



CABINET

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To: Councillors Barkley (Deputy Leader), Bokor, Harper-Davies, Mercer, Morgan (Leader), Poland, Rollings, Smidowicz, Taylor and Vardy (for attention)

All other members of the Council
(for information)

You are requested to attend the meeting of the Cabinet to be held in The Preston Room, Woodgate Chambers, Woodgate, Loughborough on Thursday, 18th October 2018 at 6.00 pm for the following business.



Chief Executive

Southfields
Loughborough

5th October 2018

AGENDA

8. LEICESTER AND LEICESTERSHIRE STRATEGIC PLAN 3 - 509

A report of the Head of Planning and Regeneration to consider a revised Leicester and Leicestershire Strategic Growth Plan, for recommendation to Council.

Key Decision

10. FUTURE CEMETERY PROVISION FOR LOUGHBOROUGH 510 - 636

A report of the Head of Cleansing and Open Spaces to further consider options for a new cemetery site for Loughborough.

Key Decision

Leicester & Leicestershire

Strategic Growth Plan

Consultation Overview

September 2018

L&L SGP Consultation Overview Report

August 2018

Report of Consultation

1.0 Introduction

- 1.1 The Strategic Growth Plan (L&L SGP) has been prepared by the ten partner organisations in Leicester and Leicestershire. Once approved, the L&L SGP will provide the long term framework for the delivery of growth in Leicester and Leicestershire to 2050. It is a 'non-statutory' plan, but it will provide an agreed framework for use in the preparation of Local Plans and other strategies.
- 1.2 The purpose of this report is to summarise the consultation processes that have taken place.
- 1.3 Partners began work on the L&L SGP in late 2015. The Statement of Strategic Involvement, August 2016 outlined the consultation process for the Strategic Growth Plan and the relationship with Statements of Community Involvement (SCI) produced individually by the partners. Since then partners have undertaken consultation on two occasions with statutory bodies and local stakeholders. The first consultation was on the Strategic Growth Statement in August and September 2016, and the second consultation was on the Consultation Draft Strategic Growth Plan in January to May 2018.
- 1.4 Both of these documents are available on the website: www.l1strategicgrowthplan.org.uk

2.0 Strategic Growth Statement (August 2016)

2.1 The Strategic Growth Statement, published in August 2016, set out the scope of the work for the preparation of the L&L SGP through:

- Summarising the changing context;
- Identifying defining current characteristics of the area and opportunities and challenges for the future;
- Setting out ambitions for the future and initial objectives to guide the work;
- Outlining the evidence base and spatial options to be considered in formulating a new strategy; and
- Describing the next steps in the process.

2.2 Consultation on the Strategic Growth Statement took place between 5 August 2016 and 16 September 2016.

How did partners consult?

2.3 To publicise the launch of the consultation on the Strategic Growth Statement:

- A press release was issued on 5 August 2016 (Appendix 1);
- Details of the consultation were posted on all ten partner websites and the L&L SGP website;
- Statutory and local consultees were sent either an email or a letter asking them to respond to the consultation. (Appendix 2)
- Hard copies of the Strategic Growth Statement, a summary leaflet and consultation material were available from all libraries and local authority offices throughout the consultation.

Consultation responses

2.4 In total 78 respondents completed the questionnaire. A further 18 responses were received by email or letter. All responses whether via survey or an alternative format were accepted and considered.

2.5 A headline report summarising consultation findings is available on the website.

2.6 In summary respondents were generally supportive of the proposed approach, including the eight Strategic Growth Statement objectives (listed below), and the suggested approach for evidence collation which underpins the final Strategic Growth Plan.

- Obj 1: To provide a deliverable supply of land for housing, providing high quality homes, reflecting local styles and distinctiveness, in a range of types, sizes and tenures suited to local needs.
- Obj 2: To strengthen the economic base and maintain its diversity by providing a range of employment sites that respond to the needs of industry.
- Obj 3: To maximise the potential of our transportation corridors to deliver sustainable development and enable the creation of an integrated public transport system.
- Obj 4: To support the City of Leicester, Loughborough, Hinckley and other market towns across the County as accessible business, service and cultural centres.
- Obj 5: To promote prosperous and sustainable rural communities.

- Obj 6: To protect and enhance the quality of the area's built and water environments, landscape and farmland, biodiversity and natural resources.
- Obj 7: To seek to achieve high standards of design and environmental sustainability in all new development, responsive to local distinctiveness.
- Obj 8: To focus on the importance of communities, ensuring that place-making delivers high quality development which supports the needs of both existing and new communities.

2.7 Additional areas for consideration highlighted by respondees included: education and skills; more and better employment; focus on type as well as spread of homes; limit congestion in market towns; appropriate growth for rural areas and towns; importance of community cohesion and combating social isolation.

2.8 These comments have been given careful consideration during the development of the SGP and will continue to be considered in future planning and delivery phases.

3.0 Consultation Draft Strategic Growth Plan (January 2018)

3.1 The Consultation Draft Strategic Growth Plan, published in January 2018, set out the broad locations where partners consider that development should be focused and the infrastructure needed to deliver it. Key components of the spatial strategy of the draft L&L SGP were:

- The primary growth areas: The A46 Growth Corridor and Leicester (our 'Central City');
- The secondary growth areas: The Northern Gateway and the Southern Gateway;
- Key Centres: Melton Mowbray and Lutterworth;
- Areas of Managed Growth in Local Plans: Coalville, Hinckley, Loughborough and Market Harborough;
- Villages and rural areas: Limited growth consistent with providing for local needs.

