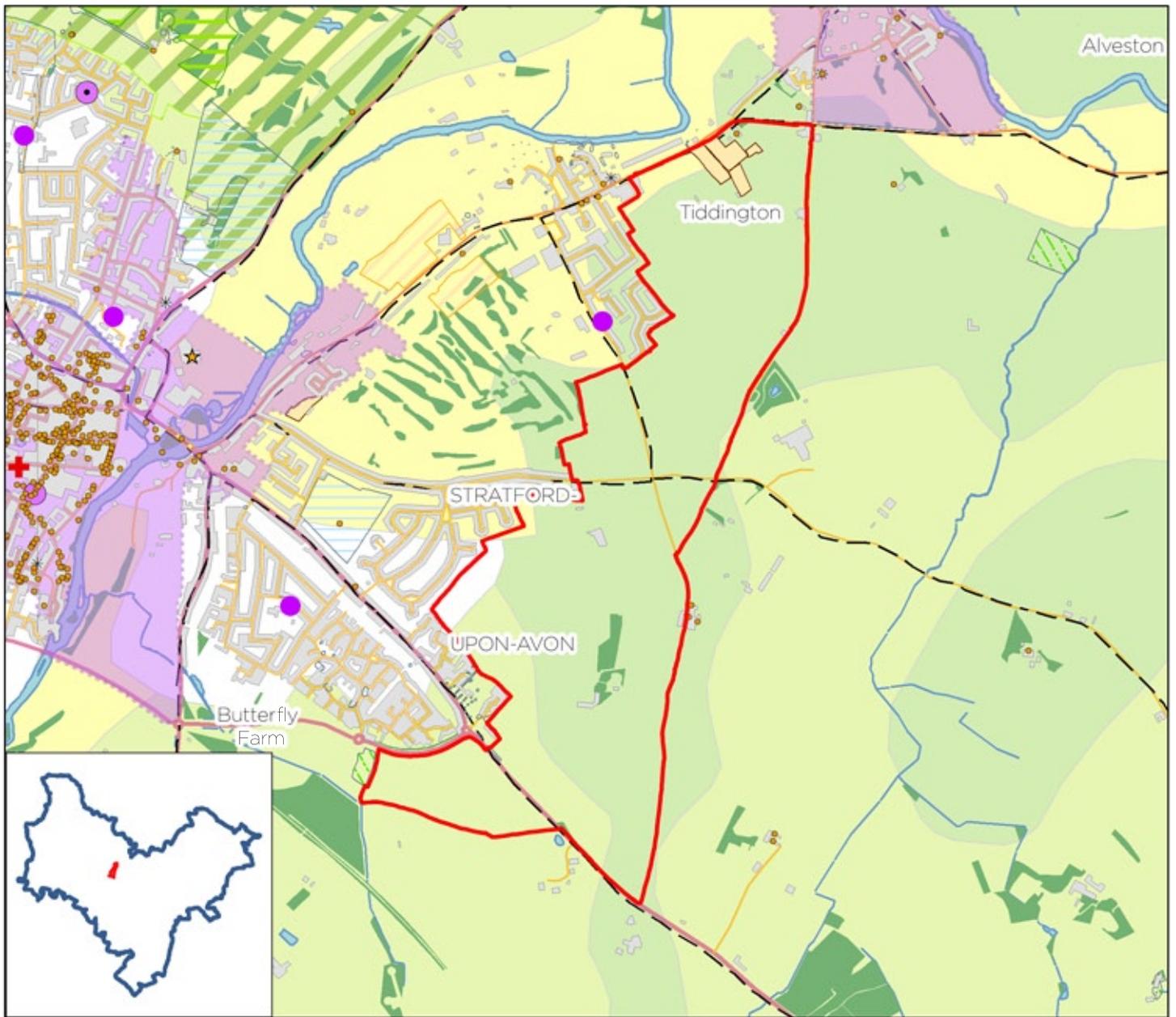
3.6.2 The Historic Environment Assessment (2008) identifies a Scheduled Ancient Monument to the west of Tiddington (Roman Road site Village) and many heritage assets. The disturbance of potential archaeological features would occur in the short term due to the development on the site. If features are present on site, then following evaluation and appropriate action, the building work will eradicate them, with no effect thereafter.

3.6.3 The Landscape Sensitivity Assessment (2011) suggests that the location is mostly of medium sensitivity to development. The area to the south of this location is of medium-high importance; development here would have an adverse effect on this receptor. The hill itself forms the skyline in views from all directions and, while acting as the backcloth to the settlement, also screens it from wider view to the east. The skyline, prominence and openness of this rural countryside make the area sensitive. Housing and commercial development is therefore not considered appropriate in this area. The river corridor in the north - west section of the town in particular is regarded as high landscape value and is close to a proposed area of landscape constraint. The proposed eastern relief road would not pass through the zone identified in the landscape sensitivity study, but would have an adverse impact on the setting of the high quality landscape when seen from certain viewpoints.

3.6.4 Arable fields dominate the open countryside with hedgerows forming field boundaries. The site does not seem to be especially high in biodiversity value and new development could increase the green infrastructure offering, with associated biodiversity benefits. There are no LWS on site, but two proposed LWS are just outside of the site boundary: Bridgetown Site and The Croft Preparatory School Plantation.

3.6.5 There are some small areas of woodland on site, and a large part of the site is within 4km of woodland of over 20ha (Shaping Neighbourhoods 2010). The northern part of the site contains an area of allotments; these could potentially be lost if developed. The option proposes to introduce open space and community woodland on site. This is likely to increase the biodiversity value of the area.

3.6.6 The site has been assessed on the basis that it is in Flood Risk Zone 1 and that it would incorporate Sustainable Urban Drainage.



South East of Stratford-upon-Avon



- 3.6.7 The option proposes residential and commercial development on site, as well as a local centre, primary school and potentially a secondary school. The provision of a mixed-use scheme could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car.
- 3.6.8 As with the other sites, increased development will produce emissions, both in the short term by transporting building materials, but also over the longer period as the materials have embodied energy and the residents of the new houses will create emissions through heating and water needs.
- 3.6.9 The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources. It could also mean an opportunity to provide Green Infrastructure in the medium term.
- 3.6.10 Minerals are known to be in the area. Sand and gravel deposits have been identified by the BGS (British Geological Society) and are likely to form minerals allocations in the emerging minerals plan. Risk of sterilization is high and should be avoided by working minerals first if viable. The area includes Grade 2 and 3a Agricultural Land.
- 3.6.11 Stratford is congested and has an Air Quality Management Area (AQMA) to help overcome some of the adverse air quality effects associated with heavy and congested traffic in the town. A new relief road will almost certainly help the flow of traffic but without further evidence it is difficult to evaluate if it is in the most sustainable location. Development could bring about short-term negative effects on air quality.
- 3.6.12 Due to the size of the proposed development there is the opportunity for the provision of a high quality public transport network. The mixed-use development, including employment and services could reduce the need for travel via car as people can access these services via walking.
- 3.6.13 The option proposes a major development on the urban fringe of Stratford-upon-Avon. Due to the location close to Stratford-upon-Avon there are many bus routes in the vicinity. The eastern part of the site is well serviced by bus stops, however the western area of the site is not within 400m of a bus stop (a standard suggested by Shaping Neighbourhoods 2010). There are also two railway stations in Stratford-upon-Avon, although these are not in the vicinity of the site.
- 3.6.14 The location close to Stratford-upon-Avon means there are many primary and secondary schools in the vicinity of the site. Two of the primary schools, and one secondary school are within the suggested (Shaping Neighbourhoods) buffer zone. It is unclear whether the schools have capacity for additional students, and as the option proposes 2,750 new homes the site will need additional facilities. The option suggests a primary school, and possibly a secondary school on site which would meet the needs of the new development and potentially service needs further afield.
- 3.6.15 The proposal also includes the introduction of a local centre (comprising of a range of shops, services, community and leisure facilities) which will help meet the needs of people living and working on the site.

- 3.6.16 The proposal introduces a large amount of new housing to the area, with 2,750 dwellings over the long term. As part of that, a percentage of the new housing will be affordable housing.
- 3.6.17 Due to the introduction of 2,750 dwellings, it is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car.
- 3.6.18 There is a hospital located in Stratford-upon-Avon and the recommended 5km buffer (Shaping Neighbourhoods 2010) covers the site. There are also doctor's surgeries within Stratford-upon-Avon, but these are not within the suggested walkable distance of 800m. The large size of Stratford-upon-Avon means that there are also leisure/sports centres in the vicinity of the site. Further facilities could be included on site.
- 3.6.19 The proposal suggests 8ha of employment land. The option also suggests a local centre which would include shops and services, further contributing to employment opportunities in the area.

Overall effect

- 3.6.20 Adverse effects have been identified due to the loss of, or potential damage to, heritage assets in the vicinity of the site. In addition, the landscape sensitivity of the area is of medium-high importance and could be harmed by development. Development here could result in the loss of a minerals resource, and potentially the loss of an area of allotments.
- 3.6.21 As there will be some employment development, the site will bring benefits in terms of direct, indirect and induced employment; this will be enhanced by the site's proximity to Stratford-upon-Avon. Again, the proximity to Stratford-upon-Avon is positive for sustainable transport and accessibility. The construction of a new relief road means the assessment against air quality and health is uncertain as the policy could encourage car use.

3.7 Option E.1: North of Southam

3.7.1 The full DAM for North of Southam is shown in **Appendix B**, the sustainability effect of the option is reproduced below in a simplified matrix with the related commentary alongside. For further information and detail, please see **Appendix B**.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
History, Cultural Heritage	Landscape	Biodiversity	Flood Risk	Climate Change Mitigation	Climate Change Adaptation	Natural Resource	Pollution	Waste	Transport	Rural Barriers	Countryside	Affordable Housing	Health, Wellbeing	Economy
-	--	-	++	+	+	+/-	0	0	+	++	-	++	-	+

3.7.2 There are two grade II listed buildings located in the northern part of the site, the Grand Union Canal Shop Lock and the Grand Union Canal Shop Lock Cottage. The nearby villages of Long Itchington and Southam both have conservation areas, although these are unlikely to be affected by development and would be protected as part of any development.

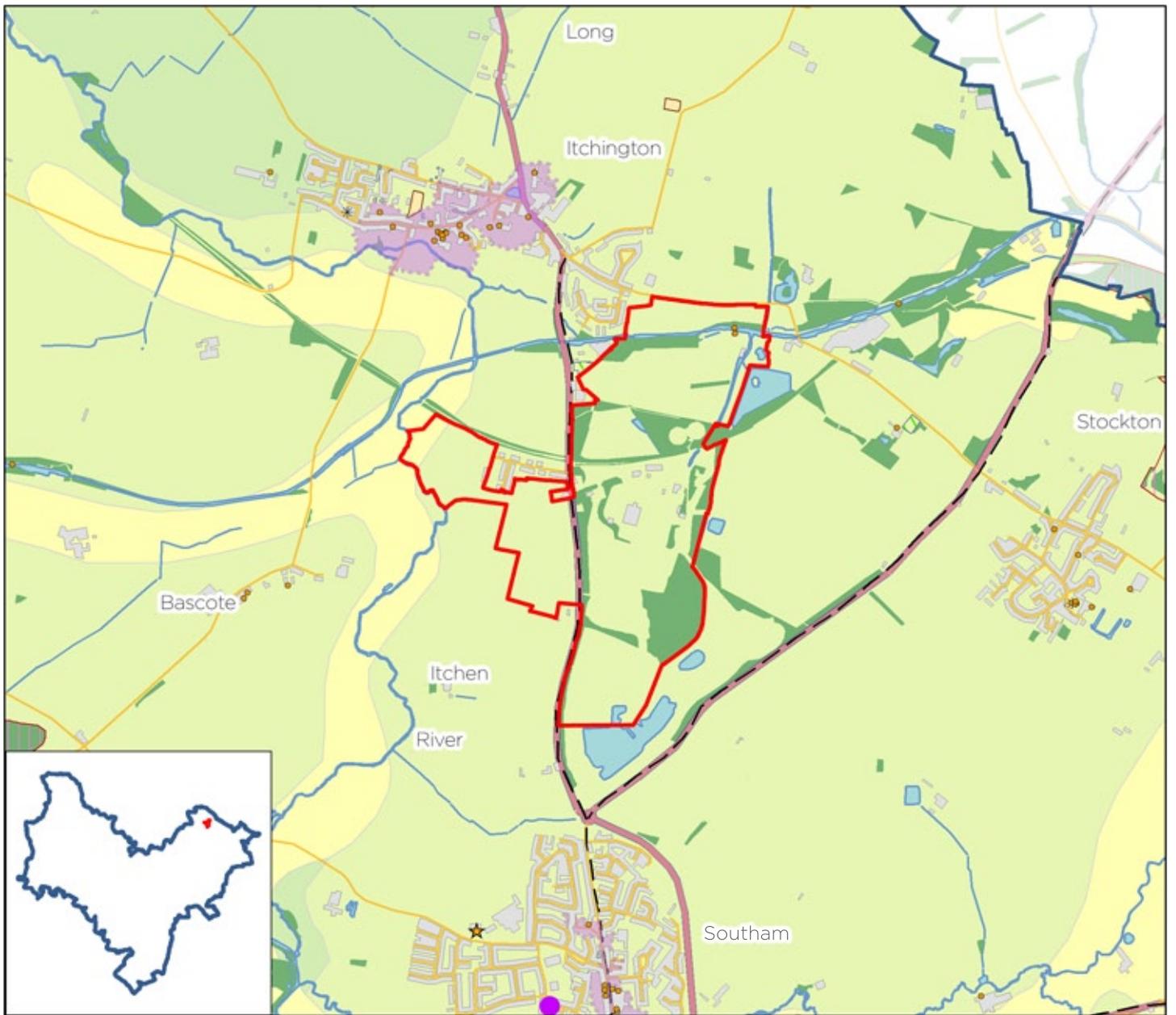
3.7.3 Development would enable the removal of existing buildings associated with the former cement works, however the development area includes sensitive landscape. The 2012 Landscape Sensitivity Assessment identifies the site as containing areas of medium, high to medium and high sensitivity. Initially there could be a significant adverse effect on the character and appearance of the landscape due to development. However the removal of existing buildings associated with the former cement works would also provide benefits in landscape terms.

3.7.4 A small proportion of the site (towards its southern edge) is designated as a Regionally Important Geological Site (RIGS). The site as a whole has been assessed on the basis that the RIGS would be retained and protected as part of the managed ecological areas proposed.

3.7.5 The site is important for birds, amphibians and invertebrates, including notable populations of the Small Blue butterfly (*Cupido minimus*). The site includes areas designated as a LWS: The Long Itchington Quarry. There would be potential for the development to include proposals for long-term management of these areas.

3.7.6 The site contains areas of woodland, meaning that the entire site falls within 500m of an area of woodland greater than 2ha in size. Part of the site is also within 4km of an area of woodland greater than 20ha in size. The development would have to retain sufficient areas of woodland to ensure that people have access to biodiversity.

3.7.7 The site is in Flood Risk Zone 1 and should incorporate Sustainable Urban Drainage.



North of Southam

- | | | | | | |
|--|--------------------------|--|--------------------------------|--|------------------|
| | North of Southam | | Listed building | | Bus routes |
| | Stratford District | | Scheduled monument | | Railway Station |
| | Secondary schools | | Traditional Orchard | | Railway |
| | Primary schools | | Allotments | | Woodland |
| | Doctor surgery | | Environmentally Sensitive Area | | Surface Water |
| | Hospital | | Green Belt | | Grade 1 |
| | Leisure or Sports Centre | | AONB | | Grade 2 |
| | Place of Worship | | Country Parks | | Grade 3 |
| | Police Station | | Park and Garden | | Grade 4 |
| | Built area | | A roads | | Grade 5 |
| | Conservation Areas | | B roads | | Non Agricultural |
| | SSSI | | Local, minor roads | | |
| | Local Nature Reserve | | Motorways | | |
| | Tree Preservation Orders | | Primary roads | | |

- 3.7.8 A large development of this size means that there will be an increase in emissions in the area, firstly from additional cars in the area and additional car journeys. In addition, the building of the houses will produce emissions through the transport of building materials and the embodied energy in the materials themselves. Furthermore the houses themselves will create emissions through heating and water needs.
- 3.7.9 The option proposes residential development on site, as well as a local centre and a primary school with a secondary school provided offsite. The provision of a mixed-use scheme could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking, cycling and alternatives to the car, although the lack of employment development may restrict this somewhat.
- 3.7.10 The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources. There is also the opportunity to provide Green Infrastructure in the medium term. Development at this location would enable the re-use of previously developed land, but it would also entail the loss of greenfield land. Cemetery
- 3.7.11 The development includes both residential development and the construction of services and amenities such as a primary school and a local centre.
- 3.7.12 There are bus routes on the A423 adjacent to the site, and the A426 to the east of the site. There are multiple bus stops within the nearby town of Southam, although none of these are within the prescribed 400m walking distance from the site (Shaping Neighbourhoods 2010). The bus stops in and around the village of Long Itchington would be more accessible to new residents on the site. Due to the size of the development there is an opportunity to improve accessible public transport on the route to Southam, by enhancing the existing bus services.
- 3.7.13 National Cycling Route 41 joins the northern border of the site towards Leamington Spa.
- 3.7.14 This is a housing led scheme, with no employment land allocated. This could mean that out-commuting associated with employment will be greater in the absence of employment opportunities being provided on-site.
- 3.7.15 The provision of a range of facilities on site, e.g. shops and leisure facilities will contribute to the accessibility objective. Strengthening existing public transport services would also benefit the wider community.
- 3.7.16 There is a primary school in Long Itchington, however this is not within the recommended 1km distance to allow it to be a walkable distance from the site. There are no secondary schools within range. However the option proposes a primary school on site, and a secondary school off site. This will help meet the demands of the new residents.
- 3.7.17 The site has been assessed on the basis that it would involve large-scale development of previously developed land in the countryside.

- 3.7.18 The proposal introduces a large amount of new housing to the area. In the long term this location could provide 2,000 homes. As part of that, a percentage of the new housing will be affordable housing.
- 3.7.19 A large influx of new residents and housing is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car.
- 3.7.20 Combining housing development and the creation of a local centre could provide a range of opportunities which could contribute to the health objective. However as the total housing number is made up of two sites, the individual sites may not be able to support the required services,
- 3.7.21 There are no health facilities within range of the site. There are two doctors' surgeries in Southam but these are not within walking distance (800m, Shaping Neighbourhoods 2010). There is a leisure/sports centre which could partially meet the needs of new residents.
- 3.7.22 The proposals will include some employment generating uses, e.g. associated with community facilities, although there is no proposal for a large area of employment development

Overall effect

- 3.7.23 The site is partly previously developed, with some areas of undeveloped land. The site is assessed as being of medium to high sensitivity to residential development, and there are two listed buildings on site, as well as a RIGS and a LWS which could be affected by inappropriate development. The option proposes residential development as well as including other services such as a local centre, a range of shops, services, community facilities and a primary school which will help meet the demands of new residents and improve accessibility in the rural area.

3.8 Option E.2: West of Southam (Stoneythorpe)

3.8.1 The full DAM for West of Southam (Stoneythorpe) is shown in **Appendix B**, the sustainability effect of the option is reproduced below in a simplified matrix with the related commentary alongside. For further information and detail, please see **Appendix B**.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
History, Cultural Heritage	Landscape	Biodiversity	Flood Risk	Climate Change Mitigation	Climate Change Adaptation	Natural Resource	Pollution	Waste	Transport	Rural Barriers	Countryside	Affordable Housing	Health, Wellbeing	Economy
0	--	+	--	-	+	+/-	0	0	-	-	--	+	-	0

3.8.2 There are no listed buildings on site although the Lodge Gates and Gate piers at the entrance of Stoneythorpe Hall on the A425 opposite the site are listed. There is the historic record Thorpe Bridge on the northern boundary of the site. Limited research has suggested that there are no archaeological finds on site.

3.8.3 The Landscape Sensitivity Study advises that the area directly to the east of the site is of medium/high landscape sensitivity, within the description the landscape sensitivity to commercial and housing development advises that any development to the west of the area (which would encompass part of the site) would take development over the hill and would be unacceptable. There is the potential for significant environmental effect if development occurred at this location.

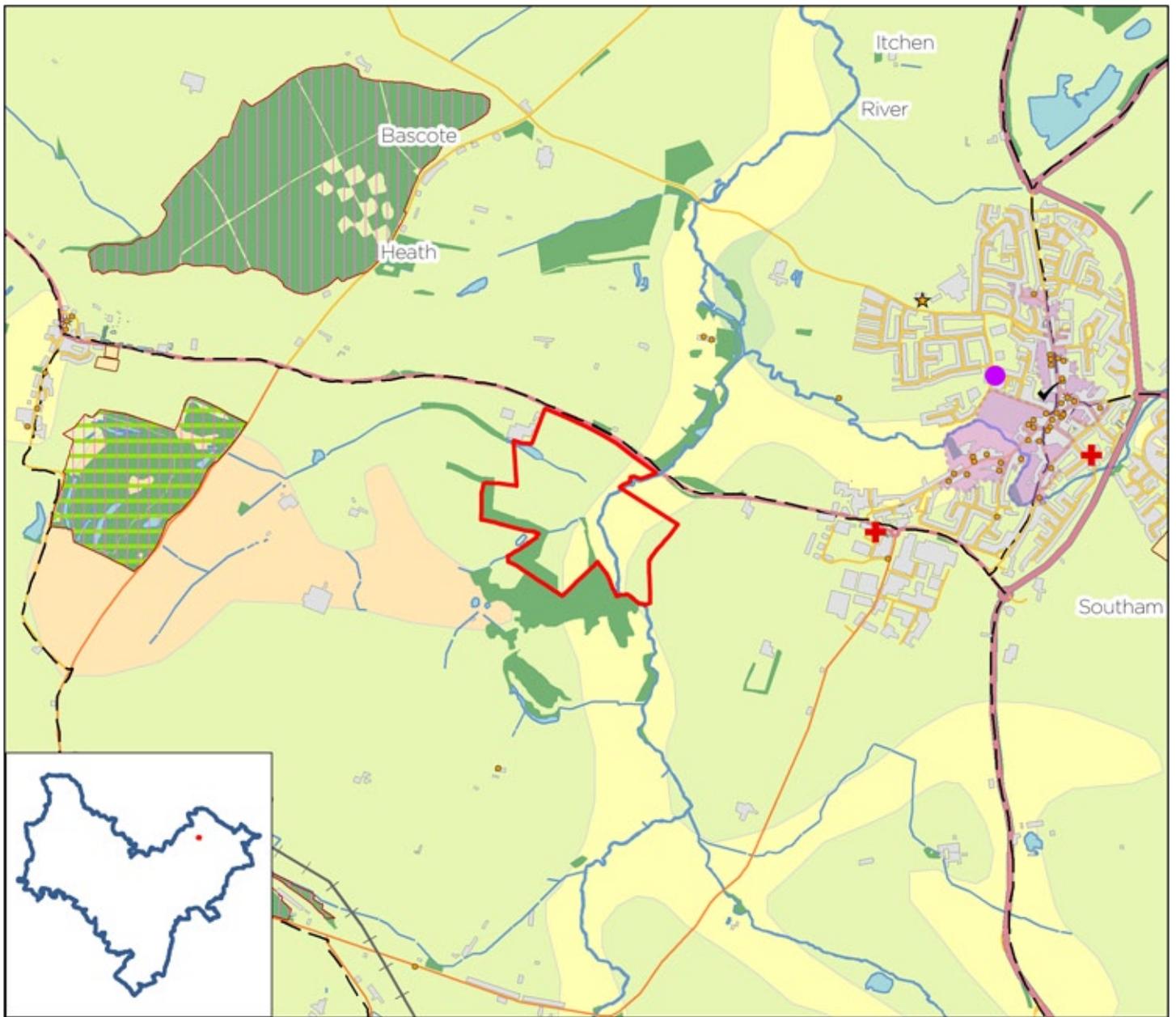
3.8.4 Furthermore, the proposed route of the new railway line, High Speed Two (HS2) crosses the northern part of the site. Construction of HS2 is due to commence in 2017. The construction of the railway is likely to cause some noise pollution. This will continue once HS2 becomes operational (expected to be in 2026). The proposed site would be affected by the noise pollution caused by both construction and operation of HS2.