3.2 Consultation on the Draft Strategic Growth Plan took place between 11 January 2018 and 10 May 2018 (a seventeen week period). Initially the consultation end date was 5 April 2018, this was then extended to 10 May 2018 following new availability of evidence, notably the Strategic Assessment of Transport Impacts.

How did partners consult?

3.3 To publicise the launch of the consultation on the consultation draft L&L SGP (January 2018):

- A media briefing was held on 10 January 2018 with East Midlands Today, ITV Central and Leicester Mercury all attending.
- A press release announcing the start of the consultation on 11 January 2018, with a further press release issued in late March 2018 when the consultation period was extended to 10 May 2018. (Appendix 3)
- Statutory consultees and other organisations and groups were notified about the consultation by email or letter. (Appendix 4).
- Public exhibitions were held during the consultation period (Appendix5).
- Copies of the draft SGP and summary leaflets were available in all libraries in the County and the City. Paper copies of the survey and all the evidence were made available at the main offices of each partner.
- The draft SGP and all of the accompanying evidence was available via the Strategic Growth Plan website (lstrategicgrowthplan.org.uk).
- Links to the SGP website were provided on the websites of partner organisations.
- Social media messages.

Consultation responses

3.4 In total 458 responses were received to the survey with an additional 130 responses received by email or letter.

3.5 These consultation responses have all been considered by partners when preparing the revised version of the Strategic Growth Plan.

3.6 The SGP: L&L Consultation Results report (July 2018) and the Partner Response report (September 2018) documents provide further information and have been published alongside the revised version of the Plan.

APPENDIX 1

Press release on Strategic Growth Statement

5th August 2016

Have your say on future development

Help shape future housing and job sites

People can help shape a long-term plan to advise where future employment and housing developments take place in Leicester and Leicestershire.

The city, county and district councils and the Leicester and Leicestershire Enterprise Partnership will be drawing up a strategic growth plan, outlining the amount and location of future growth in the area up to 2036 and broad aspirations for growth up to 2050.

People can comment on the first stage, known as the draft strategic growth statement, between now and 16 September, on www.llstrategicgrowthplan.org.uk

“By working more closely together to plan for future growth across Leicester and Leicestershire, we should be able to secure more funding to deliver infrastructure and have a greater say in how and when growth is delivered. I’d encourage you to have your say on our initial growth statement, before our draft plan is produced and consulted on in summer 2017.”

Councillor Trevor Pendleton, chair of the advisory group

The proposed plan would help to decide:

- How expected population and economic growth is accommodated and supported
- What type of development is needed and when
- The most appropriate locations for developments
- Which environmental assets should be protected and enhanced
- What investment is required in services and infrastructure, where and when

For more information and to view the strategic growth statement and survey questions, please visit www.llstrategicgrowthplan.org.uk or you can see a printed copy at your local library.

<https://www.leicestershire.gov.uk/news/have-your-say-on-future-development>

APPENDIX 2:

Letter/email on Strategic Growth Statement



Dear Sir/Madam,

I am writing to inform you that the nine local authorities in Leicester and Leicestershire and the Local Enterprise Partnership are starting work on a Strategic Growth Plan.

The first stage in the preparation of the plan is the Strategic Growth Statement. This is a high level document which explains why the plan is being prepared, provides a pen portrait of the area, sets out some overall objectives and describes the types of options that we will be considering when planning for growth. A copy of the document is available on our dedicated web site and can be found using this link: www.llestrategicgrowthplan.org.uk

Consultation will begin shortly on the Strategic Growth Statement and extends until **16 September 2016**. A summary leaflet and a consultation survey have also been prepared for your use and both are available on the web site. We would very much welcome your views.

In the meantime, if you have any queries, please contact me or one of the partners. Contact details are given for all of the partners on the web site and within the summary leaflet.

Thank you in advance for your time.

Kind Regards

Patricia Willoughby

Joint Strategic Planning Manager

For the County and Districts of Leicestershire, Leicester City and the LLEP

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APPENDIX 3:

Press release on Consultation Draft Strategic Growth Plan and extension to consultation period

11th January 2018

Have your say on how city and county will grow

A draft Strategic Growth Plan is being developed by a partnership formed by Leicester City and Leicestershire County councils, the seven local borough and district authorities and the Leicester and Leicestershire Enterprise Partnership (LEEP).

It puts forward proposals for the new housing and transport improvements that would be needed to attract jobs and investment to Leicester and Leicestershire from now until 2050.

The final version of the plan will provide strategic direction and help shape the Local Plans that the city, borough and district councils are or will be preparing or reviewing.

It will also be used to support bids for Government funding to deliver the infrastructure needed to support growth.

Now, people are invited to comment on the plan by taking part in a county-wide consultation, which runs from 11 January until 5 April 2018.

The plan estimates that Leicester & Leicestershire needs 96,580 new homes and 367-423 hectares of employment land from 2011-2031. Some of these homes have already been built or have planning permission.

Beyond 2031, the plan identifies the need for a further 90,500 dwellings and additional employment land, which is why further land needs to be unlocked. Local Plans will deal with the detailed allocation of which sites will be brought forward.

Draft proposals put forward in the Strategic Growth Plan include major infrastructure improvements on which new growth is dependent. These include a new link road – the A46 Expressway – to the south and east of Leicester, running from the M69 and the M1 to the A46 north of the city.

The A5 and A42 would also be upgraded to expressway status, supporting growth in these areas. Rail improvements are also proposed.

These road and rail improvements would require significant Government investment and would relieve congestion pressures along the M1 and more widely across the Midlands. It would also potentially unlock land for the required housing and employment.

Key areas for potential growth are the city of Leicester and the corridor of land around the proposed new road. Secondary areas for growth are identified in the north and the south of the county – there would be a ‘northern gateway’ close to East Midlands Airport, and a ‘southern gateway’, close to Magna Park.

Growth is also proposed for Melton and Lutterworth, where it would support transport improvements and relieve congestion in the towns. New housing would be built closer to where people work, to minimise congestion from commuters.

Cllr Trevor Pendleton, chair of the Strategic Growth Plan Members’ Advisory Group, said: “This is a long-term overall plan for the city and county, looking at how we can best accommodate investment and growth. We need national funding, particularly for infrastructure, so that we can grow and prosper – this is why we need this plan.

“We’re asking people whether they agree with the priorities the Government is asking us to deliver, such as delivering new housing, focusing growth in key areas and identifying essential transport infrastructure that will be needed in the future.

“It’s important to stress that no decisions have yet been made, but we do have to plan ahead and identify areas for future growth, which would then be built into our Local Plans at the appropriate time.

“We know that some of these proposals will be controversial, but that’s why we’re having this consultation – to gather people’s views.”

City mayor Peter Soulsby said: “We have ambitious plans for our city and county, and we want to see them grow and prosper in the future.

“This plan is a chance for us to shape that growth, taking advantage of the opportunities it will bring while remembering our responsibilities to the local environment and existing built heritage.

“Leicester is a city that has grown not just in population but in confidence and pride over the past few years. And Leicestershire is a county benefitting from both proven economic success and great potential. We want to capitalise on these major strengths with our Strategic Growth Plan.”

To take part in the consultation, please see the website lstrategicgrowthplan.org.uk or contact any of the local authorities or the LLEP. Local consultation events are also being planned. Details will be on the website.

<https://news.leicester.gov.uk/news-articles/2018/january/have-your-say-on-how-city-and-county-will-grow/>

26th March 2018

More time to comment on city and county’s future growth plans

People are being given more time to comment on plans about how Leicester and Leicestershire could grow in the future.

The draft Strategic Growth Plan has been out for consultation since 11 January. The consultation was due to close at the beginning of April, but the closing date for people to give their views has now been extended to Thursday 10 May 2018.

The plan has been developed by a partnership formed by Leicester City and Leicestershire County councils, the seven local borough and district authorities and the Leicester and Leicestershire Enterprise Partnership (LLEP).

It puts forward proposals for the new housing and transport improvements that would be needed to attract jobs and investment to Leicester and Leicestershire from now until 2050.

Since the consultation was launched, additional evidence has been published that people responding to the consultation might wish to read and consider. As a result, the consultation period has been extended.

The new evidence includes reports on sustainability, habitats and transport impacts, all of which can be found on the [Strategic Growth Plan website](#).

The final version of the Strategic Growth Plan will provide strategic direction and help shape the Local Plans that the city, borough and district councils are or will be preparing or reviewing.

It will also be used to support bids for Government funding to deliver the infrastructure needed to support growth.

The plan estimates that Leicester & Leicestershire needs 96,580 new homes and 367-423 hectares of employment land from 2011-2031. Some of these homes have already been built or have planning permission.

Beyond 2031, the plan identifies the need for a further 90,500 dwellings and additional employment land, which is why further land needs to be unlocked. Local Plans will deal with the detailed allocation of which sites will be brought forward.

Cllr Trevor Pendleton, chair of the Strategic Growth Plan Members' Advisory Group, said: "Because we have added new evidence to the website, we want to give people the chance to look over this information thoroughly before they respond to the consultation. That's why we have extended the deadline for responses.

"We're asking people whether they agree with the priorities the Government is asking us to concentrate on, such as delivering new housing, focusing growth in key areas and identifying essential transport infrastructure that will be needed in the future.

"It's important to stress that no decisions have yet been made, but we do have to plan ahead and identify areas for future growth, which would then be built into our Local Plans at the appropriate time.

"We know that some of these proposals will be controversial, but that's why we're having this consultation – to gather people's views."

To take part in the consultation, please see the website <http://strategicgrowthplan.org.uk> or contact any of the local authorities or the LLEP. Local consultation events are also being planned. Details will be on the website.

<https://news.leicester.gov.uk/news-articles/2018/march/more-time-to-comment-on-city-and-county-s-future-growth-plans/>

APPENDIX 4:

Letter /email sent on the Consultation Draft Strategic Growth Plan



11 January 2018

Dear Sir/Madam,

Strategic Growth Plan for Leicester & Leicestershire: Consultation Draft Plan – Your Views Please

You may be aware that the nine local authorities in Leicester & Leicestershire, together with the Local Enterprise Partnership, are preparing a Strategic Growth Plan.

The first stage in the preparation of the Plan was the Strategic Growth Statement which was published in August 2016. This was a high level document which explained why the Plan is being prepared, provided a pen portrait of the area, set out some overall objectives and described the types of options that we would be considering when planning for growth.

A Draft Plan has now been prepared for public consultation. A copy of the Draft Plan and information on the evidence used in its preparation are available on our dedicated web site. They can be found using this link: www.llstrategicgrowthplan.org.uk.

Consultation on the Draft Plan begins on 11 January and extends until 5 April 2018. A summary leaflet and a consultation questionnaire have been prepared for your use and both are available on the web site. If possible, please fill out the questionnaire online. Alternative formats, including paper copies of the questionnaire, are available on request by contacting one of the partners. Contact details for all of the partners are given on the web site and in the summary leaflet. We would very much welcome your views.

Individual local authorities are also organising consultation events during the consultation period. Details will be posted on our web site and will be available from individual local authorities as soon as times, dates and venues have been confirmed.