3.8.5 There is Deciduous Woodland BAP priority habitat located on the south/southwest edge (MAGIC, 2013) of the site. This is also a proposed LWS (Ufton Hill Farm Fields). This means that development on this site would be within 500m of woodland of over 2ha (Shaping Neighbourhoods 2010), although it is slightly further than 4km away from woodland of over 20ha. There is no other biodiversity of note found on site. The introduction of managed ecological areas could improve the biodiversity value of the area over the longer term.

3.8.6 EA advises significant risk of flooding (greater than 1.3% of flooding each year, 1 in 75), associated with the River Itchen which runs through the site.

3.8.7 This is a small development on a relatively isolated site, which could give rise to reliance on journeys by car - contributing to Greenhouse Gas emissions. The small size of the site could mean that renewable energy provision or energy efficiency measures are not considered viable at this location.

3.8.8 The site provides the potential to provide Green Infrastructure, and the option proposes open space, managed ecological and woodland planting. The site is grade 3 Agricultural Land but it is uncertain whether it is grade 3a or 3b.



West of Southam Stoneythorpe



- 3.8.9 The size of the scheme is likely to make the provision of a high quality public transport service difficult. The isolated nature of the location could lead to reliance on the car. There is currently a bus route along the A425, with a bus stop to the north west of the site. These existing transport facilities could be enhanced to improve the sustainable transport options in the vicinity.
- 3.8.10 Similarly to the other options, development could increase emissions due to the short-term effect of material transportation, as well as the increased heating and water demand. However as the site is of a smaller scale, these effects are likely to be smaller.
- 3.8.11 It is likely that the scheme would be too small to support services and is not well located to existing services. There are primary schools at Southam, but they are not within 1km walking distance to the site. The proposal suggests the creation of a primary school on site, which could improve accessibility in the area.
- 3.8.12 The site is not previously developed and is in the open countryside
- 3.8.13 The proposal suggests 800 dwellings and it is likely that a percentage of the new housing will be affordable housing.
- 3.8.14 The size of the scheme means that it is unlikely to be able to support new higher order facilities. The site is fairly remote from existing services, however there is a doctor's surgery in the south west of Southam, which is just over 800m from the site and potentially within walking distance. It is unknown if the surgery has capacity. The option proposes open space, managed ecological and woodland planting on site, with access to recreation and leisure uses on the adjacent landfill site. This will provide easily accessible open space and recreation facilities, which could help improve the health of residents.

Overall effect

- 3.8.15 There are potential significant effects in relation to biodiversity and flood risk, although the option proposes that there will be ecological and woodland planting management on site. The size and location of the scheme also means that it could be difficult to promote more sustainable forms of transport, through provision of improved bus services and accessible amenities. Existing facilities in Southam may struggle to cope with the additional demand created by 800 new homes.

4 Significant effects and mitigation

4.1 Significant effects, mitigation and uncertainty

4.1.1 This chapter considers significant potential adverse effects that have been identified through the assessment process and recorded as uncertain using the assessment classification in **Table 2.1** and **Appendix A**. If the assessment is identified as uncertain, this has been grouped as potentially adverse and mitigation has been discussed.

4.1.2 The mitigation hierarchy is a sequential process that operates in the following way: firstly, if possible, adverse effects should be avoided. Failing this, the nature of the effect should be reduced, if possible, so that it is no longer significant. If neither avoidance nor reduction is feasible, mitigation measures should be considered. Mitigation prescriptions might include changes to policy wording, advocating design guides, offsetting biodiversity effects or provision of new supporting green infrastructure. In the case of this SA Report, mitigation has been supplied to help address negative effects so that, if possible, no residual effects remain.

4.1.3 The final column in the DAMs shows the best-case scenario; if the assessment identifies an adverse effect in this column, this signifies a residual adverse effect.

4.2 Prescribed mitigation

4.2.1 This chapter discusses the mitigation prescribed for each option. This list of mitigation is not exhaustive and further mitigation, or alternative mitigation which achieves the same ends, can be utilised.

4.3 Option B: Gaydon/Lighthorne Heath

4.3.1 Effects associated with construction may be capable of mitigation through the routing of construction traffic.

4.3.2 Development on this scale would have to adhere to policy CS.9 in relation to the historic environment which protects historic buildings and policy CS.6 on landscape and CS.10 on design and distinctiveness would also apply.

4.3.3 Landscaping should be implemented to screen the listed buildings and the setting of Lighthorne Conservation Area from the new site in the longer term to protect from harm, as well as potentially improving the townscape and setting of historic assets.

4.3.4 To mitigate the potential adverse effect on the character of the area, the distinctive landscape features such as Chesterton Wood and Gaydon Coppice should be retained and incorporated into the new development.

- 4.3.5 Design standards should be implemented to ensure that the development will be in keeping with the area, incorporating landscaping. The site could provide an opportunity to improve the local landscape and townscape in the long term. Any new settlement here would have the opportunity to introduce enhanced design standards and more traditional built styles that combine with sustainable design. The implementation of high design standards is required for a positive assessment.
- 4.3.6 Initially there could be an adverse effect on the character and appearance of the landscape due to development. The introduction of open space and other green area could help reduce this adverse impact.
- 4.3.7 Much could be done as part of a new development to enhance the green infrastructure provision, including creation of more woodland, introduction of water features and planting of a natural noise and landscape barrier that could also function as a wildlife corridor alongside the M40. Important biodiversity features should be protected. Areas of lower biodiversity value should be developed on, with landscaping and green areas incorporated as part of the development. There should be no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.
- 4.3.8 There will also be potential for local energy generation, and District Heating from renewable / low carbon resources should be incorporated.
- 4.3.9 Further green spaces should be introduced which are connected to the GI network. Existing features should contribute towards the provision of Green Infrastructure, including public access, where this is consistent with other objectives. The scheme should incorporate Sustainable Urban Drainage.
- 4.3.10 A Soil Management Plan could be used to mitigate effects in relation to soils. It is not possible to mitigate against the loss of agricultural land, so the importance and demand for the agricultural land needs to be assessed.
- 4.3.11 The scale and mix of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys. Ambitious targets for modal shift should be set. This could include additional and more frequent bus routes and services. A high quality public transport service should be implemented. Green Infrastructure and provision for walking and cycling could help improve health.
- 4.3.12 It is necessary to ensure that an appropriate range of services, facilities and sustainable transport infrastructure are provided.
- 4.3.13 Sensitive landscape design will be required to mitigate intrusive landscape effects, whilst at the same time contributing to green infrastructure assets.

Overall Proposed Mitigation for site

- 4.3.14 The site has the several constraints. The presence of biodiversity rich areas will have to be considered, with protection and retention of these areas being made a priority. The potential for focus on car journeys should be addressed and sustainable transport infrastructure should be implemented from day one with the setting of a target for modal shift from the car. Due to the greenfield nature of the site (although the land is not particularly resource rich) design and siting of the development should be carefully considered, to ensure that the character and integrity of the area is protected. New education facilities should be made available. A development of this scale provides the opportunity for innovative approaches to management and long-term stewardship of green space, community assets and community development.

4.4 Option C: Long Marston Airfield

- 4.4.1 Any areas which are of importance to the landscape of the area should be retained. High design standards should be implemented. The site provides the opportunity for the appearance and local distinctiveness to be strengthened. Sensitive landscape design will be needed to help mitigate intrusive landscape effects, whilst at the same time contributing to green infrastructure assets.
- 4.4.2 Important biodiversity features should be protected. Areas of lower biodiversity value should be developed on, with landscaping and green areas incorporated as part of the development. There should be no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.
- 4.4.3 Development on the site could be at risk from flooding. Any development would have to be designed and sited in a manner that would reduce the risk and damage caused by flooding. In addition, development would need to ensure that it did not contribute to flood risk elsewhere, this could include Sustainable Urban Drainage Systems.
- 4.4.4 There will also be potential for local energy generation, and District Heating from renewable / low carbon resources should be incorporated.
- 4.4.5 Existing features should contribute towards the provision of Green Infrastructure, including public access, where this is consistent with other objectives. Further green spaces should be introduced which are connected to the GI network where possible. Green Infrastructure and provision for walking and cycling could help improve health.
- 4.4.6 Any minerals on site could be worked prior to development if viable.
- 4.4.7 To increase the sustainability value of the proposal, it needs to provide a high quality public transport service. This could include additional and more frequent bus routes. A high quality public transport service should be implemented.
- 4.4.8 It is necessary to ensure that an appropriate range of services and facilities are provided.

Overall Proposed Mitigation for site

- 4.4.9 Mitigation such as Sustainable Urban Drainage Systems would be required in relation to flood risk. Design is also important to mitigate against landscape and character degradation; the new development must be in keeping with local design. Further sustainable transport infrastructure should be implemented to provide an alternative to cars, including a high quality public transport service.

4.5 Option D: South East Stratford

- 4.5.1 It is important to establish whether there are any features of importance prior to development occurring.
- 4.5.2 There are listed buildings on the western border of the site. These, and the Scheduled Ancient Monument west of Tiddington and its setting would need protecting. Any development would need to consider the setting of the town and provide ample landscaping. Any areas which are of importance to the landscape and townscape of the area should be retained. High design standards should be implemented.
- 4.5.3 Important biodiversity features should be protected. The areas of woodland and allotments should be retained, in order to ensure there is no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.
- 4.5.4 The scheme should incorporate Sustainable Urban Drainage.
- 4.5.5 There will also be potential for local energy generation, and District Heating from renewable / low carbon resources should be incorporated.
- 4.5.6 A high quality public transport service should be implemented.
- 4.5.7 Existing features should contribute towards the provision of Green Infrastructure, including public access where this is consistent with other objectives. There is also the opportunity to introduce further green spaces which are connected to the GI network where possible.
- 4.5.8 Any minerals on site should be worked prior to development if viable. A Soil Management Plan could be used to mitigate effects in relation to soils.
- 4.5.9 It is not possible to mitigate against the loss of agricultural land, so the importance and demand for the agricultural land needs to be assessed.
- 4.5.10 A Low Emission Strategy for the site, together with provision of a high quality public transport service could help avoid effects on the AQMA.
- 4.5.11 To increase the sustainability value of the proposal it needs to provide a high quality public transport service. This could include additional and more frequent bus routes.
- 4.5.12 The scale and mix of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys.
- 4.5.13 It is necessary to ensure that an appropriate range of services and facilities are provided.

- 4.5.14 Sensitive landscape design will be required to mitigate intrusive landscape effects, whilst at the same time contributing to green infrastructure assets.
- 4.5.15 Green Infrastructure and provision for walking and cycling could also help improve health.

Overall Proposed Mitigation for site

- 4.5.16 The importance of the site in archaeological terms should be established prior to development. Any minerals present on site could be exploited, prior to development taking place if viable. The scheme should emphasise sustainable methods of transportation and ensure that a modal shift in transportation occurs.

4.6 Option E.1: North of Southam

- 4.6.1 Any development on the site would need to be sympathetically designed to minimise the potential impacts on the two listed buildings on site. If well designed, development has the opportunity to improve the setting of the historic assets. Furthermore, development would need to consider the setting of the listed buildings and conservation areas in Long Itchington and Southam.
- 4.6.2 Design standards should be implemented to ensure that the development will be in keeping with the area, incorporating landscaping. The site could provide an opportunity to improve the local landscape in the long term. The implementation of high design standards is required for a positive assessment.
- 4.6.3 Development should take place on areas of lower biodiversity value, with areas of higher value such as the RIG, the LWS and the standing water left untouched or enhanced so that important biodiversity features are protected. To enhance the biodiversity value further, landscaping, open space and green areas should be incorporated into the development.
- 4.6.4 The aim should be to achieve a net gain in biodiversity at this location, with important areas of ecological value not harmed by development. This includes retaining sufficient woodland to ensure access to biodiversity. The important areas for biodiversity must be retained in order to maintain a positive assessment.
- 4.6.5 The scheme should incorporate Sustainable Urban Drainage.
- 4.6.6 It will be important that modal shift is achieved, potentially providing further employment opportunities, and ensuring there are alternatives to transport via car.
- 4.6.7 Existing features should contribute towards the provision of Green Infrastructure, including public access where this is consistent with other objectives.
- 4.6.8 A Soil Management Plan should be required to protect soil resources.

- 4.6.9 The location of the site means that in the short term new residents are likely to travel via car and improvements to the bus services should be implemented. The scale of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys through provision of additional employment opportunities.
- 4.6.10 It is necessary to ensure that an appropriate range of services and facilities are provided. Including additional higher order facilities to aid the wider population will help improve accessibility in the rural area.
- 4.6.11 The requirements for new development to promote good design will help ensure that the site is well designed and that development adds to the character of the area.
- 4.6.12 The design and siting of the development is important to improve the outcome.
- 4.6.13 The site should probably provide new health facilities to meet the needs of the new residents. A solo doctor's surgery has approximately 2,000-3,000 people on their books and so the site could support a new doctor.
- 4.6.14 Green Infrastructure and provision for walking and cycling could also help improve health.
- 4.6.15 If this site were to be allocated it might be appropriate to provide some additional employment facilities on-site in addition to the small number of employment opportunities provided by the community facilities and the local centre.

Overall Proposed Mitigation for site

- 4.6.16 The site does have some constraints; the presence of biodiversity rich areas, listed buildings and industrial heritage will have to be considered, with protection and retention of these areas being made a priority. Developments should be designed and sited sympathetically.
- 4.6.17 The potential for focus on car journeys should be addressed and sustainable transport infrastructure should be implemented from day one with the setting of a target for modal shift from the car. If this site was taken forward, the provision of some additional employment might help make the development more sustainable. Additional services and facilities should be considered such as a doctor's surgery to reduce barriers to those living in rural areas.

4.7 Option E.2: West of Southam (Stoneythorpe)

- 4.7.1 If development takes place, it should be designed and sited sympathetically so that it can be integrated into the landscape in the longer term. Design standards should be implemented to ensure that the development will be in keeping with the area, incorporating landscaping. The site could provide an opportunity to improve the local landscape in the long term. The implementation of high design standards is required for a positive outcome.

- 4.7.2 This site has been assessed on the basis that existing features, such as the woodland, are retained and enhanced. Development should occur on areas of lower biodiversity value, with landscaping and green areas incorporated as part of the development. There should be no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.
- 4.7.3 Any development would need to avoid areas at risk of flooding and also ensure that development does not increase flood risk elsewhere.
- 4.7.4 It is necessary to ensure that any development supports improvements to existing bus services and measures to enable walking and cycling are put in place.
- 4.7.5 It could also introduce renewable energy or energy efficiency measures to optimise sustainability value
- 4.7.6 A Soil Management Plan could be used to ensure that soils are appropriately used on site
- 4.7.7 Sustainable transport options should be provided through increasing accessible facilities on or near to the site. This could encourage walking and cycling and reduce rural barriers. It is necessary to provide enhanced public transport.
- 4.7.8 It is necessary to retain and enhance existing landscape features in order to minimise effects.
- 4.7.9 Existing facilities (such as the doctor's surgery) in the south west of Southam should be enhanced, or new facilities should be built, in order to meet the demand from the new residents; otherwise the development is likely to increase the demand on existing facilities.
- 4.7.10 The proposed development could introduce employment opportunities.

Overall Proposed Mitigation for site

- 4.7.11 As the site is small by comparison to the other options, it is unlikely to be able to support new facilities. Therefore, for development to take place existing facilities and public transport should be enhanced and strengthened to cope with the increased demand. Any development would need to preserve and enhance existing biodiversity features on site and avoid areas at risk of flooding. It is necessary to promote public transport, walking and cycling.

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5 Conclusions and next steps

5.1 Residual Adverse Effects

5.1.1 There are three issues which constitute a residual adverse effect across all of the options. These consist of development in a flood risk area; development which has an effect on the countryside; and development on land of high agricultural value (classified as Grade 3a or above). These issues cannot be mitigated and should be carefully considered.

5.2 Conclusions

5.2.1 It is difficult to consistently compare the assessment of all five options as the first option is not site specific and discusses dispersed development, whereas the further four options have identified a specific site for development. The four options (B - E) have been assessed in a DAM and have utilised GIS data and maps to identify the likely significant effects of development in each area.

5.2.2 In regard to option A, the conclusions are that dispersing development will restrict development from being concentrated in specific settlements which could have areas of high sensitivity to development. However, by utilising the further dispersal option, there will continue to be incremental housing increases in a wide range of places. Although this is less likely to have a significant effect on one place, the cumulative impact of incremental increases could lead to an adverse in-combination effect on the district as a whole. This could include fundamental changes to the character of Stratford-on-Avon's existing towns and villages. However it is difficult to assess the full sustainability effects of option A consistently against options B - E without having the exact site locations of the dispersed development.

5.2.3 Option A (dispersed approach) has previously been appraised by the SA process in 2013 (see SA Report dated 18th January, 2012: Sustainability Appraisal of the Stratford-on-Avon Core Strategy: Part 3 Housing Development Options SA Report). The difficulties with appraising dispersed housing options are highlighted in this report.

5.2.4 In sustainability terms, due to the potential in-combination effect, it may be more sustainable to concentrate development in a new settlement which would be able to support new services, facilities and job opportunities and therefore perform well against the social and economic SA objectives. The environmental SA objectives could be assessed positively if the development is sympathetically sited and designed.

Table 5.1: Summary of SA results for Options A-E

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Option	Cult. heri	Lands.	Biod.	Flood Risk	Climate Change Miti.	Climate Change Adapt.	Natural Resource	Poll.	Waste	Trans	Rural Barriers	Country.	Affordable Housing	Health, Wellbeing	Econ.
A	+/-	+/-	+/-	+/-	--	+/-	+/-	-	0	-	-	-	++	+/-	+/-
B	-	--	+	++	+	+	-	0	0	+	++	--	++	-	++
C	0	+/-	-	-	+	+	+	0	0	+/-	++	-	++	-	+
D	-	--	+	++	+	+	--	+/-	0	+	++	-	++	++	+
E.1	-	--	-	++	+	+	+/-	0	0	+	++	-	++	-	+
E.2	0	--	+	--	-	+	+/-	0	0	-	-	--	+	-	0

5.2.5 The results of the assessment indicate that option E (both E.1 and E.2) performs less effectively in sustainability terms. There are multiple adverse effects of developing on both sites E.1 and E.2, and whereas some sites can negate their adverse effects through incorporating mitigation as part of their design, option E.2 lacks the ability to mitigate its adverse effects due to its smaller order of magnitude.

5.2.6 The remaining options: option B (Gaydon/Lighthorne Heath), option C (Long Marston Airfield) and option D (South East Stratford) perform at a similar level of sustainability. It is difficult to rank the options in order of performance; it depends what mitigation is put in place, and the order of importance placed on the SA objectives.

5.3 Next steps

5.3.1 The Council will consider comments received and use them to finalise the Core Strategy for ‘submission’ to the Secretary of State for public examination later this year. Prior to this, there will be a further round of statutory public consultation when the submission version will be placed ‘on deposit’ for 6 weeks. An SA Report will be prepared to accompany the submission version of the Core Strategy.

5.3.2 The submission stage will be an opportunity for everyone to comment on the ‘soundness’ of the Core Strategy, prior to public examination by an independent planning inspector. This will determine whether the Core Strategy is ‘fit for purpose’, has been prepared properly and represents the most appropriate and sustainable way of meeting the development challenges facing Stratford-on-Avon District.