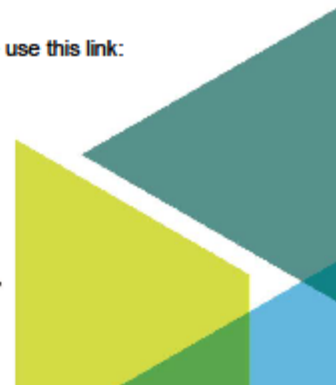
In the meantime, if you have any queries, please contact me or one of the partners.

Thank you in advance for your time.

Kind Regards.

Patricia Willoughby
Joint Strategic Planning Manager
For the County and Districts of Leicestershire, Leicester City and the LLEP
Email: strategic.growthplan@leics.gov.uk

A copy of the documents are available on our dedicated web site. Please use this link:
www.llstrategicgrowthplan.org.uk.



Appendix 5:

List of public exhibitions (dates and locations) on the Consultation Draft Strategic Growth Plan

St Peter's Parish Hall, Market Bosworth	30 January 2018
Tesco, Ashby de la Zouch	1 February 2018
Memorial Hall, Sheepy Magna	2 February 2018
Reception, Charnwood Borough Council, Loughborough	12 February 2018 - 10 May 2018
The Pavilion, Newbold Verdon	12 February 2018
Main Reception, Leicestershire County Council, Glenfield	13 February 2018 - 10 May 2018
Village Hall, Witherley	15 February 2018
Thurmaston Parish Council, Thurmaston	19 February 2018 - 8 March 2018
Village Hall, Groby	21 February 2018
Hill Court, Bushby	21 February 2018
Kegworth Parish Council, Kegworth	22 February 2018
Hinckley and Bosworth Borough Council, Hinckley	26 February 2018
Blaby District Council, Narborough	27 February 2018
Harborough District Council, Market Harborough	27 February 2018
Customer Services Centre, Granby St., Leicester City Council	1 March 2018 - 10 May 2018
Whetstone Parish Council, Whetstone	1 March 2018
Broughton Astley Parish Council, Broughton Astley	1 March 2018
Wycliffe Rooms, Lutterworth	3 March 2018
Village Hall, Great Glen	3 March 2018
Syston Town Council, Syston	12 March 2018 - 10 May 2018
Melton Mowbray Borough Council, Melton Mowbray	14 March 2018
Sapcote Pavilion, Sapcote	19 March 2018
Customer Service Centre, Oadby and Wigston Borough Council, Wigston	21 March 2018

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Consultation results

September 2018

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- Economic Growth Team, Leicestershire County Council
- Communities Team, Leicestershire County Council
- Communications Team, Leicestershire County Council

Whilst every effort has been made to ensure the accuracy of the information contained within this report, Leicestershire County Council cannot be held responsible for any errors or omission relating to the data contained within the report.

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Executive Summary

The Strategic Growth Plan (SGP) is the overarching plan that is being prepared jointly by ten partner organisations in Leicester and Leicestershire which will set out the aspirations for delivering growth (housing, economic, infrastructure) in the city and county until 2050.

The SGP will focus on four key matters:

- Delivering new housing
- Supporting the economy
- Identifying essential infrastructure
- Protecting our environment and built heritage

To achieve this the draft plan proposes a hierarchy of potential development locations close to economic generators and major infrastructure:

- The delivery of a proposed A46 Expressway, with a new Junction 20a (J20a) on the M1
- Leicester as an increasingly important regional city, with a strong city centre
- Focusing growth in secondary growth areas, known as the Northern and Southern Gateways
- Concentrating growth at growth points in the form of Key Centres, these are identified at Lutterworth and Melton Mowbray
- Managed growth in Local Plans for Coalville, Hinckley, Loughborough and Market Harborough

A public consultation of the draft SGP ran from 11 January 2018 to 10 May 2018 (a seventeen week window), and was communicated in various ways, including press releases, public exhibitions, and social media posts.

In total, 458 responses were received to the survey (i.e. submitted by questionnaire either electronically or by paper). These are referred to throughout the report as 'survey responses' (see chapter 2).

Four-fifths of the survey responses were from members of the public (79%), and others were from a range of professional stakeholders. This sample was notably over-represented by respondents from southern Leicestershire districts* (78%) and rural areas of the county (62%), compared to the 2011 Census (52%, 21%).

In addition to the survey responses, 130 written responses were received by email or letter; these were submitted by individuals, organisations, or agents on behalf of landowners or developers. These are referred to throughout the report as 'non-survey responses' (see chapter 3).

* Northern districts - Charnwood, Melton, North West Leicestershire
Southern districts - Blaby, Harborough, Hinckley and Bosworth, Oadby and Wigston

Survey responses

Key priorities

When asked to consider the four key priorities outlined above, similar proportions of respondents said they agreed (42%) and disagreed (42%) with them.

One primary concern of respondents was in regard to the environmental implications of the plan. Some felt large sections of countryside and wildlife would be adversely affected by the proposals in the draft SGP, as a result of the construction of the A46 Expressway and the additional pollution resulting from all proposals focusing on growth. Some respondents suggested the SGP place greater emphasis on the use of environmentally-friendly alternatives, such as renewable energy or sustainable growth, and make environmental preservation a higher priority.

Some respondents also felt concerned about the housing development proposed in the draft SGP. Whilst some felt the county had already been excessively developed for housing, others felt the proposals may result in further or over-development, particularly of rural areas and villages. Respondents made a number of suggestions in relation to residential growth, such as small-scale development, making use of disused sites or brownfield land, and focusing on needs-based housing.