APPENDIX A

Standards used in the assessment process

LC-0005 Stratford-on-Avon SA Framework with criteria

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	Q1a	Will it preserve buildings of architectural or historic interest and, where necessary, encourage their conservation and renewal?	SDC will conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations in accordance with the NPPF. Draft Policy CS.9 'Historic Environment' seeks to protect the historic environment and provides the basis for controlling development that potentially affects such assets.	++ Securing appropriate new uses for unused listed buildings, or Where there is a known enhancement to a historic asset(s)
		Q1b	Will it preserve or enhance archaeological sites/remains?		+ Potential to enhance the setting of historic assets, or Potential enhancements to the townscape, or Potential enhancement to the setting of a listed building
		Q1c	Will it improve and broaden access to, understanding, and enjoyment of the historic environment?		- Potential negative impact on the setting of historic assets, or Potential degradation of the townscape or loss of ridge and furrow or <u>potential</u> impact on heritage assets
		Q1d	Will it preserve or enhance the setting of cultural heritage assets?		-- Loss of a listed building or Negative impact on historic assets
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Q2a	Will it safeguard and enhance the character of the landscape and local distinctiveness and identity?	Draft Policy CS.6 'Landscape' seeks to protect the landscape character and quality of the district and provides the basis for controlling landscape related effects.	++ Potential to re-use degraded landscape/townscape in a prominent location
		Q2b	Will it safeguard and enhance the character of the townscape and local distinctiveness and identity?		+ Potential to enhance degraded landscape/townscape (in a less prominent location),

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
					identify as no significant effect.
		Q2c	Will it preserve or enhance the setting of cultural heritage assets?		- Potential impact on an area of medium sensitivity as identified in the Landscape Sensitivity Assessment (2011, 2012) or the Stratford Urban Edge Study indicates that the area is moderate fragility or Potential issues associated with noise or light pollution that will be difficult to mitigate
		Q2d	Will it help limit noise pollution?		
		Q2e	Will it help limit light pollution?		-- Potential for impact on an area of medium to high or high sensitivity as identified in the Landscape Sensitivity Assessment (2011, 2012) or the Stratford Urban Edge Study indicates that the area is of high fragility or Potential issues associated with noise or light pollution that cannot be mitigated
		Q2f	Will it encourage well-designed, high quality developments that enhance the built and natural environment?		
3	Protect, enhance and manage biodiversity and geodiversity.	Q3a	Will it lead to a loss of or damage to biodiversity interest?	SDC will work towards implementation of the Local Biodiversity Action Plan.	++ Potential for a significant net increase in biodiversity AND contribution to the network of corridors/ spaces or 2ha accessible woodland is within 500m (or 20ha accessible woodland is within 4km) of the site AND allotments are within 200m of the site AND there is a park within 300m of the site AND there is an area of major natural greenspace within 2km of the site
		Q3b	Will it lead to habitat creation, matching BAP priorities?	Legislation relating to Protected Species will apply to future planning applications, e.g. the Wildlife and Countryside Act, 1981.	
		Q3c	Will it maintain and enhance sites nationally designated for their biodiversity interest and increase their area?	Draft Policy GS.7 'Natural Environment' seeks to protect biodiversity and geodiversity.	+ Potential for a net increase in biodiversity or 2ha accessible woodland is within 500m (or 20ha accessible woodland is

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
		Q3d	Will it increase the area of sites designated for their geodiversity interest?	This policy requires projects to work towards a net gain in biodiversity.	within 4km) of the site or allotments are within 200m of the site or there is a park within 300m of the site or there is an area of major natural greenspace within 2km of the site
		Q3e	Will it maintain and enhance sites designated for their geodiversity interest?		- Potential harm to locally designated habitats or Fragmentation of existing corridors/spaces or one of the below does not apply: 2ha accessible woodland is within 500m (or 20ha accessible woodland is within 4km) of the site AND allotments are within 200m of the site AND there is a park within 300m of the site AND there is an area of major natural greenspace within 2km of the site
		Q3f	Will it link up areas of fragmented habitat?		
		Q3g	Will it increase awareness of biodiversity and geodiversity assets?		-- Potential harm to nationally designated habitats AND / OR leads to fragmentation of existing corridors/ spaces or none of the below apply: 2ha accessible woodland is within 500m (or 20ha accessible woodland is within 4km) of the site AND allotments are within 200m of the site AND there is a park within 300m of the site AND there is an area of major natural greenspace within 2km of the site
4	Reduce the risk of flooding.	Q4a	Will it help prevent flood risk present in the district from fluvial flooding?	Draft Policy DS.3 'Water Environment and Flood Risk' provides the policy context for locating development within flood risk areas.	++ Development in flood risk zone 1 AND will provide Sustainable Urban Drainage
		Q4b	Will it help prevent flood risk		+ Development in flood risk zone 1

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
			present in the district from surface water flooding?		- Development in flood risk zone 2
		Q4c	Will it help limit potential increases in flood risk likely to take place in the district as a result of climate change?		-- Development in flood risk zone 3a or 3b
5	Minimise the district's contribution to climate change.	Q5a	Will it help reduce Stratford-on-Avon's carbon footprint?	Draft Policy CS.2 'Climate Change and Sustainable Energy' provides the policy context for ensuring that new development minimises reduction in climate change.	<p>++Opportunities for either renewable energy provision or energy efficiency measures above those identified in the assumptions have been clearly defined for the site See approach to Objective 10 in relation to transport factors</p> <p>+ Opportunities for either renewable energy provision or energy efficiency measures above those identified in the assumptions are considered to be viable for the site See approach to Objective 10 in relation to transport factors</p> <p>- Opportunities for either renewable energy provision or energy efficiency measures identified in the assumptions are not considered to be viable for the site See approach to Objective 10 in relation to transport factors</p> <p>-- Development of the site would constrain a renewable energy scheme coming forward See approach to Objective 10 in relation to transport factors</p>
		Q5b	Will it help raise awareness of climate change mitigation?		

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
6	Plan for the anticipated levels of climate change.	Q6a	Will it help limit potential increases in flood risk likely to take place in the district as a result of climate change?	Draft Policy CS.2 'Climate Change and Sustainable Energy' includes a requirement for developments to demonstrate that they have taken account of future climate change risks.	++ Development leads to the provision of significant Green Infrastructure that is accessible by the occupants of development and the wider community.
		Q6b	Will it encourage the development of buildings prepared for the impacts of climate change?		+ Development allows the enhancement of existing Green Infrastructure.
		Q6c	Will it retain existing green infrastructure and promote the expansion of green infrastructure to help facilitate climate change adaptation?		- Development with poor access to existing Green Infrastructure or development of a greenfield site -- Development results in the loss of existing Green Infrastructure.
7	Protect and conserve natural resources.	Q7a	Will it include measures to limit water consumption?	Draft Policy CS.10 'Design and Distinctiveness' includes a requirement for the use of local materials and effective water management.	++ The site has demonstrable potential to enhance water quality Development on a large site that is wholly on previously developed land (10ha or more)
		Q7b	Will it safeguard the district's minerals resources for future use?		+ Development of the site may be able to enhance water quality or Development on a small site (less than 10ha) that is wholly on previously developed land or development of a larger site that includes some previously developed land
		Q7c	Will it utilise derelict, degraded and under-used land?	Draft Policy CS.4 'Minerals' provides the context for safeguarding minerals and notes that economically viable reserves might be extracted prior to non-mineral development.	- Development of the site would present a potential risk of pollution to a sensitive receptor that could be mitigated. or Development of the site may lead to
		Q7d	Will it lead to the more efficient use of land?		
		Q7e	Will it lead to reduced consumption of materials and resources?		

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
					<p>inefficient water use or Development of a greenfield site of 10ha or less or Loss of Grade 3a Agricultural Land (where the land is Grade 3 mark as uncertain)</p>
		Q7f	Will it lead to the loss of the best and most versatile agricultural land?		<p>--Development of the site would present a known risk of pollution to a sensitive receptor. or Development represents a very inefficient use of water. or Development of a greenfield site over 11 ha or Loss of Grade 1 or 2 Agricultural land.</p>
8	Reduce air, soil and water pollution.	Q8a	Will it lead to improved water quality of both surface water groundwater features?	<p>Draft Policy CS.3 'Water Environment and Flood Risk' includes criteria for the protection of the water environment.</p> <p>It is assumed that in those instances where an increase in sewage treatment capacity or other increases in the capacity of related infrastructure are required these will take place prior to development being occupied.</p>	++ Development addresses existing air, soil and water pollution
		Q8b	Will it lead to improved air quality?		+ Development addresses an existing problem across air, soil and water
		Q8c	Will it maintain and enhance soil quality?		- Development near an existing Air Quality Management Area with potential to increase traffic within the AQMA AND within 200m of the centre of a main road
		Q8d	Will it reduce the overall amount of diffuse pollution to air, water and soil?		-- Development within an existing AQMA with potential to increase traffic within the AQMA or development is within 200m of the centre of a main road
9	Reduce waste generation and disposal, and promote the waste hierarchy of	Q9a	Will it provide facilities for the separation and recycling of waste?	Draft Policy CS.5 'Waste' identifies the need for Site Waste Management Plans during the	Neutral

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
	reduce, reuse, recycle/compost, energy recovery and disposal.	Q9b	Will it encourage the use of recycled materials in construction?	<p>construction phase for all projects over £300,000.</p> <p>The policy also identifies requirements in relation to the design of new development and the provision of waste management facilities.</p>	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	Q10a	Will it reduce the need to travel?	Draft Policy CS.27 identifies the need for new development to mitigate unacceptable transport impacts.	<p>++ Development with a high level of multi-modal accessibility to a range of facilities. This would include a railway station or A mixed use development with a high quality bus service or development is within 600m of a train station AND 400m of a bus stop</p> <p>+ Development with a moderate level of multi-modal accessibility to a range of facilities This would include a mixed use scheme that includes provision for walking and cycling or a residential led scheme that includes a high quality bus service or development is within 600m of a train station OR 400m of a bus stop</p> <p>- Development with a low level of accessibility to facilities by walking that is likely to rely on journeys by car or development is more than 600m of a train station AND/OR more than 400m of a bus stop</p> <p>-- Development with a very poor level of accessibility to basic facilities and</p>
		Q10b	Will it encourage walking and cycling?		
		Q10c	Will it reduce car use?		
		Q10d	Will it encourage use of public transport?		
		Q10e	Will it provide adequate means of access by a range of sustainable transport modes?		

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
		Q10f	Will it help limit HGV traffic flows?		amenities that is likely to rely on journeys by car. or development is significantly more than 600m of a train station AND significantly more than 400m of a bus stop
11	Reduce barriers for those living in rural areas	Q11a	Will it increase provision of local services and facilities and reduce centralisation?	Draft Policy CS.26 'Healthy Communities' relates to the provision of new facilities and the retention of existing facilities.	++ Site will provide high quality, accessible facilities or amenities for use by the occupants of a development and the wider population.
		Q11a	Will it improve accessibility by a range of transport modes to services and facilities from rural areas?		+ Site will provide high quality, accessible facilities or amenities to meet increased demand created by new development or meet demand by improving the accessibility / capacity of existing facilities or is located close to existing facilities with capacity. This includes a primary school within 1km and a secondary school within 2km
		Q11a	Will it support the provision of affordable housing in rural areas?		- Site may increase demand on existing facilities or have limited accessibility to facilities and amenities i.e. there is no primary school within 1km and no secondary school within 2km -- Site may lead to unacceptable increase in the demand on, or severance of communities from existing facilities and amenities or site may lead to the loss of existing community facilities or site increases demand on existing facilities AND there is limited accessibility to facilities and amenities i.e. there is no

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
					primary school within 1km and no secondary school within 2km
12	Protect the integrity of the district's countryside.	Q12a	Will it prevent the degradation of land on the urban fringe?	Draft Policy CS.8 'Green Infrastructure' seeks to protect, enhance, restore and create green infrastructure. Draft Policy CS.6 'Landscape' seeks to maintain landscape character and quality. Draft Policy CS.10 'Design and Distinctiveness' seeks to protect features that contribute to the distinctiveness of local areas.	++ Development of previously developed land within existing settlements.
		Q12b	Will it lead to a loss of agricultural land?		+ small-scale development in previously developed land in the open countryside or small-scale development of greenfield land in the urban fringe
		Q12c	Will it safeguard local distinctiveness and identity?		- large-scale development in previously developed land in the open countryside or large-scale development of greenfield land in the urban fringe
					-- Development of greenfield land in the open countryside
13	Provide affordable, environmentally sound and good quality housing for all.	Q13a	Will it ensure all groups have access to decent, appropriate and affordable housing?	Draft Policy CS.17 'Housing Development' sets out the overall requirement for housing and the proposed distribution across the district. Draft Policy CS.18 'Affordable Housing' relates to the provision of affordable housing and identifies the need for a minimum of 35% of housing to be affordable, subject to viability. Draft Policy CS.2 'Climate Change and Sustainable Energy' and Policy CS.10 'Design and Distinctiveness' include provisions relating to the Code for Sustainable Homes (and	++ Site will make a significant contribution to this objective by providing 2000 or more homes
		Q13b	Will it identify an appropriate supply of land for new housing?		+ Site will make a contribution to this objective by providing up to 1,999 or fewer homes.
		Q13c	Will it ensure that all new development contributes to local distinctiveness and improve the local environment?		- Development would result in the loss of existing housing or a site that is suitable for housing (10 units or less)
		Q13d	Will it meet the building specification guidance in the Code for Sustainable Homes? (DCLG)		-- Development would result in the loss of existing housing or a site that is suitable for housing (11 units or more).

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
		Q13e	Will it reduce the number of households on the Housing Register?	any replacement).	
14	Safeguard and improve community health, safety and wellbeing.	Q14a	Will it improve access for all to health, leisure and recreational facilities?	Draft Policy CS.26 seeks to provide facilities that contribute to this objective.	++Provision of new and accessible health facilities including doctors, dentists, pharmacies in addition to existing facilities that will help meet wider needs
		Q14b	Will it improve and enhance the district's green infrastructure network?	Draft Policy CS.28 sets out SDC's intent to introduce a Community Infrastructure Levy (CIL) to fund infrastructure and community facilities necessary to accommodate growth and to mitigate cumulative impacts.	+ Existing health facilities with capacity are accessible from the site i.e. a hospital within 5km, doctor's surgery within 800m and a leisure centre within 1,900m.
		Q14c	Will it improve long-term health?		or the development is of sufficient size to support facilities that will meet the needs of the development (but not wider needs).
		Q14d	Will it ensure that risks to human health and the environment from contamination are identified and removed?		or the development includes measures to improve safety for pedestrians and cyclists.
		Q14c	Will it improve long-term health?		- The site is located more than 5km from a hospital, 800m from a doctor's surgery and 1,900m from a leisure centre, but these facilities have capacity.
		Q14e	Will it encourage healthy and active lifestyles?		or the development would reduce safety for pedestrians and cyclists.
		Q14f	Will it reduce obesity?		
		Q14g	Does it consider the needs of the district's growing elderly population?		--The site is located more than 5km from a hospital, 800m from a doctor's surgery and 1,900m from a leisure centre AND these facilities do not have capacity.
		Q14h	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?		or The site is located significantly more than 5km from a hospital, 800m from a doctors surgery and 1,900m from a leisure centre but these facilities have

SA Objective		Decision making criteria: Will the option/proposal...		The SA assumes that	Assessment protocols for sites
		Q14i	Will it improve the satisfaction of people with their neighbourhoods as a place to live?		capacity.
		Q14j	Will it reduce crime and the fear of crime?		
		Q14k	Will it reduce deprivation in the district?		
		Q14l	Will it improve road safety?		
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	Q15a	Will it ensure that new employment, office, retail and leisure developments are in locations that are accessible to those who will use them by a choice of transport modes?		++ Site will support a broad range of employment sectors or employment allocation of 20ha or more
		Q15b	Will it help ensure an adequate supply of employment land?		+ Site will support more than one desired employment sector or employment allocation of less than 20ha
		Q15c	Will it support or encourage new business sectors?		- Development would not incorporate employment uses on a site that is suitable.
		Q15d	Will it support the visitor economy?		-- Development results in the loss of existing employment

APPENDIX B

Detailed Assessment Matrices

No.	Description of SA Objective	Description of predicted effect	Duration			Frequency
			Short term	Medium term	Long term	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	The Historic Environment Assessment (2012) identifies a number of assets within the proposed site allocation. These include an area of High to Medium Archaeological Sensitivity to the North East of Gaydon. There are listed buildings in the vicinity of the site and the setting of these will be a consideration when any development is considered in more detail. Short-term adverse effects on local heritage assets such as the listed buildings in the vicinity are likely to occur in the short term; due to the effect of development and the consequent noise and disturbance effects, including HGVs.	-	-	-	single event
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	The site is characterised by open countryside which ranges in quality according to the diversity of landscape features. These include nearby woodlands (Chesterton Wood) at the northern end of the site, Gaydon Coppice and hedgerows. Parts of the landscape are lower quality for example near junction 12 of the M40. The Landscape Sensitivity Study (2012) identifies that the site includes areas of medium and high to medium landscape sensitivity. The built character of Lighthorne Heath lacks distinctiveness. Initially there could be a minor adverse effect on the character and appearance of the landscape due to development. The introduction of open space and other green areas could help reduce this adverse impact.	--	--	+	ongoing
3	Protect, enhance and manage biodiversity and geodiversity.	Chesterton Wood is a proposed Local Wildlife Site (LWS) and part of it is ancient semi-natural woodland (ASNW). Whilst it is outside of the development location it is an important feature that should be retained, enhanced and protected. Woodlands are robust habitat features but can suffer in quality if not managed or affected by 'urban edge' effects which can include fires, predation from cats and litter. Biodiversity levels are likely to be low in association with the larger arable fields, however hedgerows are likely to be of value to biodiversity and should be retained. Other important relevant biodiversity features is the ASNW at Gaydon Coppice LWS, near the centre of the site and the lakes that lie to the north of this wood. The lakes have not been surveyed as part of this SA but may be important for protected species including amphibians and or reptiles. Another constraint is the LWS at the former quarry. The centre and northern part of the site is within a 500m buffer zone of woodland (a standard suggested by Shaping Neighbourhoods 2010). The presence of woodland in and around the site offers potential for sustainable accessible to biodiversity in the area. The option proposes to incorporate parks, open space and community woodland, as well as introducing a local nature reserve on the former quarry. This will add to the biodiversity value of the area in the long term.	-	+	+	ongoing
4	Reduce the risk of flooding.	Assessed on the basis that the site is in Flood Risk Zone 1 and that it would incorporate Sustainable Urban Drainage.	++	++	++	ongoing
5	Minimise the district's contribution to climate change.	The development is mixed-use and is comprised of housing, employment land, a main centre, a local centre and a primary school. The mixed-use nature of the site could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car. The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources.	+	+	+	ongoing
6	Plan for the anticipated levels of climate change.	A site of this size provides the opportunity to provide Green Infrastructure, including the proposed parks, open space and community woodland, in the medium term.	0	+	+	ongoing
7	Protect and conserve natural resources.	Loss of soil at this site (as with all sites) represents a loss of natural resources - an irreversible effect. The site includes land in Grade 3a.	-	-	-	ongoing
8	Reduce air, soil and water pollution.	No significant effects at this level of detail.	0	0	0	
9	Reduce waste generation and disposal, and achieve the sustainable management of waste.	No significant effects at this level of detail.	0	0	0	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	A mixed use development, including employment, local and main centres and a primary school will help ensure that a self-sufficient community is created, this could reduce the need for travel via car. There are multiple bus stops on the B4100 along the west of the site. This improves the accessibility of the proposal and ensures that there are alternatives to car travel available. However not all of the site is within 400m of a bus stop (a standard suggested by Shaping Neighbourhoods 2010), existing bus services could be improved due to the size of the proposed development.	+	+	+	ongoing
11	Reduce barriers for those living in rural areas.	There is currently a primary school in Lighthorne Heath, which would serve part of the site. However there would be insufficient capacity at existing facilities to meet the demand created by 3,000 new homes. The proposal includes the introduction of a main centre (comprising of a range of shops, services, community and leisure facilities), a local centre and a primary school which will improve accessibility in the longer term The area currently has some employment opportunities, namely Aston Martin, Jaguar, Land Rover and the Heritage Museum. The site is close to small villages but not within the vicinity of larger towns, therefore providing housing and employment development in this area together is likely to help provide opportunities in the wider area.	-	++	++	ongoing
12	Protect the integrity of the district's countryside.	Assessed on the basis that this is a greenfield site in the countryside.	--	--	--	ongoing
13	Provide affordable, environmentally sound and good quality housing for all.	In the long term this location could provide 3,000 dwellings. The proposal introduces a large amount of new housing to the area. As part of that, a percentage of the new housing will be affordable housing.	+	++	++	ongoing
14	Safeguard and improve community health, safety and well being.	A large influx of new residents and housing is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car. A mixed use development provides a range of opportunities which could contribute to this objective, however these have not been explicitly stated. There are no health facilities within range of the site. For example there are doctors surgeries to the north east and the south west, but these are beyond the 800m buffer suggested by Shaping Neighbourhoods 2010.	-	-	-	ongoing
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value lower impact activities.	The nearby employment centres of Aston Martin, Jaguar, Land Rover and the Heritage Museum all provide employment opportunities. These facilities will be expanded by a further 100ha, if selected. The option also proposes a main and local centre which would include shops and services, further contributing to employment opportunities	++	++	++	ongoing

Option B

New settlement at Gaydon/
Lighthorne Heath providing
3,000 dwellings, 100ha of
land for Jaguar Land Rover

Overall Effect

The development is proposed on an area of greenfield land, with areas of high biodiversity value, and areas of low biodiversity value. There are currently limited local services in the area, although the proposal includes the implementation of new amenities. The site is located close to the M40 motorway providing an opportunity for travel, there are also opportunities for travel via bus. As part of the proposal, both housing and employment development will take place providing affordable housing and employment opportunities currently lacking in the area. Although the proposal is likely to affect the character of the area, the area is not recognised as being an exemplar for character, therefore implementing stringent design guides will help mitigate any adverse effects, and potentially improve the feel of the area. Although the use of cars at this location could be an issue in the short term, the site is strategically linked to the settlements of Stratford-upon-Avon, Banbury and Warwick. If these links are capitalised on using sustainable modes of transportation the effect on employment, quality of life and wellbeing could be significant.

Reversibility	Geographic significance	Magnitude	Level of certainty (probability)	Overall Effect	Mitigation or other action required?	Supporting comments / Proposed mitigation	Best Case Scenario Effect
permanent	local	low	low	-	yes	Effects associated with construction may be capable of mitigation through the routing of construction traffic. Development on this scale would have to adhere to policy CS.9 in relation to the historic environment which protects historic buildings and policy CS.6 on landscape and CS.10 on design and distinctiveness would also apply. Landscaping should be implemented to screen the listed buildings from the new site in the longer term to protect from harm, as well as potentially improving the townscape and setting of historic assets.	+
permanent	local	medium	medium	--	yes	To mitigate the potential adverse effect on the character of the area the distinctive landscape features such as Chesterton Wood should be retained and incorporated into the new development. Design standards should be implemented to ensure that the development will be in keeping with the area, incorporating landscaping. The site could provide an opportunity to improve the local landscape and townscape in the long term. Any new settlement here would have the opportunity to introduce enhanced design standards and more traditional built styles that combine with sustainable design. The implementation of high design standards in accordance with Policy CS.10 is required for a positive assessment.	+
permanent	local	low	medium	+	yes	Much could be done as part of a new development to enhance the green infrastructure provision including creation of more woodland, introduction of water features and planting of a natural noise and landscape barrier that could also function as a wildlife corridor alongside the M40. Important biodiversity features should be protected as suggested by policy CS.7. Areas of lower biodiversity value should be developed on, with landscaping and green areas incorporated as part of the development. There should be no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.	++
permanent	local	low	medium	++	yes	Scheme to incorporate Sustainable Urban Drainage.	++
permanent	regional	high	low	+	yes	There will also be potential for local energy generation, including District Heating from renewable / low carbon resources should be incorporated. A high quality public transport service should be implemented.	+
permanent	local	low	low	+	yes	Ensure that existing areas contribute towards the provision of Green Infrastructure, including public access, where this is consistent with other objectives. Introduce further green spaces which are connected to the GI network	++
permanent	local	low	low	-	yes	A Soil Management Plan could be used to mitigate effects in relation to soils. Cannot mitigate against the loss of agricultural land, the importance and demand for the agricultural land needs to be assessed.	-
				0	no		0
				0	no		0
permanent	local and regional	medium	low	+	yes	The scale and mix of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys. Ambitious targets for modal shift should be set (see separate text on this) by the Core Strategy. This could include additional and more frequent bus routes. The assessment assumes that sustainable transport infrastructure will be implemented.	+
permanent	local and regional	high	medium	++	yes	Need to ensure that an appropriate range of services and facilities are provided.	++
permanent	local	low	medium	--	yes	Sensitive landscape design will be required to mitigate intrusive landscape effects whilst at the same time contributing to green infrastructure assets.	--
permanent	local and regional	high	high	++	no		++
permanent	local	low	medium	-	yes	The site is of sufficient scale to provide new health facilities, which could contribute to this objective. Green Infrastructure and provision for walking and cycling could also help improve health.	+
permanent	local and regional	high	high	++	no		++

Proposed Mitigation

The site does have some constraints; the presence of biodiversity rich areas will have to be considered, with protection and retention of these areas being made a priority. The potential for focus on car journeys should be addressed and sustainable transport infrastructure should be implemented from day one with the Core Strategy providing a target for modal shift from the car. Due to the greenfield nature of the site (although the land is not particularly resource rich) design and siting of the development should be carefully considered to ensure that the character and integrity of the area is protected. New education facilities should be made available. A development of this scale provides the opportunity for innovative approaches to management and long term stewardship of green space, community assets and community development.

Key

Major negative effect	--
Negative effect	-
Uncertain effect,	+/-
Positive and negative effect	+&-
Positive effect	+
Major positive effect	++
No significant environmental effect	0

No.	Description of SA Objective	Description of predicted effect	Duration			Frequency
			Short term	Medium term	Long term	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	No significant effects at this level of detail.	0	0	0	
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	The airfield is located in an arable landscape and is part greenfield and part brownfield. It is not covered by any of the landscape sensitivity work undertaken by SDC. Initially there could be an adverse effect on the character and appearance of the landscape due to development. The proposal includes open space and managed ecological areas.	-	+/-	+/-	ongoing
3	Protect, enhance and manage biodiversity and geodiversity.	There are a few small areas of woodland and watercourses located on site, but none known to be of high biodiversity value. There are areas of woodland in the vicinity of the site; the southern part of the site is within 4km of an area woodland over 20ha (a standard suggested by Shaping Neighbourhoods 2010). No available data was sourced with regard to biodiversity value of the grassland at the airfield. There is also a proposed LWS covering much of the site. This represents a constraint that could require significant biodiversity offsetting. The introduction of managed ecological areas could improve the biodiversity value of the area over the longer term.	-	+/-	+	ongoing
4	Reduce the risk of flooding.	The western edge of the site has a significant chance of flooding. The chance of flooding each year is greater than 1.3% (1 in 75).	-	-	-	ongoing
5	Minimise the district's contribution to climate change.	The development is mixed-use and is comprised of housing, employment land, a local centre, a primary school and a secondary school. The mixed-use nature of the site could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car. The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources.	+	+	+	ongoing
6	Plan for the anticipated levels of climate change.	A site of this size provides the opportunity to provide Green Infrastructure, including open space and managed ecological areas in the medium term.	0	+	+	ongoing
7	Protect and conserve natural resources.	Assessed on the basis that the site is Grade 3b Agricultural Land and contains sand and gravel deposits, which would be worked prior to development if viable.	+	+	+	single event
8	Reduce air, soil and water pollution.	Wastewater capacity is at its limit in the area but the site is assessed on the basis that the necessary upgrades would be made in order to avoid significant environmental effects.	0	0	0	
9	Reduce waste generation and disposal, and achieve the sustainable management of waste.	No significant effects at this level of detail.	0	0	0	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	A development of this scale provides the opportunity to provide a high quality public transport network. As the site is proposed to be a mixed use development, including employment and services this could reduce the need for travel via car. There are bus routes running down the B4632 which borders the site to the east, and Long Marston Road/Lane which is to the west of the site. Two of the bus stops on the route are in the vicinity of the site and could be utilised by new residents. However only a small amount of the site is within 400m of a bus stop (a standard suggested by Shaping Neighbourhoods 2010).	-	?	?	ongoing
11	Reduce barriers for those living in rural areas.	There is currently a primary school in Lower Quinton and Welford-on-Avon. However there would be insufficient capacity at existing facilities to meet the demand created by 3,000 new homes. The proposal includes the introduction of a local centre (comprising of a range of shops, services, community and leisure facilities), a primary school and a secondary school, which will improve accessibility over the wider area in the longer term.	-	++	++	ongoing
12	Protect the integrity of the district's countryside.	Assessed on the basis that the site includes previously developed land but is a large scale development in the countryside	-	-	-	ongoing
13	Provide affordable, environmentally sound and good quality housing for all.	The proposal suggests 3,500 dwellings in the long term. The proposal introduces a large amount of new housing to the area. As part of that, a percentage of the new housing will be affordable housing.	++	++	++	ongoing
14	Safeguard and improve community health, safety and well being.	Due to the introduction of 3,500 new homes and residents is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car. As the site is mixed use, the proposal could include health facilities which could contribute to this objective, however these have not been explicitly stated. There are no health facilities within the suggested (Shaping Neighbourhoods 2010) 800m range of the site. Although there is an existing doctors surgery in Lower Quinton, this is further than 800m from the site and it is unknown whether the surgery has capacity for additional patients.	-	-	-	ongoing
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value lower impact activities.	The proposal suggests 13ha of employment land. The option also suggests a local centre which would include shops and services, further contributing to employment opportunities in the area.	++	++	++	ongoing

Option C

Long Marston Airfield -
3,500 dwellings and 13ha of
employment land

Overall Effect

As the site is located in open countryside, in an area associated with flood risk and few amenities there are many adverse effect associated with the site. The site is partially greenfield and located in the countryside so is likely to have impacts on the character and landscape quality. A further issue with the location is the distance to facilities, employment opportunities and services; currently the amenities in the area would not support a development of this size. This is likely to mean travel by car to get to jobs and shops. However the proposal suggests the implementation of both residential and commercial development, as well as the introduction of a local centre, a primary school and a secondary school; this will improve the sustainability value of the site. There are no significant effects on biodiversity or historical assets due to the lack of important biological or historical features in the vicinity.

Reversibility	Geographic significance	Magnitude	Level of certainty (probability)	Overall Effect	Mitigation or other action required?	Supporting comments / Proposed mitigation	Best Case Scenario Effect
				0		There are no known heritage constraints at this site.	0
permanent	local	low	low	+/-	yes	Any areas which are of importance to the landscape and townscape of the area should be retained. High design standards should be implemented in accordance with Policy CS10. The site provides the opportunity for the appearance and local distinctiveness to be strengthened.	+
permanent	local	medium	medium	-	yes	Important biodiversity features should be protected as suggested by policy CS.7. Areas of lower biodiversity value should if necessary be prioritised for development, with other parts of the site forming the core parts of a local biodiversity network, incorporated into and around the development. There should be no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.	++
permanent	local	high	medium	-	yes	Development on the site could be at risk from flooding. Any development would have to be designed and sited in a manner that would reduce the risk and damage caused by flooding. In addition, development would need to ensure that it did not contribute to flood risk elsewhere.	-
permanent	local	medium	low	+	yes	There will also be potential for local energy generation, including District Heating from renewable / low carbon resources should be incorporated. A high quality public transport service should be implemented.	+
permanent	local	medium	medium	+	yes	Ensure that existing areas contribute towards the provision of Green Infrastructure, including public access, where this is consistent with other objectives. Introduce further green spaces which are connected to the GI network where possible.	+
permanent	local	low	low	+	yes	Any minerals on site could be worked prior to development if viable.	+
				0			0
				0			0
permanent	regional	high	medium	+/-	yes	To increase the sustainability value of the proposal the proposal needs to provide a high quality public transport service. This could include additional and more frequent bus routes. The scale and mix of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys. ANY new road proposal should be subject to EIA or at least consider a range of effects that might arise from a new road and supply requisite mitigation.	+/-
permanent	local	high	low	++	yes	Need to ensure that an appropriate range of services and facilities are provided.	++
permanent	local	high	low	-	yes	Sensitive landscape design will be needed to help mitigate intrusive landscape effects whilst at the same time contributing to green infrastructure assets.	-
permanent	local	low	medium	++	no		++
permanent	local	low	low	-	yes	Need to consider the scope for providing facilities on site. Green Infrastructure and provision for walking and cycling could also help improve health.	+
permanent	local	medium	low	+	no		++

Proposed Mitigation

Mitigation would be required in relation to flood risk. Design is also important to mitigate against landscape and character degradation; the new development must be in keeping with local design. Further sustainable transport infrastructure should be implemented to provide an alternative to cars, including a high quality public transport service.

Key

- Major negative effect
- Negative effect
- Uncertain effect,
- Positive and negative effect
- Positive effect
- Major positive effect
- No significant environmental effect

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No.	Description of SA Objective	Description of predicted effect	Duration			Frequency
			Short term	Medium term	Long term	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	The Historic Environment Assessment (2008) identifies a Scheduled Monument to the west of Tiddington (Roman Road site Village) and many heritage assets. The disturbance of potential archaeological features would occur in the short term due to the development on the site. If features are present on site then the building work will eradicate them, with no effect thereafter.	-	-	-	single event
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	The Landscape Sensitivity Assessment (2011) suggests that the location is mostly of medium sensitivity to development. The area to the south of this location as medium-high importance, development here would have an adverse effect on this receptor. The hill itself forms the skyline in views from all directions and, while acting as the backcloth to the settlement, also screens it from wider view to the east. The skyline, prominence and openness of this rural countryside make the area sensitive. Housing and commercial development is therefore not considered appropriate in this area. The river corridor in the north - west section of the town in particular is regarded as high landscape value and is close to a proposed area of landscape constraint. The proposed road would not pass through the zone identified in the landscape sensitivity study but would have an adverse impact on the setting of the high quality landscape when seen from certain view points.	--	--	+	ongoing
3	Protect, enhance and manage biodiversity and geodiversity.	Arable fields dominate the open countryside with hedgerows forming field boundaries. The site does not seem to be especially high in biodiversity value and new development could increase the green infrastructure offering, with associated biodiversity benefits. There are some small areas of woodland on site, and a large part of the site is within 4km of woodland of over 20ha (Shaping Neighbourhoods 2010). The northern part of the site contains an area of allotments, these could potentially be lost if developed. The option proposes to introduce open space and community woodland on site, this is likely to increase the biodiversity value of the area.	+	+	+	ongoing
4	Reduce the risk of flooding.	Assessed on the basis that the site is in Flood Risk Zone 1 and that it would incorporate Sustainable Urban Drainage.	++	++	++	ongoing
5	Minimise the district's contribution to climate change.	The option proposes residential and commercial development on site, as well as a local centre, primary school and potentially a secondary school. The provision of a mixed-use scheme could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car. The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources.	+	+	+	ongoing
6	Plan for the anticipated levels of climate change.	A site of this size provides the opportunity to provide Green Infrastructure in the medium term.	0	+	+	ongoing
7	Protect and conserve natural resources.	Minerals are known to be in the area. Sand and gravel deposits have been identified by the BGS (British Geological Society) and are likely to form minerals allocations in the emerging minerals plan. Risk of sterilization is high and should be avoided by working minerals first if viable. The area includes Grade 2 and 3a Agricultural Land.	--	--	--	single event
8	Reduce air, soil and water pollution.	Stratford is congested and has an AQMA to help overcome some of the adverse air quality effects associated with heavy and congested traffic in the town. A new road crossing will almost certainly help the flow of traffic but without further evidence it is difficult to evaluate if it is in the most sustainable location. Development could bring about short term negative effects on air quality.	-	+/-	+/-	ongoing
9	Reduce waste generation and disposal, and achieve the sustainable management of waste.	No significant effects at this level of detail.	0	0	0	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	Due to the size of the proposed development there is the opportunity for the provision of a high quality public transport network. The mixed use development, including employment and services could reduce the need for travel via car as people can access these services via walking. The implementation of an eastern relief road could reduce congestion in the area and improve transportation. Due to the location close to Stratford-upon-Avon there are many bus routes in the vicinity. The eastern part of the site is well serviced by bus stops, however the western area of the site is not within 400m of a bus stop (a standard suggested by Shaping Neighbourhoods 2010). There are also two railway stations in Stratford-upon-Avon, although these are not in the vicinity of the site.	+	+	+	ongoing
11	Reduce barriers for those living in rural areas.	The location close to Stratford-upon-Avon means there are many primary and secondary schools in the vicinity of the site. Two of the primary schools, and one secondary school are within the suggested (Shaping Neighbourhoods) buffer zone. It is unclear whether the schools have capacity for additional students, and as the option proposes 2,750 new homes the site will need additional facilities. The option suggests a primary school, and possibly a secondary school on site which would meet the needs of the new development and potentially services needs further afield. The proposal also includes the introduction of a local centre (comprising of a range of shops, services, community and leisure facilities) which will help meet the needs of the site	++	++	++	ongoing
12	Protect the integrity of the district's countryside.	Assessed on the basis that this is development of countryside on the existing urban edge.	-	-	-	ongoing
13	Provide affordable, environmentally sound and good quality housing for all.	The proposal suggests 2,750 dwellings over the long term. The proposal introduces a large amount of new housing to the area. As part of that, a percentage of the new housing will be affordable housing.	++	++	++	ongoing
14	Safeguard and improve community health, safety and well being.	Due to the introduction of 2,750 dwellings is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car. There is a hospital located in Stratford-upon-Avon and the recommended 5km buffer (Shaping Neighbourhoods 2010) covers the site. There are also doctors surgeries within Stratford-upon-Avon, but these are not within the suggested walkable distance of 800m. The large size of Stratford-upon-Avon means that there are also leisure/sports centres in the vicinity of the site. Further facilities could be included on site.	++	++	++	ongoing
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value lower impact activities.	The proposal suggests 8ha of employment land. The option also suggests a local centre which would include shops and services, further contributing to employment opportunities in the area.	+	+	+	ongoing

Option D
South East Stratford - up to 2,750 dwellings and 8ha employment land

Overall Effect

Adverse effects have been identified due to the loss or potential damage of heritage assets in the vicinity of the site. In addition, the landscape sensitivity of the area is of medium-high importance and could be harmed by development. Development here would result in the loss of a minerals site, and potentially the loss of an area of allotments. As employment development the site will bring benefits in terms of direct, indirect and induced employment, this will be enhanced by the sites proximity to Stratford-upon-Avon. Again, the proximity to Stratford-upon-Avon is positive for sustainable transport and accessibility. Although the construction of a new relief road means the assessment against air quality and health is uncertain as the policy could encourage car use,

Reversibility	Geographic significance	Magnitude	Level of certainty (probability)	Overall Effect	Mitigation or other action required?	Supporting comments / Proposed mitigation	Best Case Scenario Effect
permanent	local to regional	medium	low	-	yes	It is important to establish whether there are any features of importance prior to development occurring. There are listed buildings on the western border of the site, these, and the SAM west of Tiddington and its setting would need protecting.	+
permanent	local	medium	medium	--	yes	Any development would need to consider the setting of the town and provide ample landscaping. Any areas which are of importance to the landscape and townscape of the area should be retained. High design standards should be implemented in accordance with Policy CS10.	+
permanent	local	low	medium	+	yes	Important biodiversity features should be protected as suggested by policy CS.7. The areas of woodland and allotments should be retained in order to ensure there is no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.	++
permanent	local	low	medium	++	yes	Scheme to incorporate Sustainable Urban Drainage.	++
permanent	local	medium	low	+	yes	There will also be potential for local energy generation, including District Heating from renewable / low carbon resources should be incorporated. A high quality public transport service should be implemented.	+
permanent	local	low	low	+	yes	Ensure that existing areas contribute towards the provision of Green Infrastructure, including public access, where this is consistent with other objectives. Introduce further green spaces which are connected to the GI network where possible.	+
permanent	local to regional	medium	low	--	yes	Any minerals on site should be worked prior to development if viable. A Soil Management Plan could be used to mitigate effects in relation to soils. Cannot mitigate against the loss of agricultural land, the importance and demand for the agricultural land needs to be assessed.	--
reversible	local to regional	medium	low	+/-	yes	A Low Emission Strategy for the site, together with provision of a high quality public transport service could help avoid effects on the AQMA.	+
				0			0
permanent	local	high	medium	+	yes	To increase the sustainability value of the proposal the proposal needs to provide a high quality public transport service. This could include additional and more frequent bus routes. The scale and mix of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys.	+
permanent	local	high	low	++	yes	Need to ensure that an appropriate range of services and facilities are provided.	++
permanent	local	low	medium	-	yes	Sensitive landscape design will be required to mitigate intrusive landscape effects whilst at the same time contributing to green infrastructure assets.	-
permanent	local	low	medium	++	no		++
permanent	local	low	low	++	yes	Need to consider the scope for providing facilities on site. Green Infrastructure and provision for walking and cycling could also help improve health.	++
permanent	local	medium	low	+	no		++

Proposed Mitigation

The importance of the site in archaeological terms should be established prior to development. Any minerals present on site could be exploited prior to development taking place if viable. The policy should emphasise sustainable methods of transportation and ensure that a modal shift in transportation occurs.

Key

- Major negative effect
- Negative effect
- Uncertain effect,
- Positive and negative effect
- Positive effect
- Major positive effect
- No significant environmental effect

--
-
+/-
+&-
+
++
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No.	Description of SA Objective	Description of predicted effect	Duration			Frequency
			Short term	Medium term	Long term	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	There are two grade II listed buildings located in the northern part of the site, the Grand Union Canal Shop Lock and the Grand Union Canal Shop Lock Cottage. The nearby villages of Long Itchington and Southam both have conservation areas, such as the Model Village although these are unlikely to be affected by development and would be protected as part of any development.	-	-	-	long term
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Development would enable the removal of existing buildings associated with the former cement works however the development area includes sensitive landscape. The 2012 Landscape Sensitivity Assessment identifies the site as containing areas of medium, high to medium and high sensitivity. Initially there could be a significant adverse effect on the character and appearance of the landscape due to development. However the removal of existing buildings associated with the former cement works would also provide benefits in landscape terms.	--	--	-	ongoing
3	Protect, enhance and manage biodiversity and geodiversity.	A small proportion of the site (towards its southern edge) is designated as a Regionally Important Geological site (RIG). The site as a whole has been assessed on the basis that the RIGS would be retained and protected as part of the managed ecological areas proposed. The standing water within the site may be important for birds, amphibians and invertebrates, including notable populations of the Small Blue butterfly (<i>Cupido minimus</i>). The site includes areas designated as a Local Wildlife Site (LWS). There would be potential for the development to include proposals for long-term management of these areas. The site contains areas of woodland, meaning that the entire site falls within 500m of an area of woodland greater than 2ha in size. Part of the site is also within 4km of an area of woodland greater than 20ha in size. The development would have to retain sufficient areas of woodland to ensure that people have access to biodiversity.	-	-	+	ongoing
4	Reduce the risk of flooding.	Assessed on the basis that the site is in Flood Risk Zone 1 and that it would incorporate Sustainable Urban Drainage.	++	++	++	ongoing
5	Minimise the district's contribution to climate change.	A large development of this size means that there will be an increase in emissions in the area, firstly from additional cars in the area and additional car journeys. In addition, the building of the houses will produce emissions through the transport of building materials and the embodied energy in the materials themselves. Furthermore the houses themselves will create emissions through heating and water needs. The option proposes residential development on site, as well as a local centre and a primary school with a secondary school provided offsite. The provision of a mixed-use scheme could help reduce carbon emissions associated with transport by helping to reduce the need to travel, promote walking and cycling and alternatives to the car, although the lack of employment development may restrict this somewhat. The size of the development means there will also be potential for local energy generation, including District Heating from renewable / low carbon sources.	+	+	+	ongoing
6	Plan for the anticipated levels of climate change.	A site of this size provides the opportunity to provide Green Infrastructure in the medium term.	0	+	+	ongoing
7	Protect and conserve natural resources.	Development at this location would enable the re-use of previously developed land, it would also entail the loss of greenfield land.	+&-	+&-	+&-	ongoing
8	Reduce air, soil and water pollution.	No significant effects at this level of detail.	0	0	0	
9	Reduce waste generation and disposal, and achieve the sustainable management of waste.	No significant effects at this level of detail.	0	0	0	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	The development includes both residential development and the construction of services and amenities such as a primary school and a local centre. There are bus routes on the A423 along the west boundary of the site, and the A426 to the east of the site. There are multiple bus stops within the nearby town of Southam, although none of these are within the proscribed 400m walking distance from the site (Shaping Neighbourhoods 2010). The bus stops in and around the village of Long Itchington would be more accessible to new residents on the site. Due to the size of the development there is an opportunity to improve accessible public transport on the route to Southam, by enhancing the existing bus services. National Cycling Route 41 joins the northern border of the site towards Leamington Spa. This is a housing led scheme and out commuting associated with employment will be greater in the absence of more employment.	-	+	+	ongoing
11	Reduce barriers for those living in rural areas.	The provision of a range of facilities on site, e.g. a range of shops and leisure facilities will contribute to this objective. Strengthening existing public transport services would also benefit the wider community. There is a primary school in Long Itchington, however this is not within the recommended 1km distance, to allow it to be a walkable distance from the site. There are no secondary schools within range. However the option proposes a primary school on site, and a secondary school off site, this will help meet the demands of the new residents.	-	++	++	ongoing
12	Protect the integrity of the district's countryside.	Assessed on the basis that the site would involve development of previously development land in the countryside.	-	-	-	ongoing
13	Provide affordable, environmentally sound and good quality housing for all.	In the long term this location could provide 2,000 homes. The proposal introduces a large amount of new housing to the area. As part of that, a percentage of the new housing will be affordable housing.	+	++	++	ongoing
14	Safeguard and improve community health, safety and well being.	A large influx of new residents and housing is likely to mean the surrounding roads are busier and consequently potentially more hazardous in the absence of measures to reduce the use of the car. Combining housing development and the creation of a local centre could provide a range of opportunities which could contribute to this objective. However as the total housing number is made up of two sites, the individual sites may not be able to support the required services, furthermore their introduction has not been explicitly stated. There are no health facilities within range of the site. there are two doctors surgeries in Southam but these are not within walking distance (800m, Shaping Neighbourhoods 2010). There is a leisure/sports centre which could partially meet the needs of new residents.	-	-	-	ongoing
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value lower impact activities.	The proposals will include some employment generating uses, e.g. associated with community facilities, although there is no proposal for a large area of employment development	+	+	+	ongoing

Option E.1

North of Southam, Southam Cement Works - 2,000 homes

Overall Effect

The site is partly previously developed, with some areas of undeveloped land. The site is assessed as being of medium to high sensitivity to residential development, and there are two listed buildings on site, as well as a RIGS and a LWS which could be affected by inappropriate development. The option proposes residential development as well as including other services such as a local centre, a range of shops, services, community facilities and a primary school which will help meet the demands of new residents and improve accessibility in the rural area.