Primary Growth Areas

Over half (57%) disagreed with the proposed construction of the A46 Expressway, whereas nearly a third (31%) agreed with the proposal.

Respondents were often concerned about the potential implications of the A46 Expressway on the existing road network and congestion. Some felt the existing network to be congested and insufficient in terms of capacity for growth. Others felt concerned about the additional congestion that may be added to the south and east of the county as a result of the Expressway. Some respondents made a number of suggestions as to how the current road network could be improved or congestion reduced. In contrast, some respondents felt the proposed Expressway would improve the existing road network and ease congestion.

Other respondents felt the Expressway would cause irreversible damage to much of the Leicestershire countryside and wildlife, and add pollution and noise to the proposed areas. Some respondents felt the Expressway would have a detrimental impact on the character of the towns and villages of the south and east of the county, and in response made a number of suggestions as to how the SGP could improve its proposals for these housing and residential areas.

The majority of respondents agreed with the proposal to develop Leicester into becoming the 'central city' of the region (54%),

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whereas nearly a third disagreed (29%).

Several respondents felt previous growth in Leicester had already established the area to be the natural 'central city' of the region. Others cited it to be the economic hub of the region, and saw the proposed development as the natural trajectory for the city. In contrast, some respondents saw such previous growth in the city as excessive, resulting in Leicester becoming too busy and crowded. The proposals to develop the city were therefore seen as having the potential to compound these issues further.

Some respondents voiced concerns about the transport infrastructure in the city. Some felt the proposed development of Leicester would worsen the current congestion and parking issues experienced in the city. Others voiced concern at the standard, expense, and breadth of provision of public transport connected to the city, and that such accessibility between Leicester and residential areas in the county needed to be improved via: reduced fares or increased subsidies; de-privatisation of bus services; improved railway access between areas; and the development of a Leicester tram network.

Secondary Growth Areas

Respondents were in greater agreement with the proposed Northern Gateway than the Southern Gateway; nearly half of respondents (47%) agreed with the Northern Gateway, whereas only a third of respondents (33%) agreed with the proposed

Southern Gateway. In contrast, whilst half of respondents (50%) disagreed with the Southern Gateway (39% strongly disagreed), less than a third (28%) disagreed with the Northern Gateway.

Respondents often cited the current and proposed transport infrastructure, the proximity of existing and planned employment centres, nearby cities, towns and villages, and the availability of development-ready land as reasons for their agreement of the Northern Gateway.

Some respondents voiced similar reasons in support of the Southern Gateway, but others felt the road network to be ill-prepared for additional traffic associated with the proposed growth. Others voiced concerns about the potential impact of the Southern Gateway on the surrounding residential areas, with particular reference to villages.

Reaction to the proposed Key Centres of Lutterworth and Melton Mowbray appeared to be evenly split; nearly four-in-ten agreed with Lutterworth (40%) and Melton Mowbray (38%), whereas over a third (36% and 34% respectively) disagreed.

Some respondents felt the existing infrastructure, such as the road network, rendered the two towns suitable to be 'Key Centres'. Others felt positive in relation to proposed growth of the two Key Centres, with several respondents specifying the need for employment growth in Lutterworth and Melton Mowbray.

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Other respondents were more concerned about the potential implications on the road network and congestion around Lutterworth and Melton Mowbray. Some respondents felt Lutterworth already faced high levels of congestion and had little alternative transport options, and others felt Melton Mowbray to be too far from the proposed A46 Expressway to reap enough benefit.

Respondents were typically more positive about the proposals relating to limited growth. The majority of respondents agreed that the market towns of Market Harborough (61%), Loughborough (59%), Coalville (55%), and Hinckley (54%) should have 'managed growth' only, and four-fifths of respondents agreed that growth in villages and rural areas should be limited to providing for local needs (79%).

Respondents often cited that such proposals would protect against overdevelopment of these areas. Others felt growth is needed in these areas. In relation to the 'managed growth' of the four market towns, some respondents felt significant investment was required for regeneration and transport infrastructure improvements. Other respondents felt growth in villages and rural areas should not be limited to local need, and instead that development was needed to prevent future deterioration.

Other comments

When asked whether they had any other comments, respondents made a number of points.

Several respondents felt the draft SGP did not include enough information in regard to housing and residential areas, suggesting: the proposed locations for development to be vague; the methodology used to determine need to be unclear; and those affected by the proposals were not adequately identified.

Other respondents voiced a similar concern about the A46 Expressway, suggesting: the proposed route was unknown; there was a lack of business case for the Expressway; and how the Expressway would be connected to the existing road network was unclear.

Following on, respondents felt more information should be provided and that subsequent consultations held in order to provide a more informed response.

Other respondents reiterated their concerns about the environmental implications of the draft SGP, suggesting the proposals may cause excessive damage to the countryside and wildlife. Respondents reaffirmed their suggestion for the SGP to make environmental consideration a higher priority.

Some respondents also restated their concerns of the possible effects of the SGP on villages and rural areas, with apprehensions about road capacity, local character and identity, and the capacity of other infrastructure such as GP practices and schools. Respondents made a number of suggestions relating to residential development,

Strategic Growth Plan - Public consultation results

including: using disused sites or brownfield land; focusing on needs-based development; and building new towns or settlements instead of extending existing ones.

Other respondents reiterated their concerns about the impact of the SGP on the road network and congestion, suggesting the plans to be overly focused on car-based travel, and inadequately considering public transport as an alternative.

Statistical analysis

Statistical analysis of the survey responses showed some differences by demographic groups. Male respondents, respondents answering in a professional capacity, and those based in northern Leicestershire districts or urban city and town areas of the county were typically more positive about the proposals than the average. In contrast, female respondents, members of the public, or those based in southern Leicestershire districts or rural areas of the county were often more negative about the proposals.