Reversibility	Geographic significance	Magnitude	Level of certainty (probability)	Overall Effect	Mitigation or other action required?	Supporting comments / Proposed mitigation	Best Case Scenario Effect
permanent	local	medium	low	-	yes	Any development on the site would need to be sympathetically designed to minimise the potential impacts on the two listed buildings on site. If well designed, development has the opportunity to improve the setting of the historic assets. Furthermore, development would need to consider the setting of the listed buildings and conservation areas in Long Itchington and Southam.	+
permanent	local	low	medium	+/-	yes	Design standards should be implemented to ensure that the development will be in keeping with the area, incorporating landscaping. The site could provide an opportunity to improve the local landscape and townscape in the long term. The implementation of high design standards in accordance with Policy CS.10 is required for a positive assessment.	+
permanent	local	low	medium	-	yes	Development should take place on areas of lower biodiversity value, with areas of higher value such as the RIG, the LWS and the standing water left untouched or enhanced to comply with policy CS.7 which suggests that important biodiversity features are protected. To enhance the biodiversity value further, landscaping, open space and green areas should be incorporated into the development. The aim should be to achieve a net gain in biodiversity at this location, with important areas of ecological value not harmed by development. This includes retaining sufficient woodland to ensure access to biodiversity. The important areas for biodiversity must be retained in order to maintain a positive assessment.	+
permanent	local	low	medium	++	yes	Scheme to incorporate Sustainable Urban Drainage.	++
permanent	local	high	low	+	yes	The Core Strategy could go further to ensure that the potential for modal shift is achieved, potentially providing further employment opportunities, and ensuring there are alternatives to transport via car.	+
permanent	local	low	low	+	no	Ensure that existing areas contribute towards the provision of Green Infrastructure, including public access, where this is consistent with other objectives. Introduce further green spaces which are connected to the GI network where possible.	+
permanent	local	high	low	+&-	yes	A Soil Management Plan should be required to protect soil resources.	+
				0	no		0
				0	no		0
permanent	local and regional	low	low	+	yes	The location of the site near to the M40 means that in the short term new residents are likely to travel via car and improvements to the bus services should be implemented. The scale of the development provides the opportunity to encourage alternatives to the car and reduce the length of journeys through provision of additional employment opportunities.	+
permanent	local	medium	medium	++	yes	Need to ensure that an appropriate range of services and facilities are provided. Including additional higher order facilities to aid the wider population will help improve accessibility in the rural area.	++
permanent	local	medium	medium	-	yes	The requirements for new development to promote good design (CS.10) will help ensure that the site is well designed and that development adds to the character of the area. The design and siting of the development is important to improve the assessment.	-
permanent	local and regional	high	high	++	no		++
permanent	local	medium	medium	-	no	The site should probably provide new health facilities to meet the needs of the new residents. A solo doctors surgery has approximately 2,000-3,000 people on their books and so the site could support a new doctors. Green Infrastructure and provision for walking and cycling could also help improve health.	+
permanent	local	high	high	+	yes	If this site were to be allocated it might be appropriate to provide some additional employment facilities on-site in addition to the small number of employment opportunities provided by the community facilities and the local centre.	++

Proposed Mitigation

The site does have some constraints; the presence of biodiversity rich areas and listed buildings must be considered, with protection and retention of these areas being made a priority. Development should be designed and sited sympathetically. The potential for focus on car journeys should be addressed and sustainable transport infrastructure should be implemented from day one with the Core Strategy providing a target for modal shift from the car. If this site was taken forward the provision of some additional employment might help make the development more sustainable. Additional services and facilities should be considered such as a doctor's surgery to reduce barriers to those living in rural areas.

Key

Major negative effect	--
Negative effect	-
Uncertain effect,	+/-
Positive and negative effect	+&-
Positive effect	+
Major positive effect	++
No significant environmental effect	0

No.	Description of SA Objective	Description of predicted effect	Duration			Frequency
			Short term	Medium term	Long term	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	There are no listed buildings on site, although there is on historic record; Thorpe Bridge which extends over part of the north west of the site. Limited research has suggested that there are no archeological finds on site.	0	0	0	
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Landscape sensitivity study advises that the area directly to the east of the site is of medium/high landscape sensitivity, within the description the landscape sensitivity to commercial and housing development advises that any development to the west of the area (which would encompass the site) would take development over the hill and would be unacceptable. There is the potential for significant environmental effect if development occurred at this location.	--	--	-	ongoing
3	Protect, enhance and manage biodiversity and geodiversity.	There is Deciduous Woodland BAP priority habitat located on the south/southwest edge (MAGIC 2013) of the site. This means that development on site would be within 500m of woodland of over 2ha (Shaping Neighbourhoods 2010), although it is slightly further than 4km away from woodland of over 20ha. There is no other biodiversity of note found on site. The introduction of managed ecological areas could improve the biodiversity value of the area over the longer term.	-	+	+	ongoing
4	Reduce the risk of flooding.	EA advises significant risk of flooding (greater than 1.3% of flooding each year, 1 in 75)	--	--	--	ongoing
5	Minimise the district's contribution to climate change.	This is a small development on a relatively isolated site, which could give rise to reliance on journeys by car - contributing to Greenhouse Gas emissions. The small size of the site could mean that renewable energy provision or energy efficiency measure are not considered viable at this location.	-	-	-	ongoing
6	Plan for the anticipated levels of climate change.	The site provides the potential to provide Green Infrastructure, and the option proposes open space, managed ecological and woodland planting,	0	+	+	ongoing
7	Protect and conserve natural resources.	This could be grade 3 Agricultural Land but it is uncertain whether it is grade 3a or 3b.	+/-	+/-	+/-	ongoing
8	Reduce air, soil and water pollution.	No significant effects at this level of detail.	0	0	0	
9	Reduce waste generation and disposal, and achieve the sustainable management of waste.	No significant effects at this level of detail.	0	0	0	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	The size of the scheme is likely to make the provision of a high quality public transport service difficult. The isolated nature of the location could lead to reliance on the car. There is currently a bus route along the A425, with a bus stop to the north west of the site. These existing transport facilities could be enhanced to improve the sustainable transport options in the vicinity.	-	-	-	ongoing
11	Reduce barriers for those living in rural areas.	Assessed on the basis that the scheme would be too small to support services and is not well located to existing services. There is a primary school at Southam, but this is not within 1km walking distance to the site. The proposal suggests the creation of a primary school on site which could improve accessibility in the area.	-	-	-	ongoing
12	Protect the integrity of the district's countryside.	The site is not previously developed and is in the open countryside.	--	--	--	ongoing
13	Provide affordable, environmentally sound and good quality housing for all.	The proposal suggests 800 dwellings in the long term it is likely that a percentage of the new housing will be affordable housing.	+	+	+	ongoing
14	Safeguard and improve community health, safety and well being.	The size of the scheme means that it is unlikely to be able to support new higher order facilities. The site is fairly remote from existing services, however there is a doctors surgery in the south west of Southam, which is just over 800m from the site and potentially within walking distance. It is unknown if the surgery has capacity. The option proposes open space, managed ecological and woodland planting on site, with access to recreation and leisure uses on the adjacent landfill site. This will provide easily accessible open space and recreation facilities which could help improve the health of residents.	-	-	+	ongoing
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value lower impact activities.	Assessed on the basis that the scheme will only provide housing.	0	0	0	

Option E.2 West of Southam (Stonethorpe) - 800 dwellings

Overall Effect

There are potential significant effects in relation to biodiversity and flood risk, although the option proposes that there will be ecological and woodland planting management on site. The size and location of the scheme also means that it could be difficult to promote more sustainable forms of transport, through provision of new public transport and accessible amenities, and existing facilities may struggle to cope with the additional demand created by 800 new homes.

Reversibility	Geographic significance	Magnitude	Level of certainty (probability)	Overall Effect	Mitigation or other action required?	Supporting comments / Proposed mitigation	Best Case Scenario Effect
				0	no		0
permanent	local	low	low	--	yes	If development takes place it should be designed and sited sympathetically so that it can be integrated into the landscape in the longer term. Design standards should be implemented to ensure that the development will be in keeping with the area, incorporating landscaping. The site could provide an opportunity to improve the local landscape and townscape in the long term. The implementation of high design standards in accordance with Policy CS.10 is required for a positive assessment.	+
permanent	local	low	low	+	yes	Assessed on the basis that existing features, such as the woodland, on site are retained and enhanced. Development should occur on any areas of lower biodiversity value, with landscaping and green areas incorporated as part of the development. There should be no net loss in biodiversity. Additional biodiversity features should be incorporated where possible, preferably linking into the wider GI network.	+
permanent	local	low	medium	--	yes	Any development would need to avoid areas at risk of flooding and also ensure that development does not increase flood risk elsewhere.	--
permanent	local	low	medium	-	yes	Need to ensure that any development supported improvements to existing bus services and measures to enable walking and cycling put in place. Could also introduce renewable energy or energy efficiency measures to optimise sustainability value	+
permanent	local	low	medium	+	no		+
permanent	local	low	medium	+/-	yes	A Soil Management Plan could be used to ensure that soils are appropriately used on site.	+
				0			0
				0			0
permanent	local	low	medium	-	yes	Need to provide enhanced public transport. The introduction of additional accessible facilities in the area could encourage walking and cycling.	+
permanent	local	low	medium	-	yes	Need to enhance sustainable transport options through increasing accessible facilities on or near to the site. This could encourage walking and cycling and reduce rural barriers.	+
permanent	local	low	high	--	yes	Need to retain and enhance existing landscape features in order to minimise effects.	--
permanent	local	low	high	+	no		+
permanent	local	low	medium	-	yes	Existing facilities (such as the doctors surgery) in the south west of Southam should be enhanced, or new facilities should be built, in order to meet the demand from the new residents, otherwise the development is likely to increase the demand on existing facilities. Green Infrastructure and provision for walking and cycling could also help improve health.	+
				0	yes	Could introduce additional employment opportunities	+

Proposed Mitigation

As the site is small by comparison to the other options, it is unlikely to be able to support new facilities therefore, for development to take place existing facilities and public transport should be enhanced and strengthened to cope with the increased demand. Any development would need to preserve and enhance existing biodiversity features on site and avoid areas at risk of flooding. Need to promote public transport, walking and cycling.

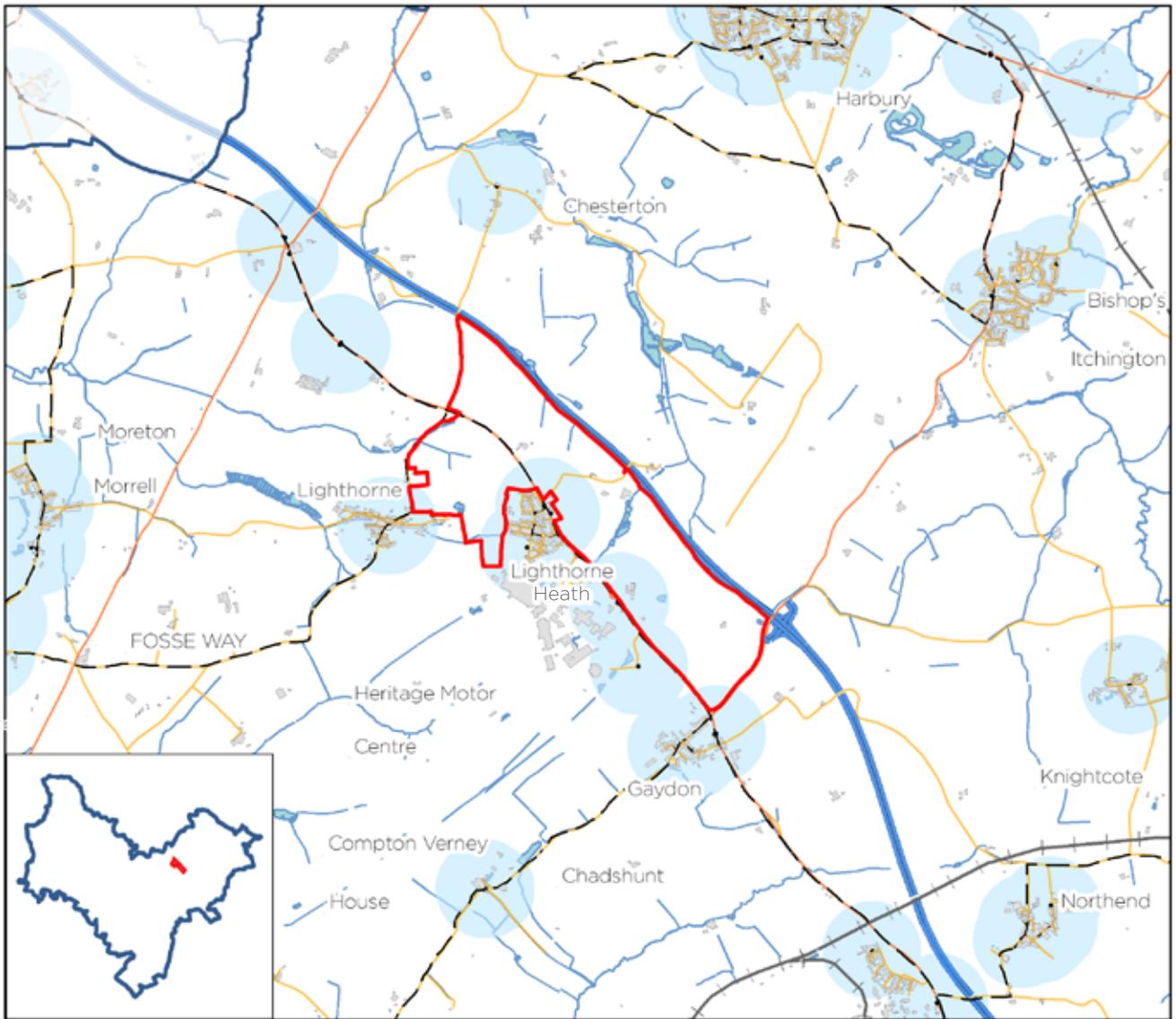
Key

Major negative effect	--
Negative effect	-
Uncertain effect,	+/-
Positive and negative effect	+&-
Positive effect	+
Major positive effect	++
No significant environmental effect	0

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APPENDIX C

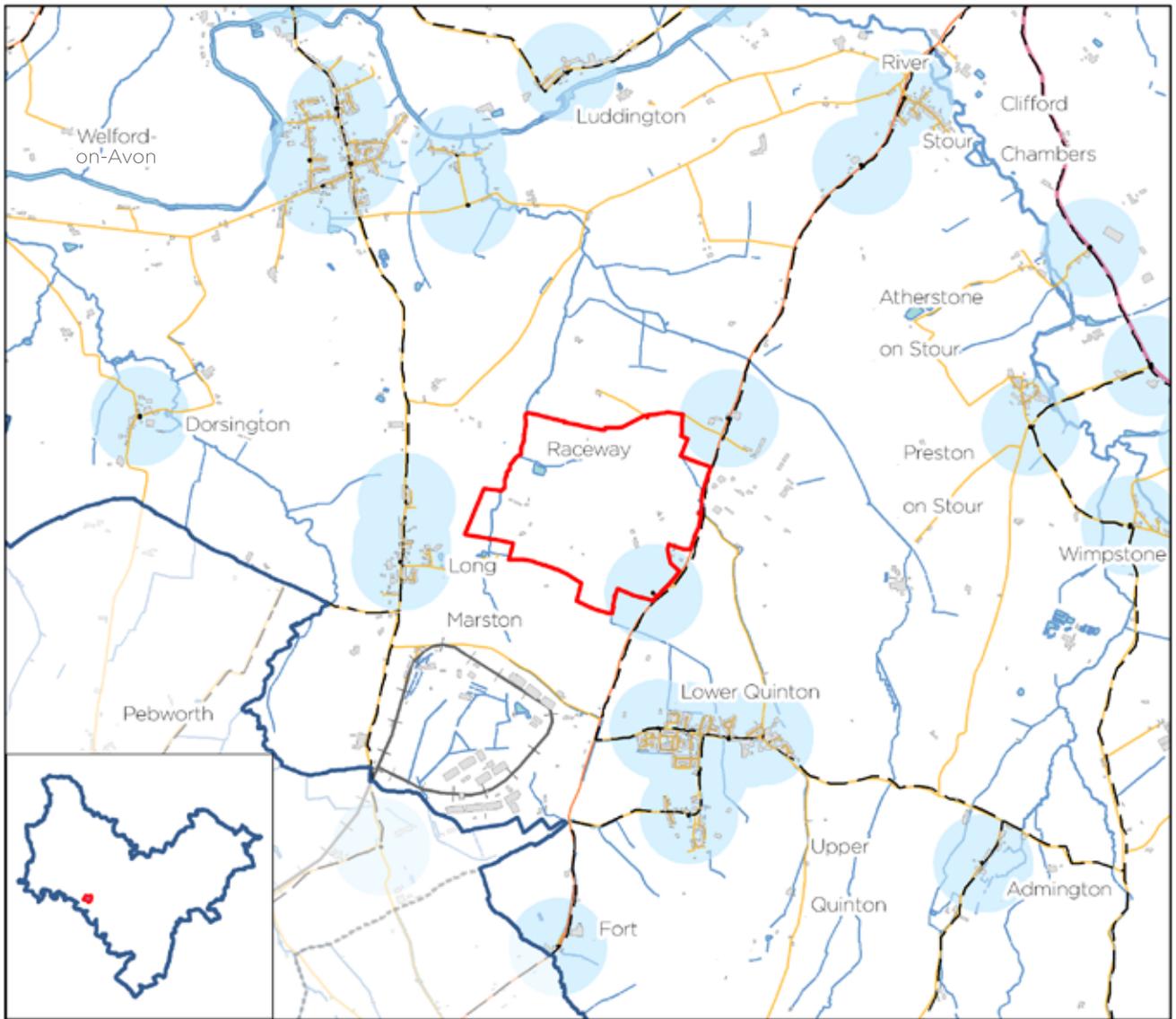
Mapping analysis for accessibility



Accessibility
Gaydon/Lighthorne Heath



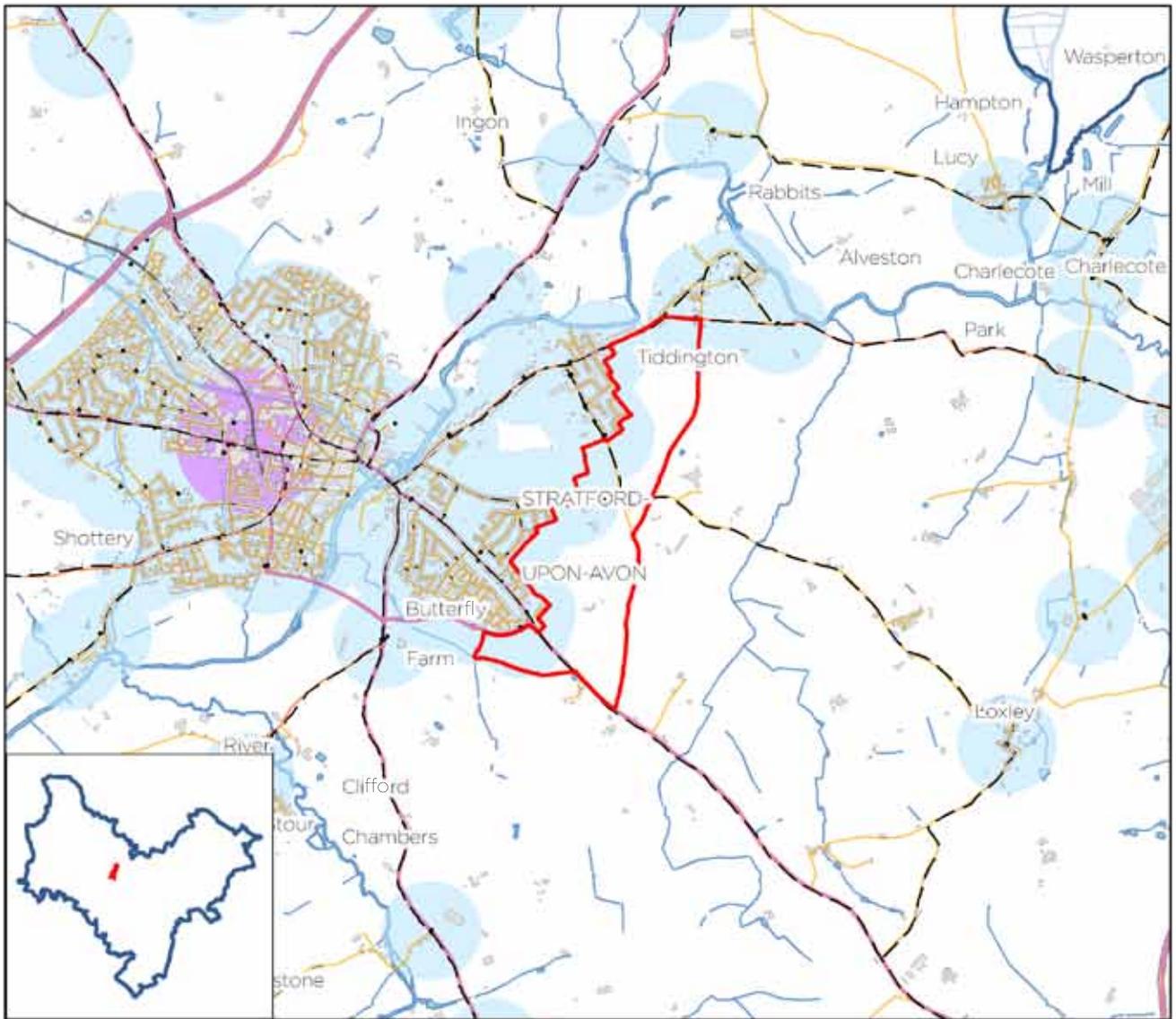
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- Stratford District
- Built area
- Bus Stops
- Bus routes
- Railway Station
- Railway
- A roads
- B roads
- Local, minor roads
- Motorways
- Primary roads
- Rail Stations Buffer (600m)
- Bus Stop Buffer (400m)
- Surface Water



Accessibility
Long Marston Airfield



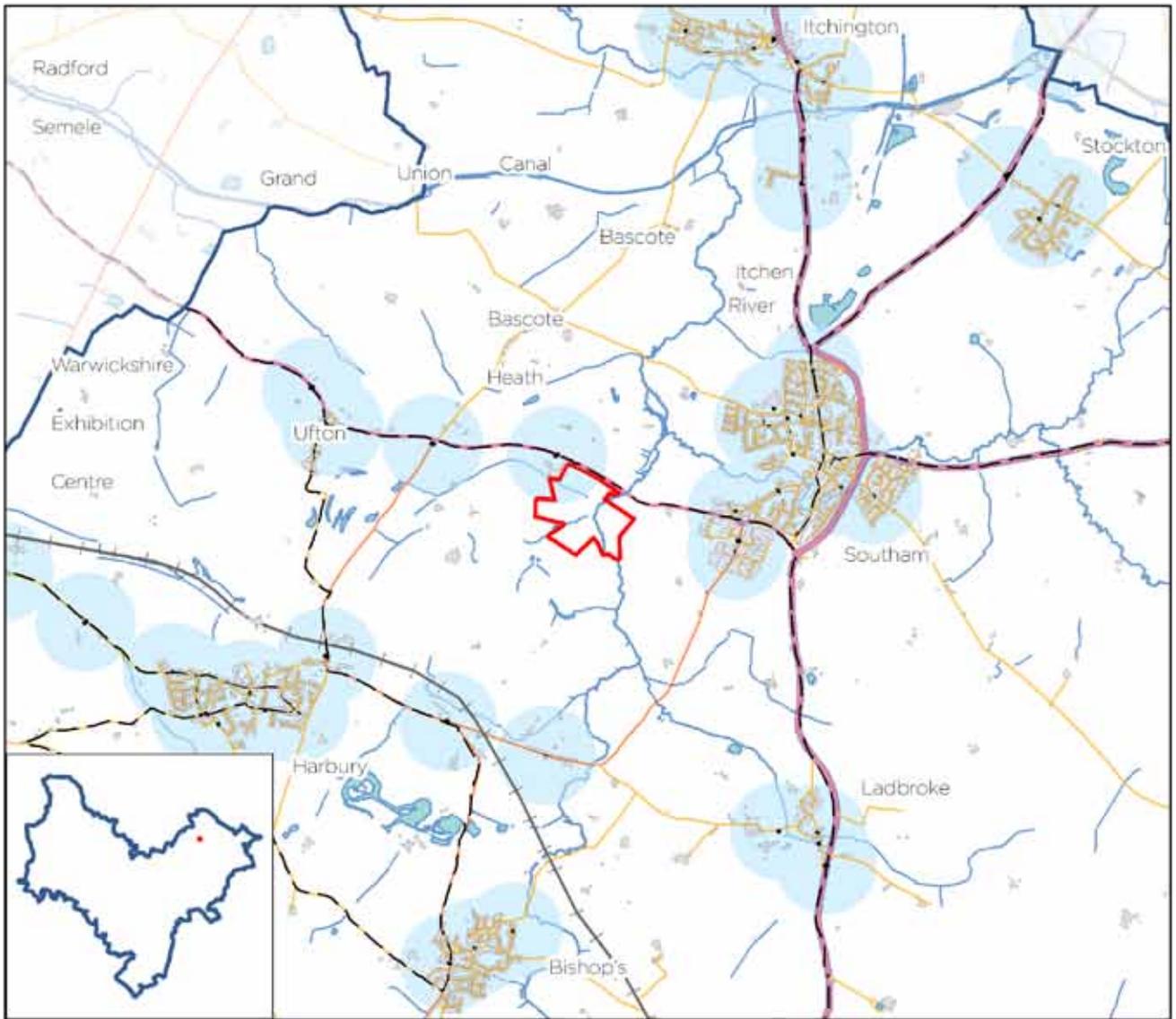
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- Stratford District
- Built area
- Bus Stops
- Bus routes
- Railway Station
- Railway
- A roads
- B roads
- Local, minor roads
- Motorways
- Primary roads
- Rail Stations Buffer (600m)
- Bus Stop Buffer (400m)
- Surface Water



Accessibility
South East of Stratford-upon-Avon



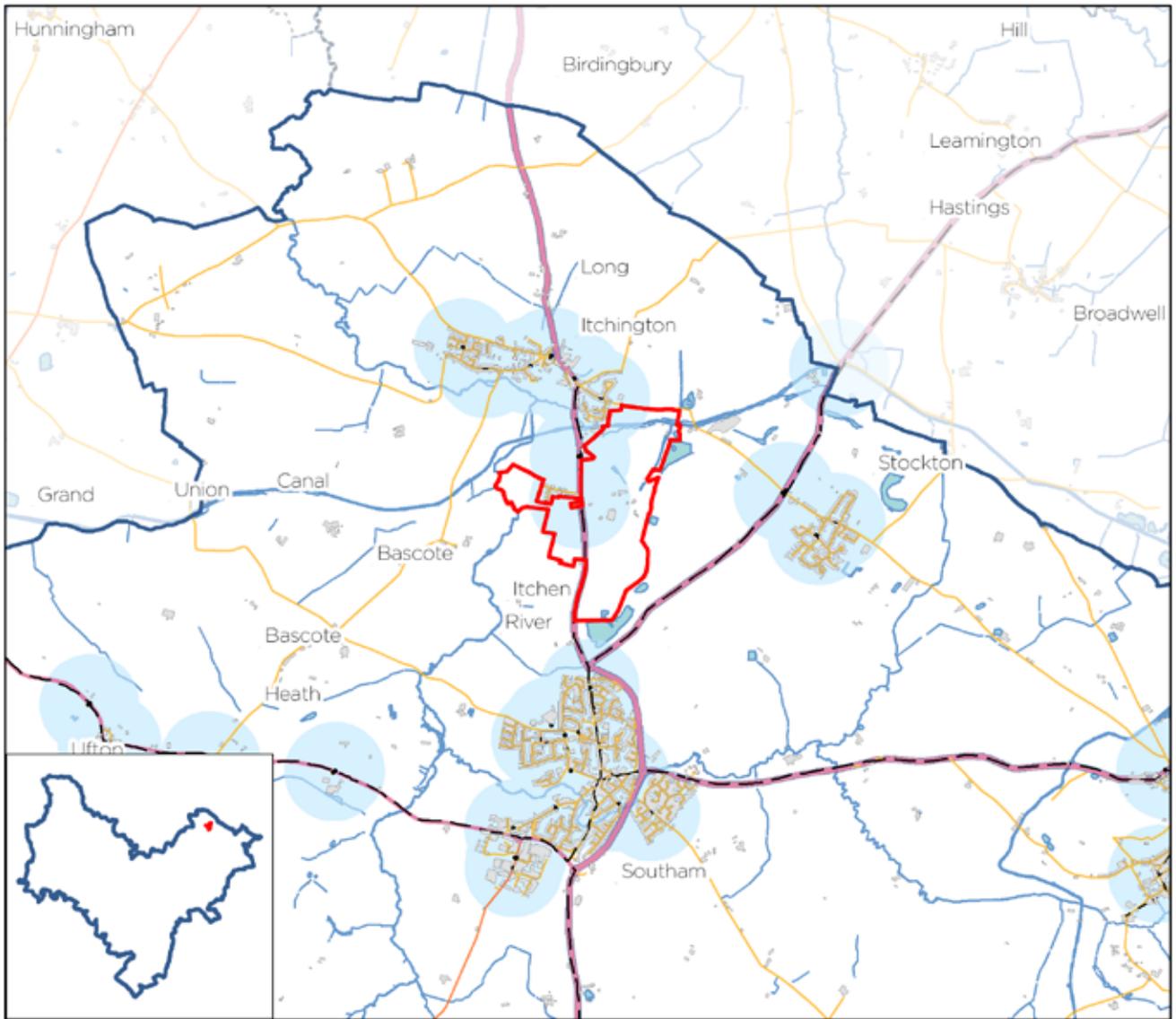
- South East of Stratford-upon-Avon
- Stratford District
- Built area
- Bus Stops
- Bus routes
- Railway Station
- Railway
- A roads
- B roads
- Local, minor roads
- Motorways
- Primary roads
- Rail Stations Buffer (600m)
- Bus Stop Buffer (400m)
- Surface Water



Accessibility
West of Southam Stoneythorpe



- West of Southam Stoneythorpe
- Stratford District
- Built area
- Bus Stops
- Bus routes
- Railway Station
- Railway
- A roads
- B roads
- Local, minor roads
- Motorways
- Primary roads
- Rail Stations Buffer (600m)
- Bus Stop Buffer (400m)
- Surface Water



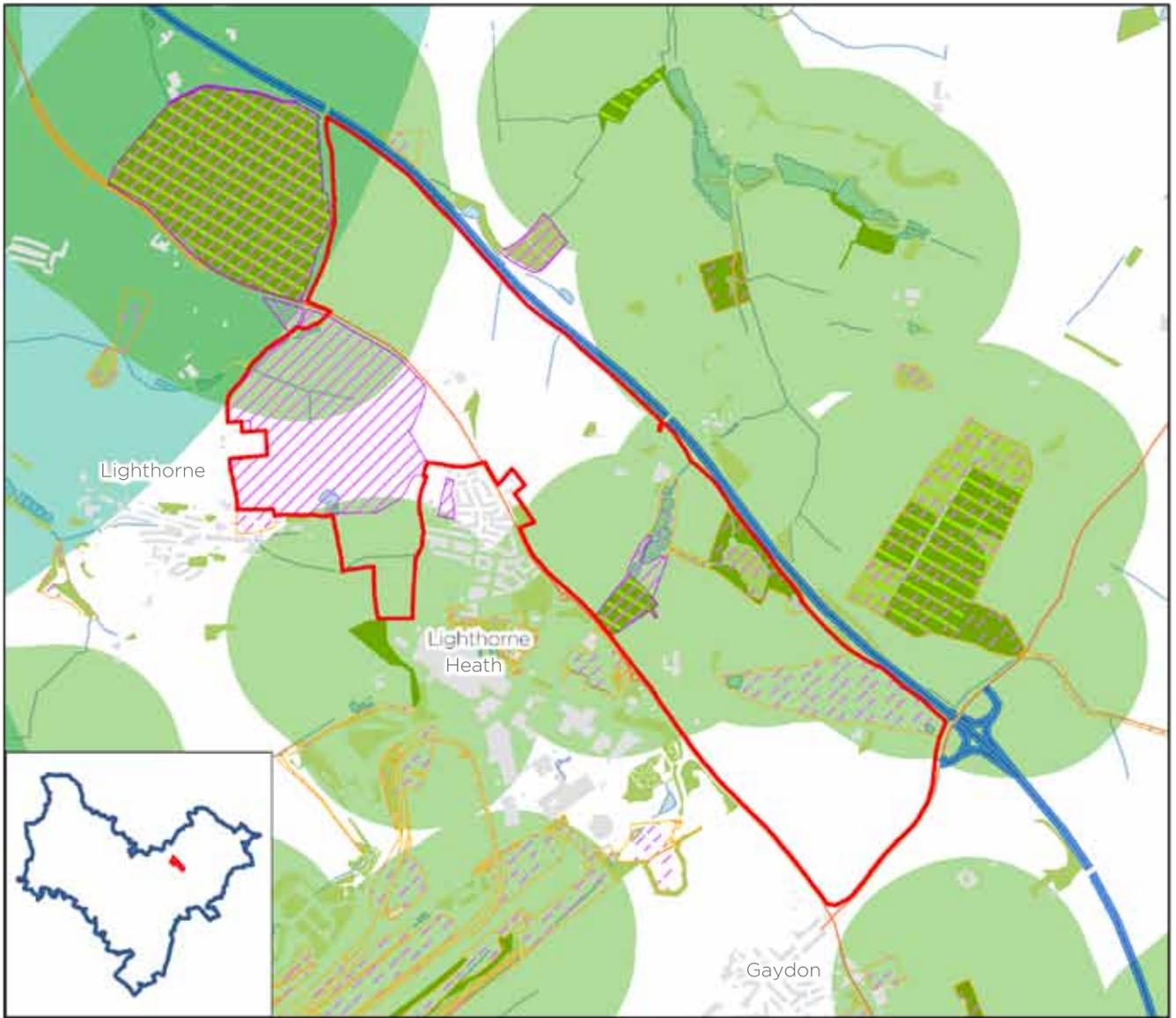
Accessibility
North of Southam



- North of Southam
- Stratford District
- Built area
- Bus Stops
- Bus routes
- Railway Station
- Railway
- A roads
- B roads
- Local, minor roads
- Motorways
- Primary roads
- Rail Stations Buffer (600m)
- Bus Stop Buffer (400m)
- Surface Water

APPENDIX D

Mapping analysis for biodiversity

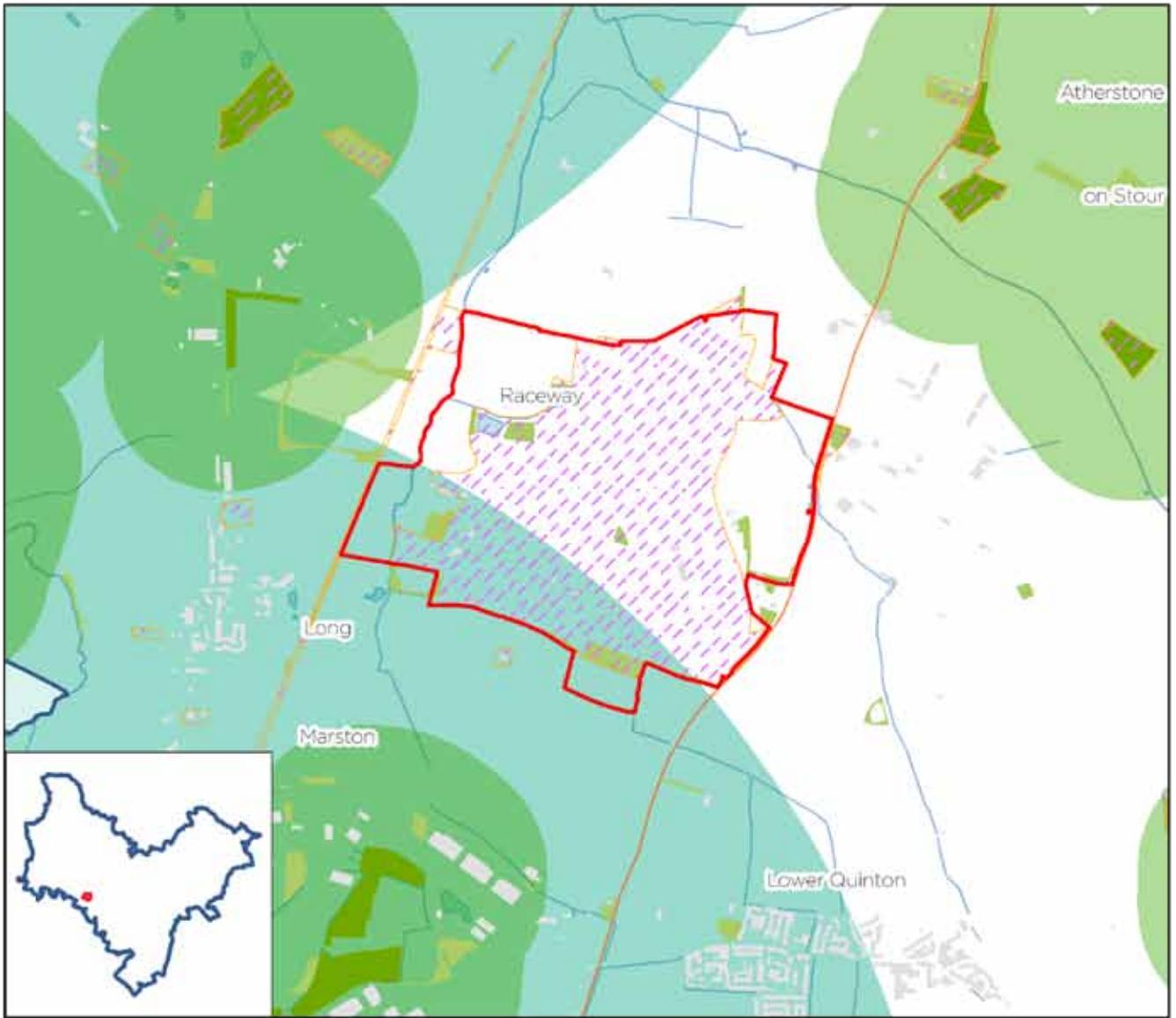


Biodiversity
Gaydon/Lighthorne Heath



- Gaydon/Lighthorne Heath
- Stratford District
- Built area
- SSSI
- Local Nature Reserve
- Local Wildlife Sites
- Proposed Local Wildlife Sites
- A roads
- B roads
- Motorways
- Primary roads
- Ancient Woodland
- Surface Water

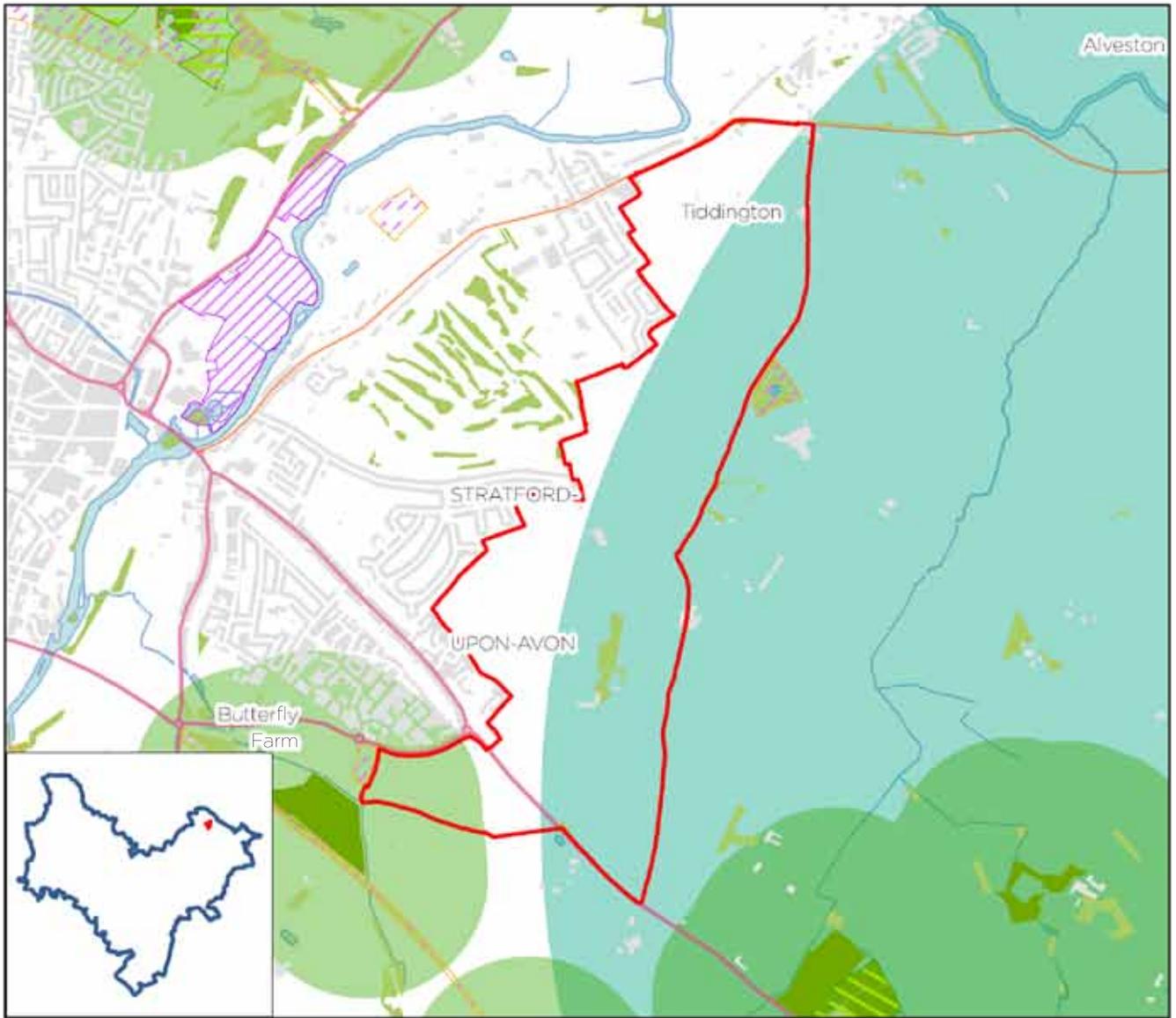
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- woodland 2to20ha
- woodland up2ha
- woodland over 2ha buffer (500m)
- woodland over20ha buffer (4km)



Biodiversity
Long Marston Airfield



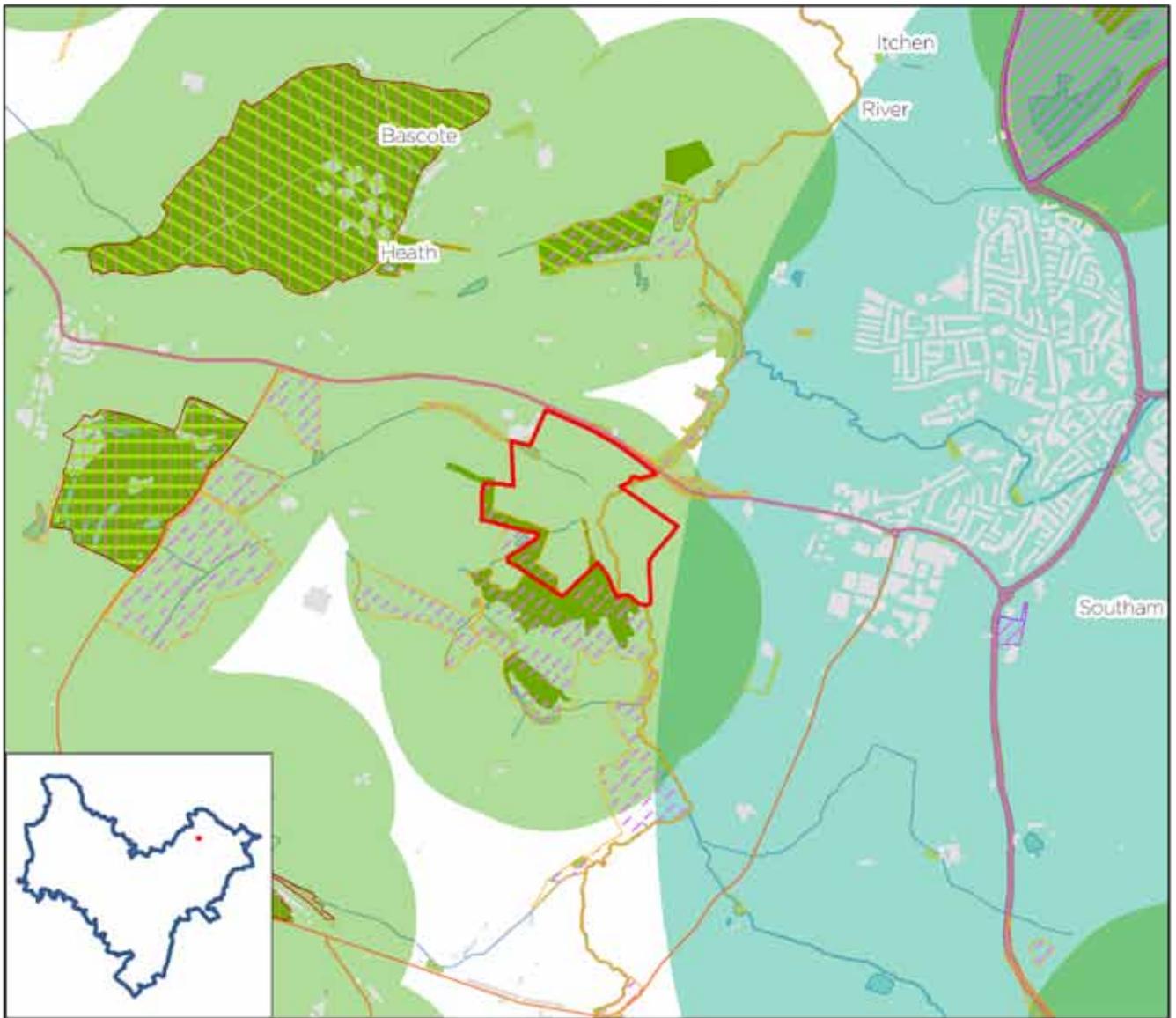
- Long Marston Airfield
- Stratford District
- Built area
- SSSI
- Local Nature Reserve
- Local Wildlife Sites
- Proposed Local Wildlife Sites
- A roads
- B roads
- Motorways
- Primary roads
- Ancient Woodland
- Surface Water
- woodland over20ha
- woodland 2to20ha
- woodland up2ha
- woodland over 2ha buffer (500m)
- woodland over20ha buffer (4km)