Non-survey responses

In the main the 130 non-survey responses reflected the key points raised in the analysis of the survey responses set out in chapter 2.

Spatial strategy

With regards to the spatial strategy of the draft SGP the A46 Expressway received the majority of the comments in comparison with other components of the SGP strategy. The Northern and Southern Gateways received similar mention to each other, as did the two proposed key centres, Melton Mowbray and Lutterworth. Reference was also made by some respondents to Coalville, Loughborough, Hinckley, Market Harborough and larger rural communities continuing to represent sustainable locations for growth. The need to maximise the use of brownfield sites for housing, particularly in the City, was made by many respondents. Some respondents expressed concern about the downgrading of the rural character of villages and the related adverse effect on wider rural areas.

Details on several potential new settlements or strategic sites were submitted as a response to the consultation.

Transport

With regards to transport the most notable concerns were regarding the amount of new road building, the congestion this may cause, and concerns about poor public transport infrastructure.

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There were also particular concerns on the lack of infrastructure to promote and support sustainable travel, reducing car usage and promoting more sustainable means such as car-pooling, walking and cycling.

Environment, health and wellbeing

Comments regarding the environment were wide ranging, with the vast majority of these either referring to the negative effects that the SGP may bring about or providing suggestions on how to minimise or mitigate their effects. Common themes amongst responses related to; concerns regarding the loss of, and damage to agriculture land and landscapes, and that the protection of the environment is lacking from key priorities.

There were a few, but fairly detailed responses regarding health and well-being.

Housing

The lack of affordable housing and too much housing development in and around villages and rural areas were particular concerns relating to housing. Some comments questioned the robustness of projections around the new number of new homes required by 2050, and that a more realistic assessment of need should be carried out. A number of responses referred to a lack of consideration of environmentally-friendly, low carbon housing, with some suggestions that new homes should be designed on a carbon

neutral standard. A number of respondents felt that the SGP would contribute to the loss of community and would downgrade the character of the rural villages.

However, there was some acknowledgement that the SGP recognised the need to provide sufficient housing and there was some support, especially from agents, for proposals to place a greater emphasis on housing developments in major strategic locations.

Employment land

Employment land was referred to either specifically or more generally in connection with other forms of development on several occasions. With regards to warehousing reference was made to no more warehousing being directed towards Lutterworth, with Daventry and Rugby more logically fulfilling the Southern Gateway role. Less reliance on logistics was requested, and specific support sought for grass root small enterprises etc.

The national and regional shortage of warehousing and distribution was referred to, and a proposal for a Strategic Rail Freight Interchange (SRFI) near Hinckley.

Town centre, retail, ICT, waste, and energy

A few respondents commented specifically on these topics. The need to invest in ICT infrastructure and an agreement that digital

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connectivity is a major issue for many in rural areas was referred to.

The lack of reference to Minerals and Waste Plans was noted.

Regarding energy, a common response was that there should be more of a focus on the building of carbon neutral housing and increasing the use of renewable energy.

Process and consultation

It was noted that it has been a positive step to listen to people at this early stage; however, there has been some criticism that the consultation lacked local engagement and public examination. A number of respondents felt that the plan to be too simplistic, not thought out and/or lacking evidence. A review period in line with the National Planning Policy Framework (NPPF) has been suggested. There were some concerns over the delay in progressing a memorandum of understanding and whilst some praised that the SGP was bringing partners together, a number of developers and Parish Councils had concerns that the SGP wasn't being delivered as a statutory plan, with some feeling it should be.

Additional points made included concerns over the provision of community infrastructure such as schools, doctors, dentists and digital connectivity, support for the priorities and principles of the SGP, and for reference to be made to the importance of tourism.

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Chapter 1: Introduction and methodology

The Strategic Growth Plan

The Strategic Growth Plan (SGP) is the overarching plan that is being prepared jointly by ten partner organisations in Leicester and Leicestershire which will set out the aspirations for delivering growth (housing, economic, infrastructure) in the city and county until 2050. The SGP will be used as a basis for preparing or reviewing individual Local Plans, transport plans and economic plans.

The vision of the SGP is that by 2050, Leicester & Leicestershire will have established itself as a driver of the UK economy, exploiting opportunities for linkages across its diverse economic base, supporting its urban and rural centres, and taking advantage of its exceptional location. Growth will contribute to people's health, happiness and well-being through the timely delivery of well-designed and high quality development, raising the bar in terms of environmental standards, quality of life and local distinctiveness.

The SGP will focus on four key matters:

- Delivering new housing
- Supporting the economy
- Identifying essential infrastructure
- Protecting our environment and built heritage

Key priorities

The SGP proposes to build more development in major strategic locations and to reduce the amount of development that takes place in existing towns, villages and rural areas. This will allow the planning of new housing and employment together with new and improved roads, public transport, schools, health services, local shops and open space.

To achieve this the draft plan proposes a hierarchy of potential development locations close to economic generators and major infrastructure:

- The delivery of a proposed A46 Expressway, with a new Junction 20a (J20a) on the M1
- Leicester as an increasingly important regional city, with a strong city centre
- Focusing growth in secondary growth areas, known as the Northern and Southern Gateways
- Concentrating growth at growth points in the form of Key Centres, these are identified at Lutterworth and Melton Mowbray
- Managed growth in Local Plans for Coalville, Hinckley, Loughborough and Market Harborough

Overview of the process

The ten partner organisations have consulted with the public on the draft Strategic SGP. A consultation survey was made available on the Strategic Growth Plan website from 11 January 2018. This was accompanied by the draft plan itself and the summary leaflet, both of which set out the proposals.