Biodiversity
South East of Stratford-upon-Avon



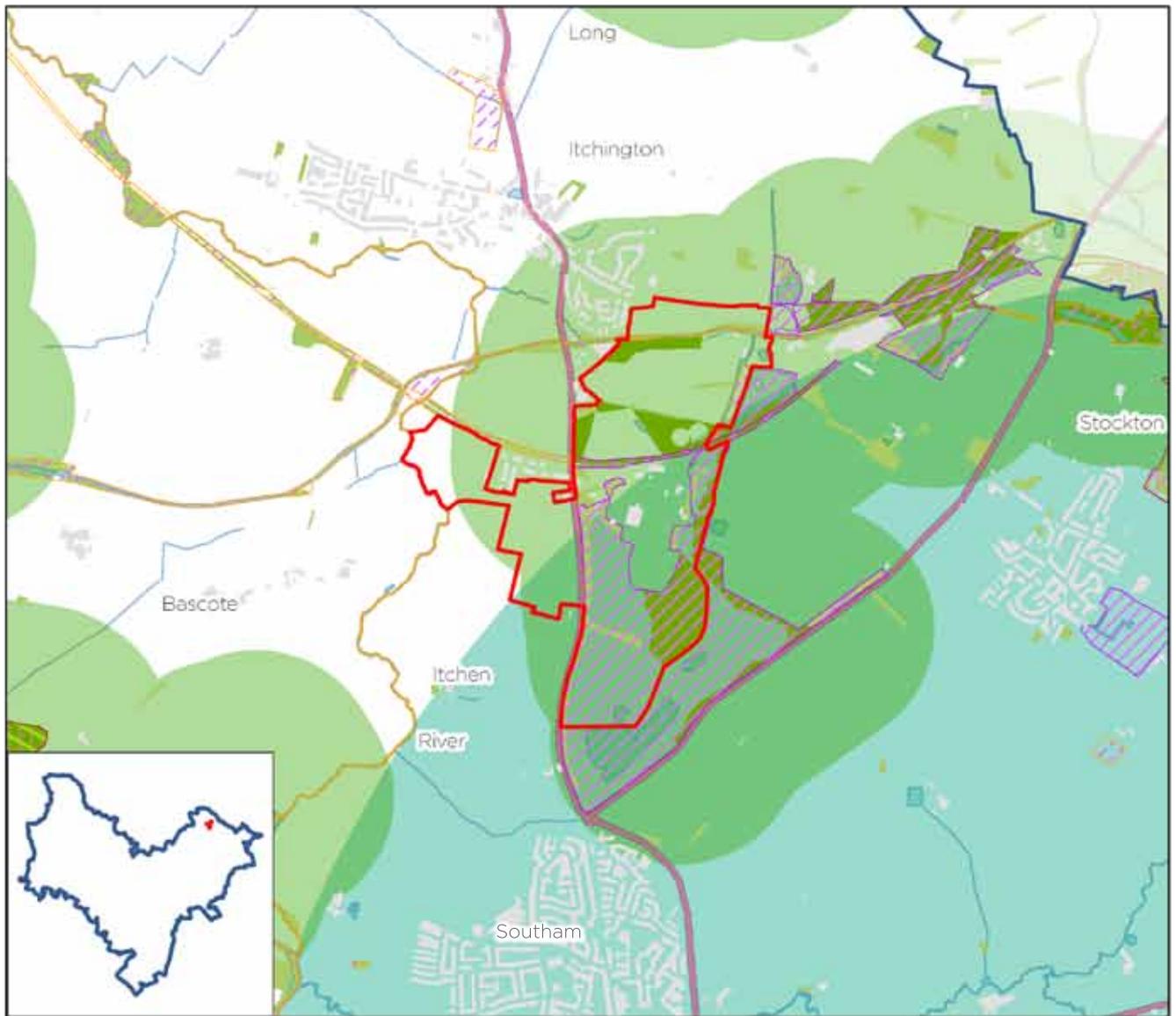
- South East of Stratford-upon-Avon
- Stratford District
- Built area
- SSSI
- Local Nature Reserve
- Local Wildlife Sites
- Proposed Local Wildlife Sites
- A roads
- B roads
- Motorways
- Primary roads
- Ancient Woodland
- Surface Water
- woodland over20ha
- woodland 2to20ha
- woodland up2ha
- woodland over 2ha buffer (500m)
- woodland over20ha buffer (4km)



Biodiversity
West of Southam Stoneythorpe



- West of Southam Stoneythorpe
- Stratford District
- Built area
- SSSI
- Local Nature Reserve
- Local Wildlife Sites
- Proposed Local Wildlife Sites
- A roads
- B roads
- Motorways
- Primary roads
- Ancient Woodland
- Surface Water
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- woodland up2ha
- woodland over 2ha buffer (500m)
- woodland over20ha buffer (4km)



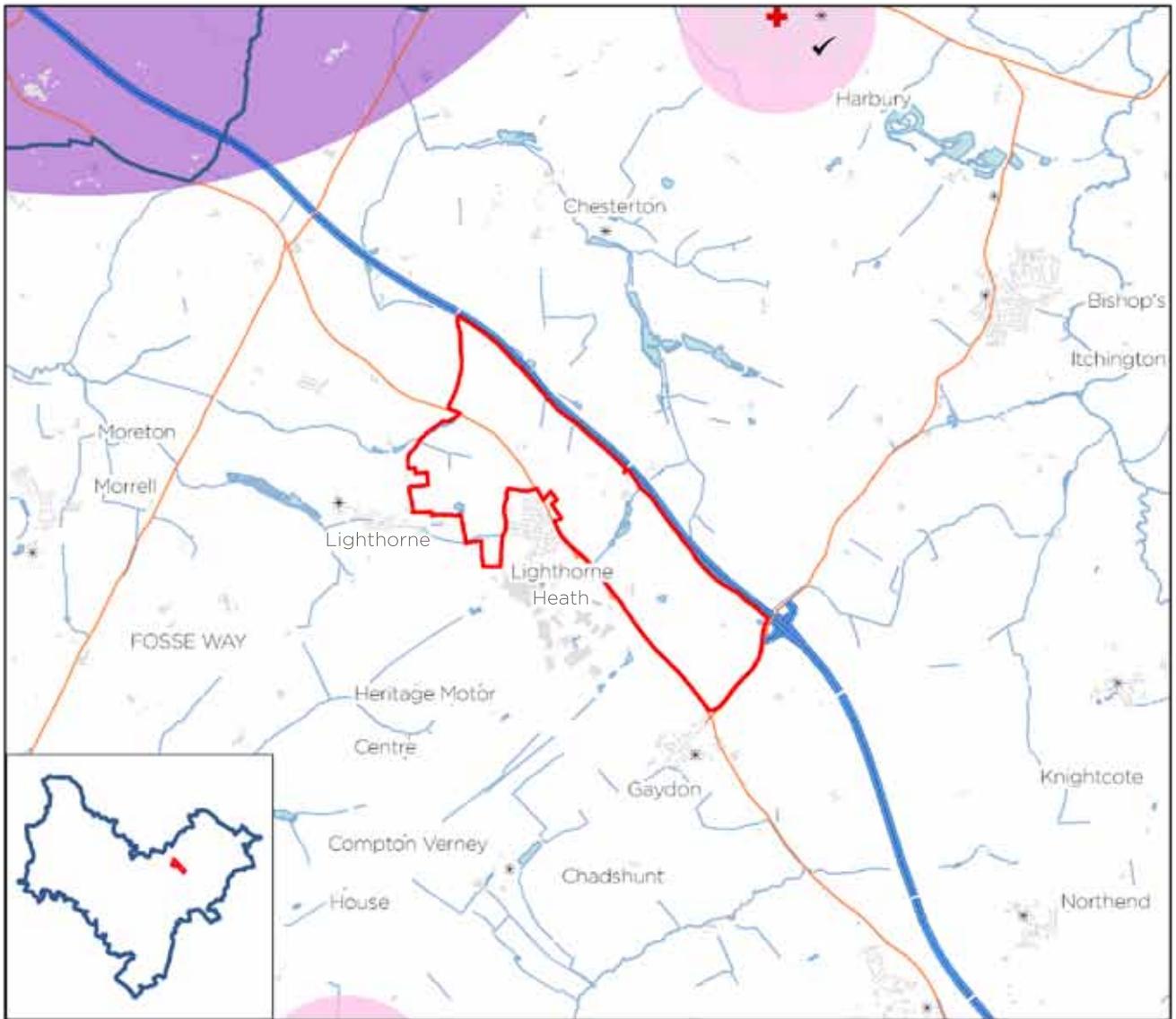
Biodiversity
North of Southam



- North of Southam
- Stratford District
- Built area
- SSSI
- Local Nature Reserve
- Local Wildlife Sites
- Proposed Local Wildlife Sites
- A roads
- B roads
- Motorways
- Primary roads
- Ancient Woodland
- Surface Water
- woodland over20ha
- woodland 2to20ha
- woodland up2ha
- woodland over 2ha buffer (500m)
- woodland over20ha buffer (4km)

APPENDIX E

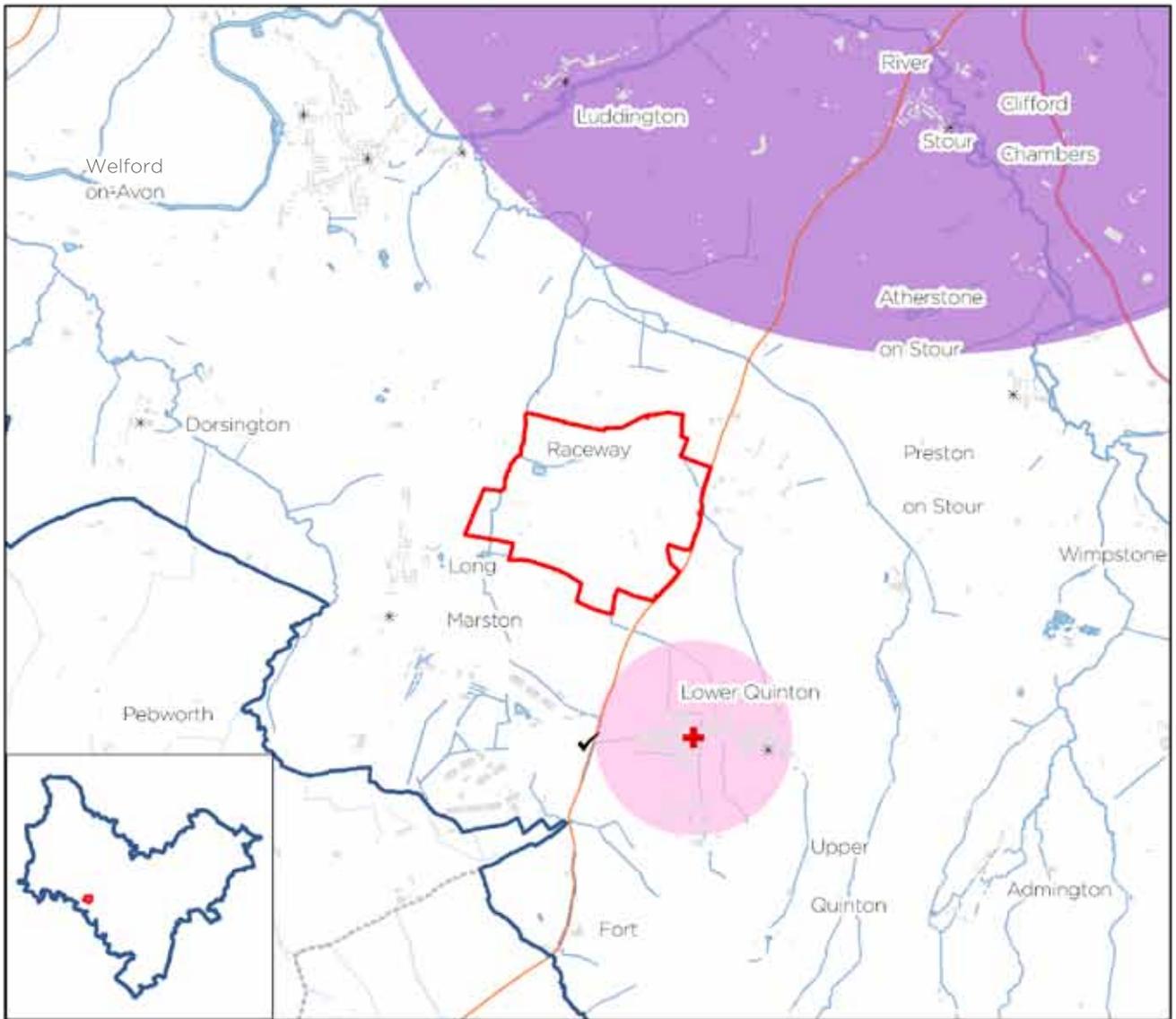
Mapping analysis for health and well-being



Health & Well-being
Gaydon/Lighthorne Heath



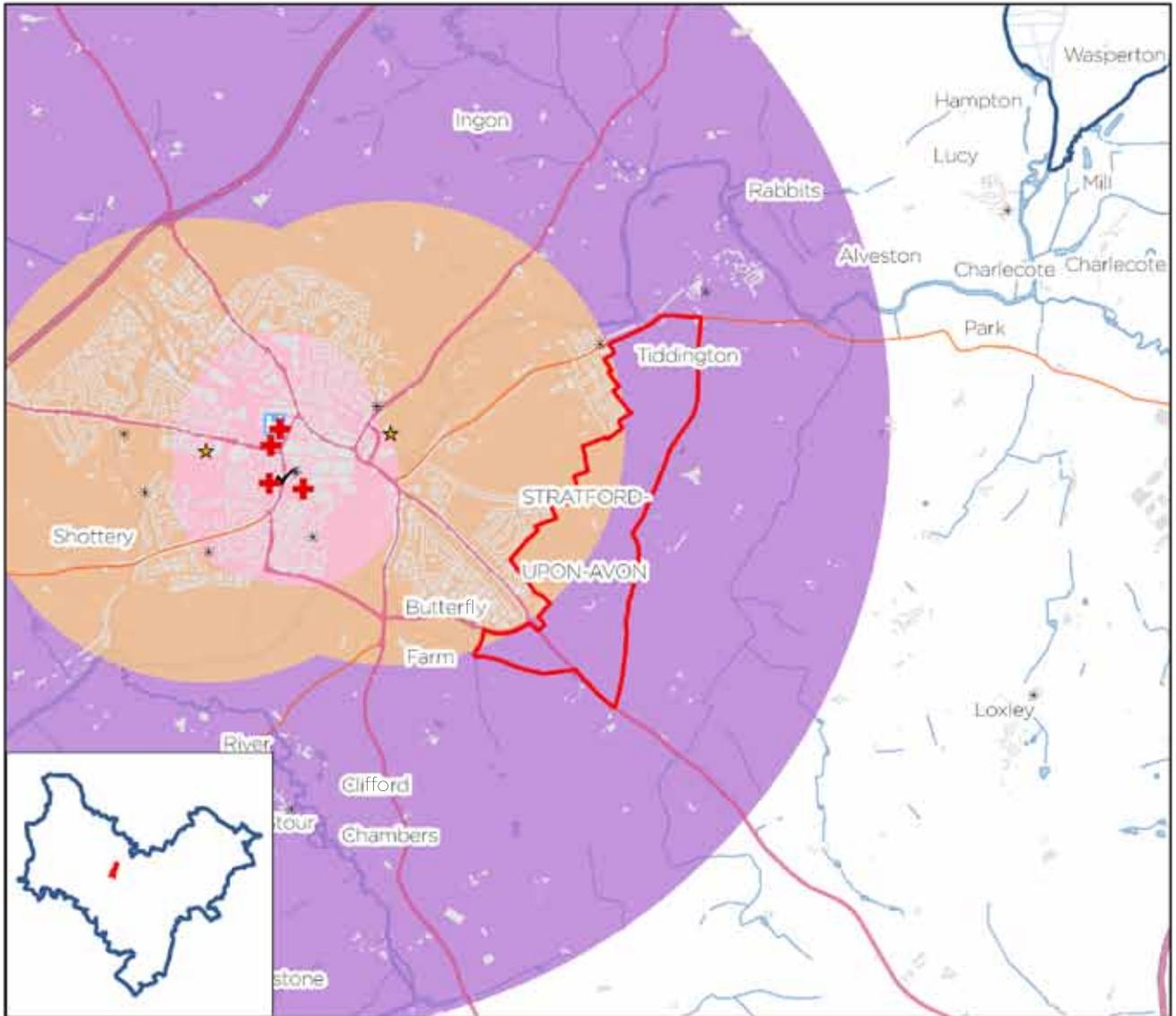
- Gaydon/Lighthorne Heath
- Stratford District
- + Doctor surgery
- H Hospital
- ★ Leisure or Sports Centre
- * Place of Worship
- ✓ Police Station
- Built area
- A roads
- B roads
- Motorways
- Primary roads
- Doctor surgery buffer (800m)
- Leisure centres buffer (1900m)
- hospitals buffer (5km)
- Surface Water



Health & Well-being
Long Marston Airfield



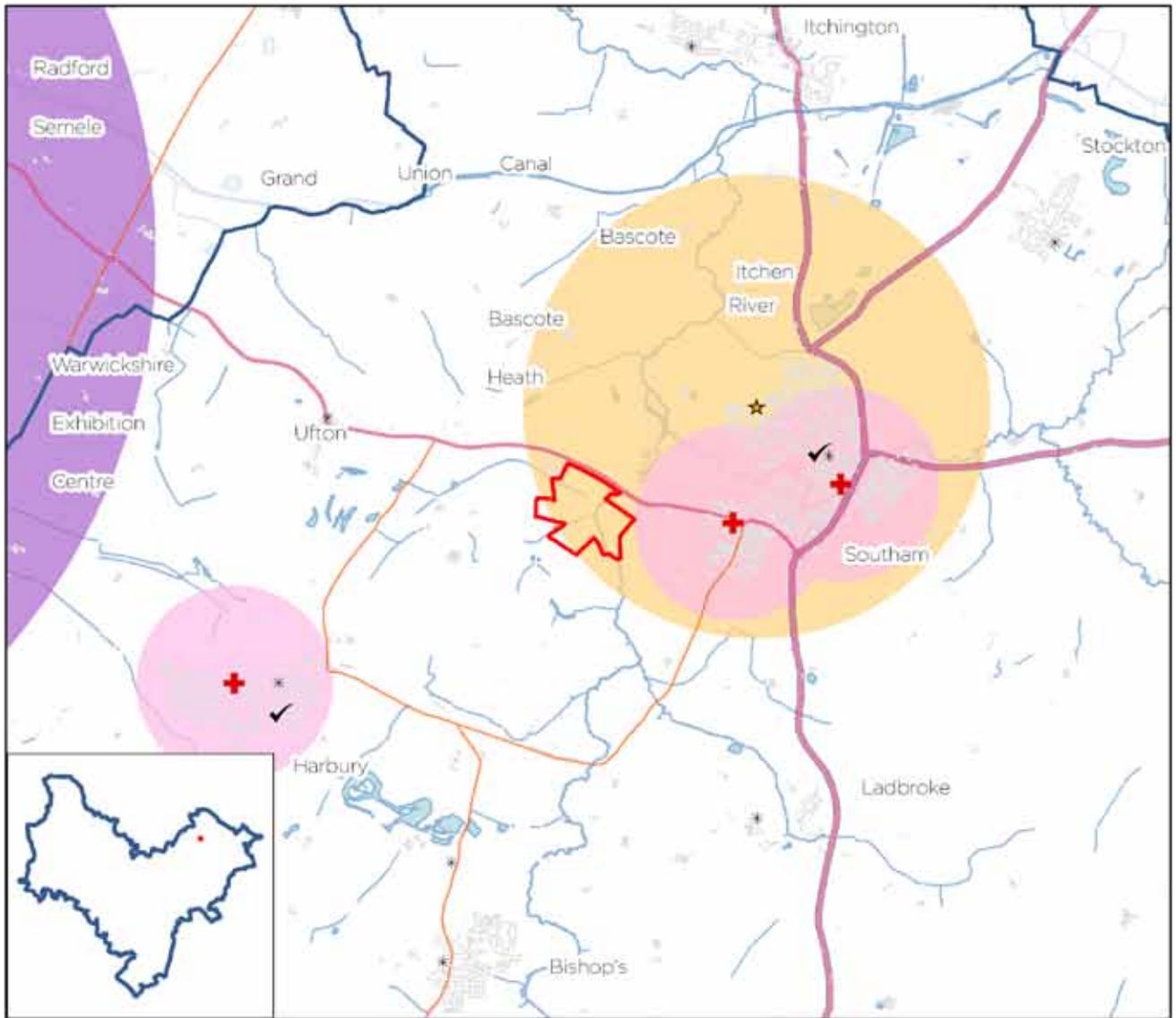
- Long Marston Airfield
- Stratford District
- + Doctor surgery
- H Hospital
- ★ Leisure or Sports Centre
- * Place of Worship
- ✓ Police Station
- Built area
- A roads
- B roads
- Motorways
- Primary roads
- Doctor surgery buffer (800m)
- Leisure centres buffer (1900m)
- hospitals buffer (5km)
- Surface Water



Health & Well-being
South East of Stratford-upon-Avon



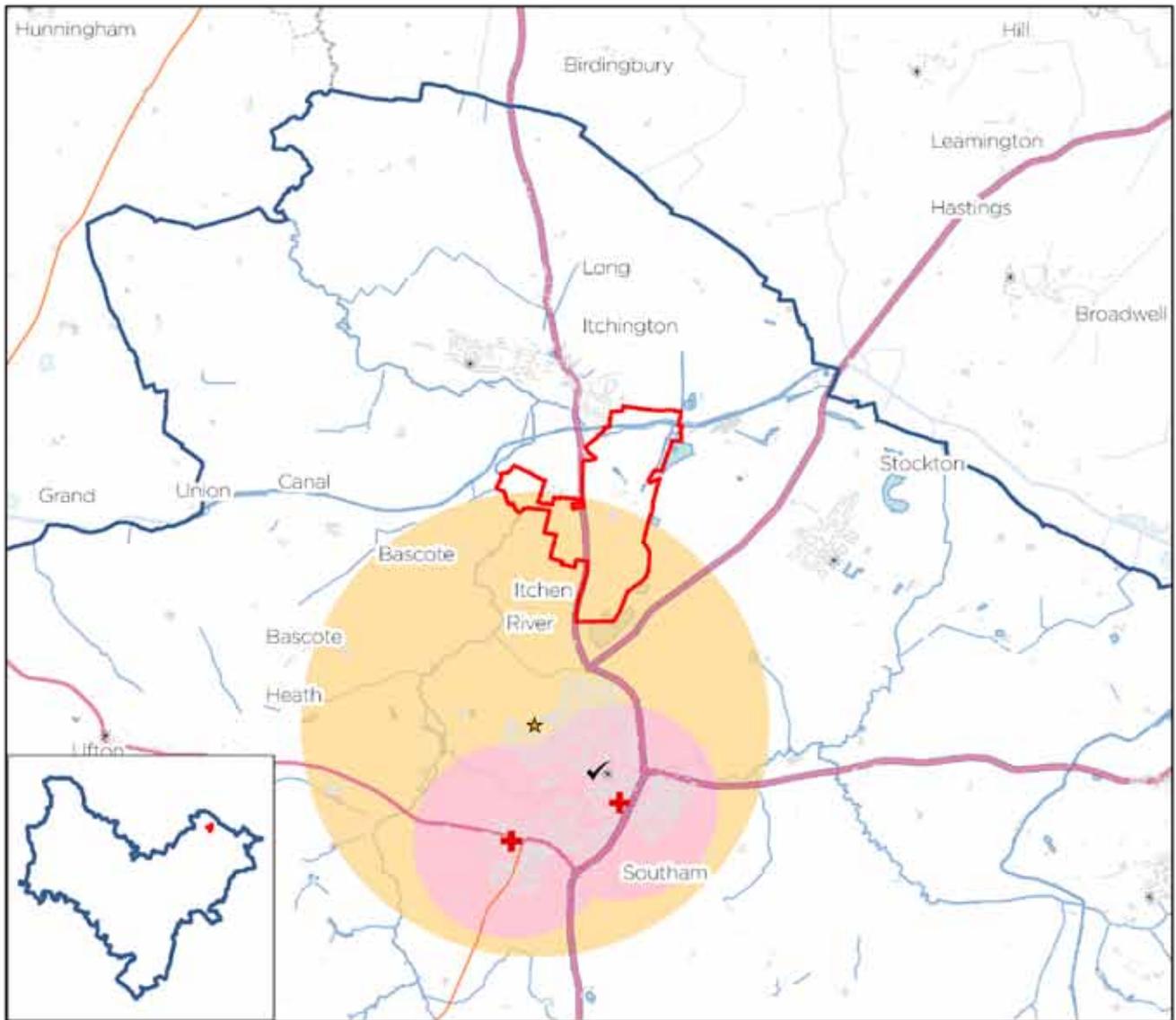
- South East of Stratford-upon-Avon
- Stratford District
- + Doctor surgery
- H Hospital
- ★ Leisure or Sports Centre
- * Place of Worship
- ✓ Police Station
- Built area
- A roads
- B roads
- Motorways
- Primary roads
- Doctor surgery buffer (800m)
- Leisure centres buffer (1900m)
- hospitals buffer (5km)
- Surface Water