The survey asked for views on the SGP proposals. Respondents also had the option of responding to the consultation via letter or email, rather than the survey (these non-survey responses are analysed in Chapter 3 of this report). Further evidence was made available after the consultation period had started and as a consequence the consultation period was extended from 5 April 2018 to 10 May 2018 (a seventeen week fieldwork window) to provide the opportunity for this evidence to inform consultation responses.

Communications and media activity

The partner organisations communicated the draft Strategic Growth Plan consultation in a number of ways, including:

- A press release announcing the start of the consultation in January 2018, with a further press release issued in late March 2018 when the consultation period was extended to 10 May 2018.
- Statutory consultees were notified about the consultation by email or letter. Each partner then contacted other organisations and groups whom they wished to notify about the consultation

via email or letter.

- Public exhibitions were held during the consultation period (see full list in Appendix 4).
- Copies of the draft SGP and summary leaflets were available in all libraries in the County and the City. Paper copies of the survey and all the evidence were made available at the main offices of each partner.
- The draft SGP and all of the accompanying evidence was available via the Strategic Growth Plan website (lstrategicgrowthplan.org.uk).
- Links to the SGP website were provided on the websites of partner organisations.
- Social media messages.

Alternative formats / Equality and Human Rights Impact Assessment (EHRIA)

Measures were put in place to make the consultation process open and inclusive. The draft SGP and evidence was available to download from the Strategic Growth Plan website. Copies of the draft SGP, summary leaflet, evidence and survey were available as hard copy and in alternative formats on request. A freepost return address was provided for completed hard copy surveys to encourage response. Contact details for a named officer at each partner organisation was given on the website to help with queries.

Analysis methodology

In total, 458 responses were received to the survey (i.e. submitted by questionnaire either electronically or by paper). These are referred to throughout the report as ‘survey responses’ and are analysed in chapter 2. In addition to the survey responses, 130 written responses were received by email or letter; these were submitted by individuals, organisations, or agents on behalf of landowners or developers. These are referred to throughout the report as ‘non-survey responses’, and are analysed in Chapter 3.

Graphs and tables have been used to assist explanation and analysis. Survey question results have been reported based on those who provided a valid response, i.e. taking out the ‘don’t know’ responses and no replies.

Postcodes supplied by respondents to the survey (members of the public and organisations) were used to collect geographical information, including lower-tier local authority, deprivation (IMD county quintile) and rural-urban classification (RUC).

The survey responses of different demographic groups were also statistically compared using Chi-Square analysis.

The survey contained eight open-ended questions, which received a total of 2,450 comments. Coding frames were devised for each of the questions. All of the comments were read and coded by analysts. Open comment themes are available in Appendix 2.

Survey respondent profile

Nearly four-fifths (79%) of survey respondents were members of the public, and nearly fifth (19%) were professional stakeholders. The sample was notably over-represented by respondents from southern Leicestershire districts* (78%) and rural areas of the county (62%). A full respondent profile is in Appendix 3.

The stakeholder organisations that responded to the consultation survey are listed in Table 1. Of the stakeholders that responded to the consultation survey, three-quarters (75%) said they were providing the official response of their organisation.

Chart 1: Survey respondent roles



Base = 458

Chart 2: Survey respondent stakeholders: Official responses



Base = 93

* Northern districts - Charnwood, Melton, North West Leicestershire
Southern districts - Blaby, Harborough, Hinckley and Bosworth, Oadby and Wigston

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Table 1: Stakeholder organisations (survey responses)^

^ does not include MPs, elected members, or members of the public

Andrew Granger & Co.	Great Glen Parish Council	Sheepy Parish Council
Andrew Hiorns Limited for Parker Strategic Land Limited	Harlow Bros Holdings Ltd	Stoney Stanton Parish Council
Anstey Parish Council	Herbert Daybell	Stoughton Parish Council
Ashby Town Council	Houghton on the Hill Parish Council	Strutt & Parker
Barrow upon Soar Parish Council	Hugglescote and Donington Le Heath Parish Council	Swithland Parish Meeting
Barwell Parish Council	Huncote Parish Council	The Environment Agency
Bidwells	Hungarton Parish Council	The National Forest Company
Birstall Parish Council	IM Properties Ltd	Thurcaston & Cropston Parish Council
Bitteswell Parish Council	Kibworth Harcourt Parish Council	Thurnby and Bushby Parish Council
Burbage Parish Council	LeicesterShire & Rutland Sport ¹	Time
Burton on the Wolds, Cotes and Prestwold Parish Council	Leicestershire Police	Together Leicester
Burton Overy Parish Council	Lichfields (on behalf of Commercial Estates Group)	Ullesthorpe Parish Council
Carlton Parish Council	Long Clawson, Hose and Harby Parish Council	Vale Planning Consultants
Claybrooke Magna Parish Council	Loughborough University	Whetstone Parish Council
Copesticks Ltd	Lutterworth Town Council	Wigston Parva Parish Council
Countesthorpe Parish Council	Manston Investments Ltd	Wilson Bowden Developments Ltd
Cre8 Associates Limited	Marrons Planning (on behalf of C Walton Ltd)	Wymeswold Parish Council
Croft Parish Council	Mountsorrel Parish Council	
Croxton Kerrial & Branston Parish Council	Narborough Parish Council	
Define Planning and Design Ltd	Overseal Parish Council	
Desford Neighbourhood Development Plan Working Group	Oxalis Planning Limited	
DPP Planning	Packington Parish Council	
Earl Shilton Town Council	Sapcote Parish Council	
East Langton Parish Council	Persimmon Homes	
Federation of Small Businesses	Quorndon Parish Council	
Fosse Villages Neighbourhood Plan	Railfuture	
Fox Bennett	Rothley Parish Council	
Framptons Town Planning Ltd	Savills	
Framptons Town Planning Ltd (on behalf of db symmetry)	Sharnford Parish Council	
GraceMachin: Planning & Property	Shearsby Parish Council	