Health & Well-being
West of Southam Stoneythorpe



- West of Southam Stoneythorpe
- Stratford District
- + Doctor surgery
- H Hospital
- ★ Leisure or Sports Centre
- * Place of Worship
- ✓ Police Station
- Built area
- A roads
- B roads
- Motorways
- Primary roads
- Doctor surgery buffer (800m)
- Leisure centres buffer (1900m)
- hospitals buffer (5km)
- Surface Water



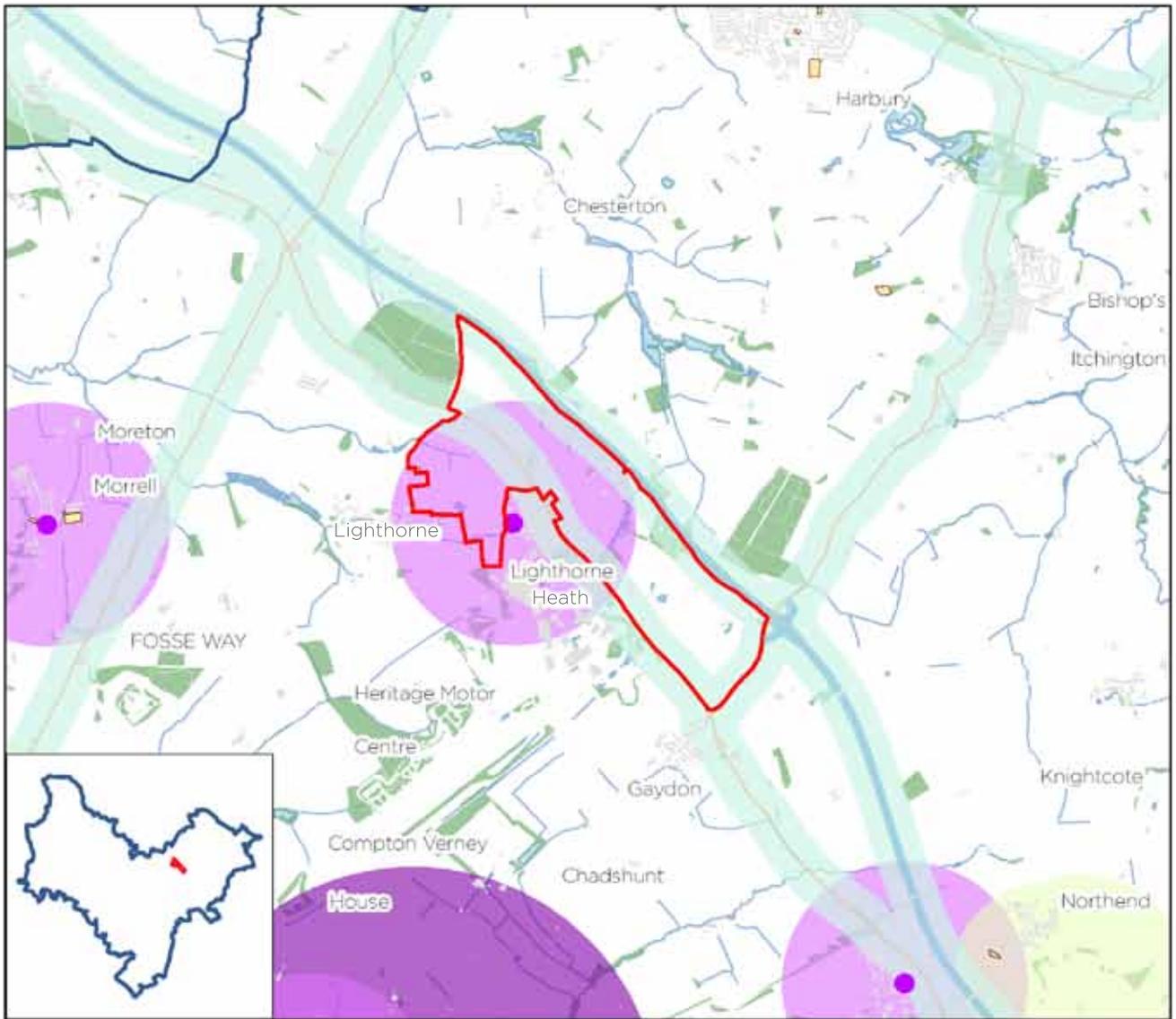
Health & Well-being
North of Southam



- North of Southam
- Stratford District
- + Doctor surgery
- H Hospital
- ★ Leisure or Sports Centre
- * Place of Worship
- ✓ Police Station
- Built area
- A roads
- B roads
- Motorways
- Primary roads
- Doctor surgery buffer (800m)
- Leisure centres buffer (1900m)
- hospitals buffer (5km)
- Surface Water

APPENDIX F

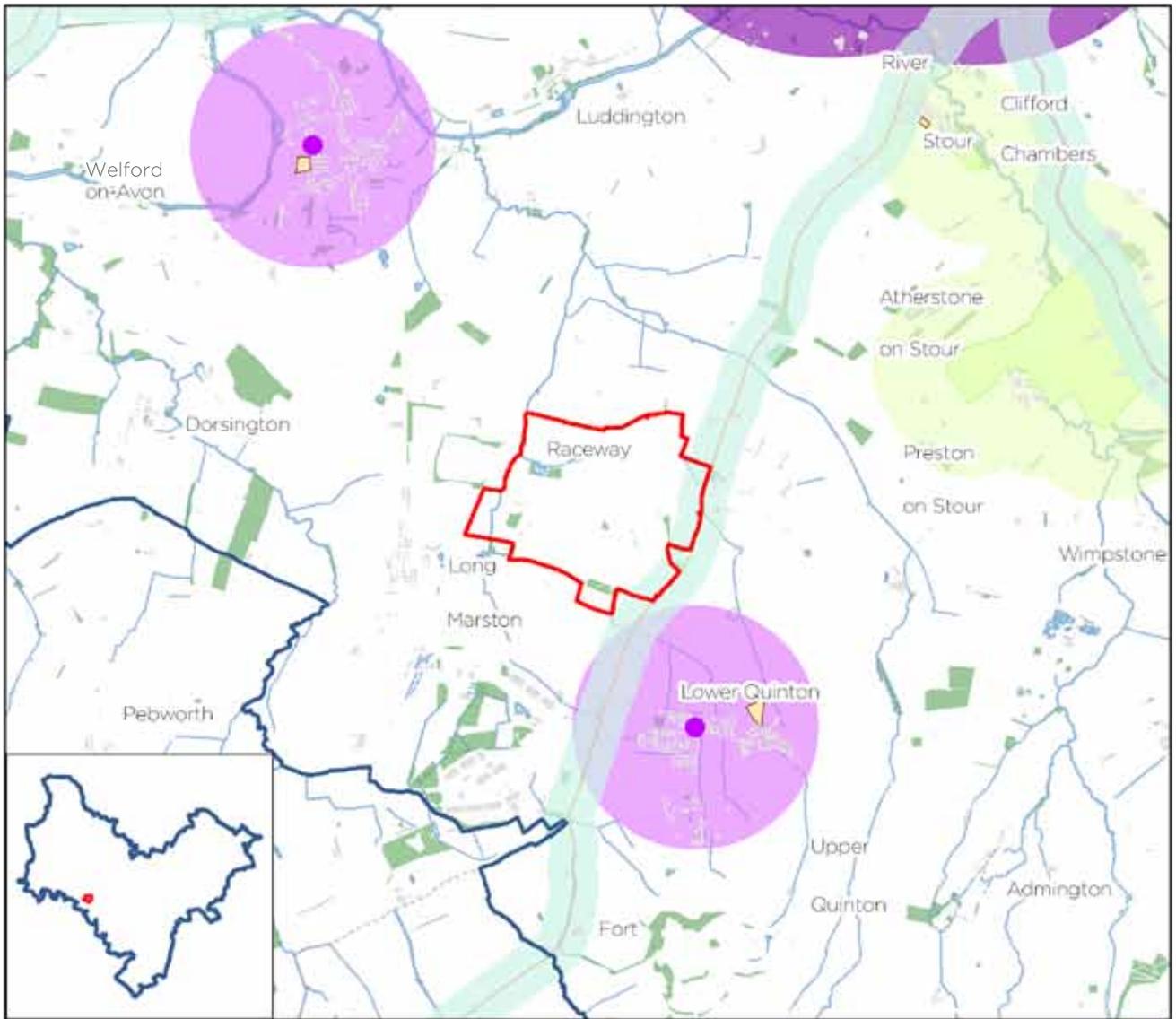
Mapping analysis for population and Quality of Life



Population & Quality of Life
Gaydon/Lighthorne Heath



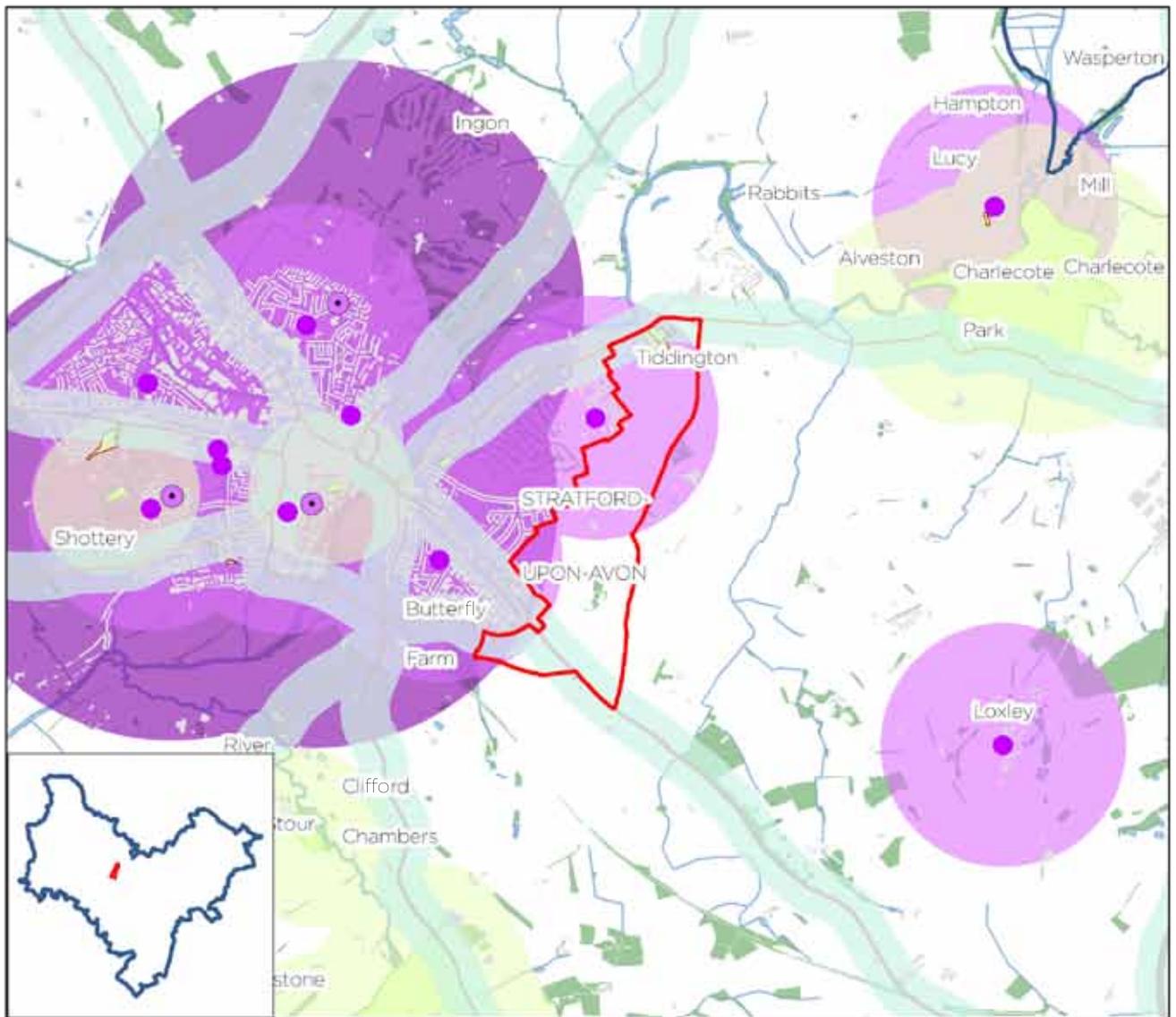
- Gaydon/Lighthorne Heath
- Stratford District
- Secondary schools
- Primary schools
- Built area
- Allotments
- Parks and Gardens
- A roads
- B roads
- Motorways
- Primary roads
- Woodland
- Surface Water
- Major roads buffer (200m)
- Parks buffer (600m)
- Primary schools buffer (1km)
- Secondary schools buffer (2km)



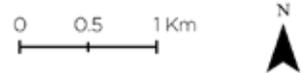
Population & Quality of Life
Long Marston Airfield



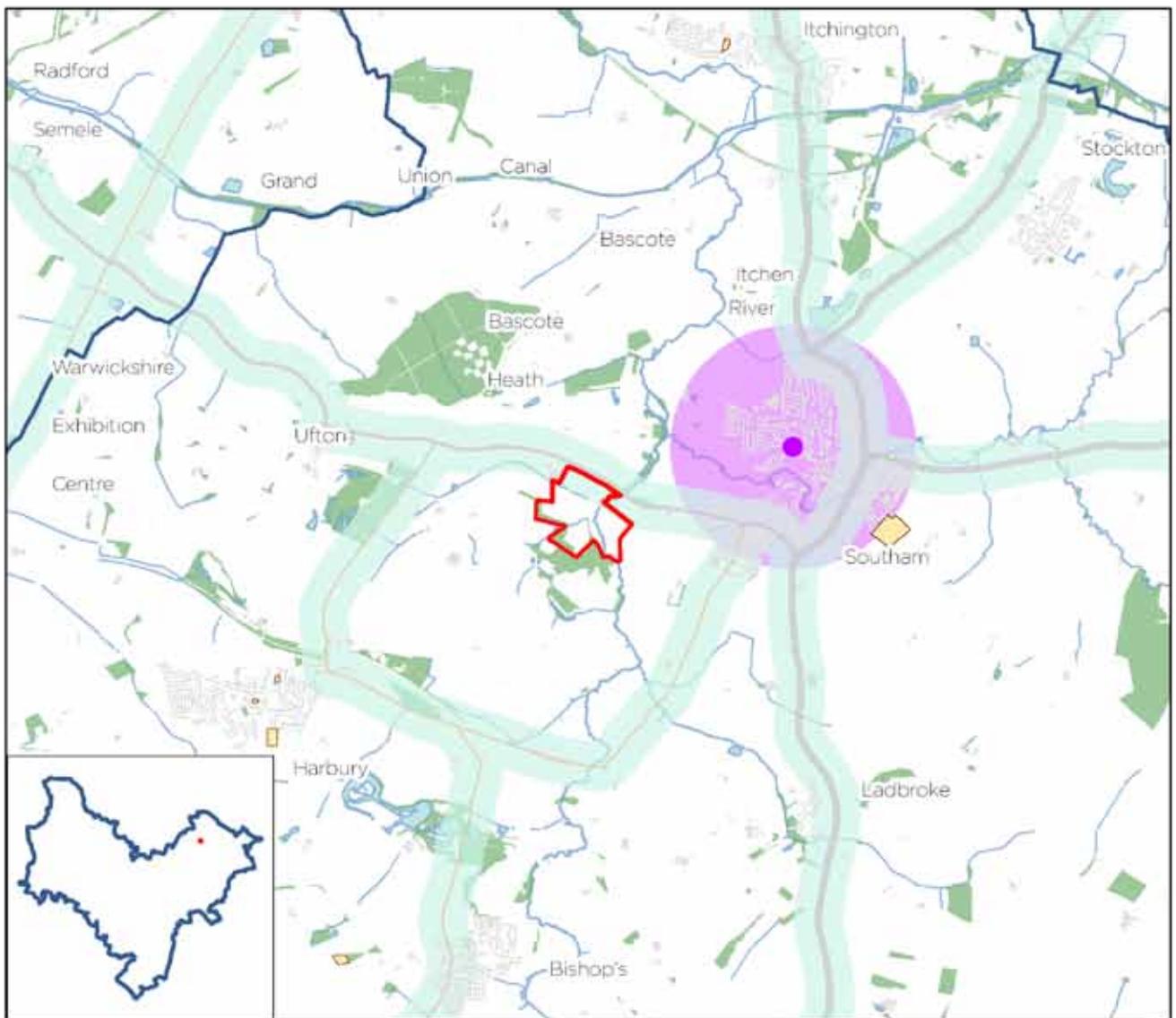
- Long Marston Airfield
- Stratford District
- Secondary schools
- Primary schools
- Built area
- Allotments
- Parks and Gardens
- A roads
- B roads
- Motorways
- Primary roads
- Woodland
- Surface Water
- Major roads buffer (200m)
- Parks buffer (600m)
- Primary schools buffer (1km)
- Secondary schools buffer (2km)



Population & Quality of Life
South East of Stratford-upon-Avon



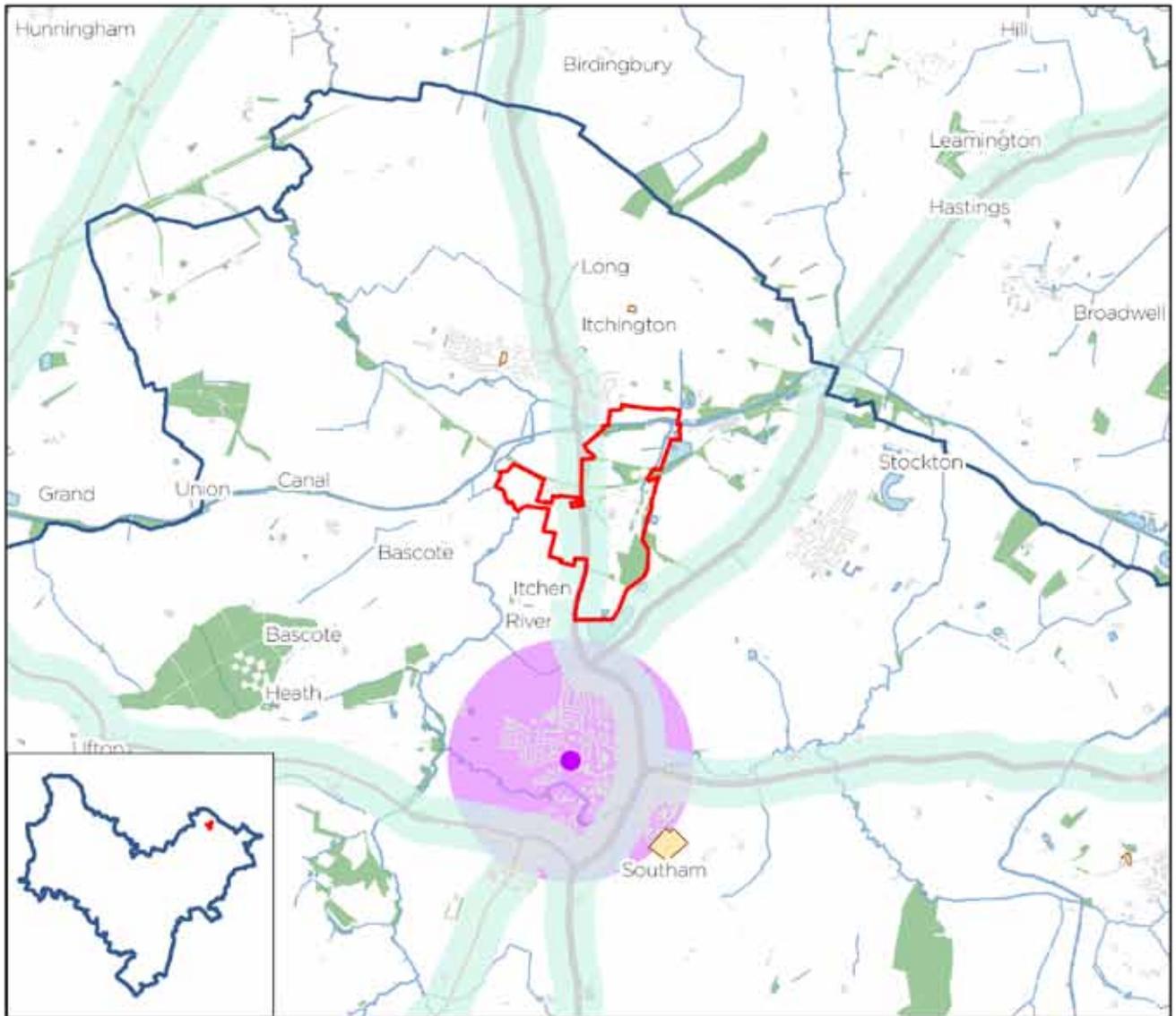
- South East of Stratford-upon-Avon
- Stratford District
- Secondary schools
- Primary schools
- Built area
- Allotments
- Parks and Gardens
- A roads
- B roads
- Motorways
- Primary roads
- Woodland
- Surface Water
- Major roads buffer (200m)
- Parks buffer (600m)
- Primary schools buffer (1km)
- Secondary schools buffer (2km)



Population & Quality of Life
West of Southam Stoneythorpe



- West of Southam Stoneythorpe
- Stratford District
- Secondary schools
- Primary schools
- Built area
- Allotments
- Parks and Gardens
- A roads
- B roads
- Motorways
- Primary roads
- Woodland
- Surface Water
- Major roads buffer (200m)
- Parks buffer (600m)
- Primary schools buffer (1km)
- Secondary schools buffer (2km)



Population & Quality of Life
North of Southam



- North of Southam
- Stratford District
- Secondary schools
- Primary schools
- Built area
- Allotments
- Parks and Gardens
- A roads
- B roads
- Motorways
- Primary roads
- Woodland
- Surface Water
- Major roads buffer (200m)
- Parks buffer (600m)
- Primary schools buffer (1km)
- Secondary schools buffer (2km)



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