¹ on behalf of Active Places Forum group

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Table 2: Stakeholder organisations (non-survey responses)^

^ does not include MPs, elected members, or members of the public

Anglian Water	Hoby With Rotherby Parish Council	Savills (on behalf of Taylor Wimpey)
Ashby Town Council*	Homes England	Savills (on behalf of Merton College, Oxford)
Barkby & Barkby Thorpe Parish Council	ID Planning (on behalf of Litton Properties Ltd)	Scraptoft Parish Council
Barkby and Barkby Thorpe Parishes Action Group	Keyham Village	Sempervox
Beeby Parish Meeting	Kilby Parish Council	Shepshed Town Council
Bidwells (on behalf of Farmcare Ltd)	Lambert Smith Hampton (on behalf of DJ&SC Smith)	Shobnall Parish Council
Blaby Parish Council	Leicester Green Party	Sport England
Campaign for Better Transport (Leicestershire)	Leicester Quakers	Stoney Stanton Parish Council
Campaign to Protect Rural England	LeicesterShire & Rutland Sport	Tetlow King Planning (on behalf of Rentplus UK)
Canal & River Trust	Leicestershire & Rutland Wildlife Trust	The Coal Authority
Castle Donington Parish Council	Leicestershire Partnership NHS Trust and The University Hospitals of Leicester NHS Trust	Transition Leicester
Centrebus Limited and Midland Classic Limited	Loughborough Quakers	Witherley Parish Council
Division of Public Health, Leicester City Council	Irmplanning ²	WYG (on behalf of Barwood Land)
East Goscote Parish Council	Magna Park is Big Enough	
East Leake Parish Council	Mather Jamie (on behalf of Parker Strategic Land)	
East Midlands Airport	Misterton with Walcote Parish Council	
Education and Skills Funding Agency (ESFA)	Narborough Parish Council	
End of the Road Campaign	National Grid	
Footpaths: Community Carbon Reduction	Natural England	
Framptons Town Planning Ltd (on behalf of db symmetry)*	NFU East Midlands Region	
Friends of the Earth	North Northamptonshire Joint Planning & Delivery Unit	
Geoffrey Prince Associates Ltd (on behalf of Cawrey Limited)	Nottinghamshire County Council	
Gladman	Pegasus Group ³	
Great Central Railway	Planning Prospects	
Health and Safety Executive	Road Haulage Association (RHA)	
Heaton Planning Ltd (on behalf of Tarmac Trading Ltd)	RPS Planning & Development (on behalf of IM Land)	
Highways England	Rushcliffe Borough Council (RBC)	
Historic England	Sapcote Parish Council	

*also provided additional comments via survey

² on behalf of William Davis and Parker Strategic Land

³ on behalf of Hallam Land Management, Bloor Homes, William Davis, Barratt Homes, David Wilson Homes and Mrs BA Walker

Chapter 2: Survey response analysis

Survey respondents were asked several questions about what they thought about the draft SGP proposals.

Key priorities

The four priorities of the draft SGP were outlined:

- Creating conditions for investment and growth
- Achieving a step change in the way growth is delivered
- Securing essential infrastructure
- Delivering high quality development

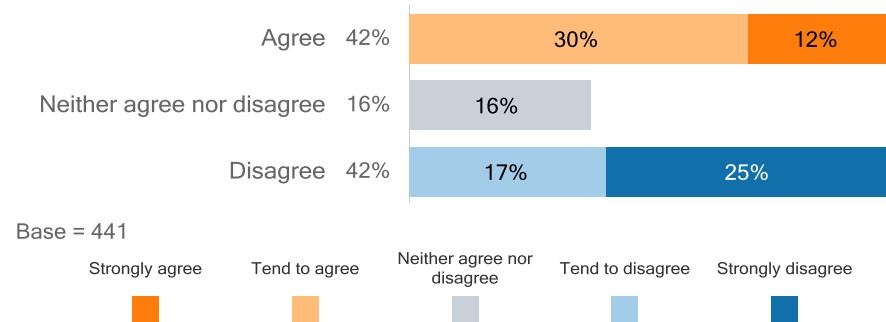
Respondents were asked to what extent they agreed or disagreed with the four priorities. Chart 3 shows a split response; 42% of respondents agreed with the four priorities, and 42% disagreed.

Respondents who were significantly more likely to agree were: professionals (63%), from northern districts (57%) or urban city and town areas (49%), or were male (46%). Those who were more likely to disagree were: from rural town and fringe areas (51%), members of the public (47%), or from southern districts (44%).

Respondents were then asked to provide comments. Chart 4 lists the top 10 codes.

Respondents were often concerned about the environmental implications of the proposals outlined in the draft SGP. Some felt

Chart 3: Key priorities



the potential developments, such as the A46 Expressway, would inevitably lead to building on “greenbelt”* areas of the county, resulting in the permanent loss of large sections of the Leicestershire countryside, farmland and wildlife. Several respondents argued that the proposals placed a disproportionate focus on car transport, which would result in additional pollution and diminishing air quality. Other respondents voiced their concerns that little consideration had been made in the draft SGP to the effects of the proposals on the environment.

Often in conjunction with their concerns, several respondents felt the environment should be more prominently considered in the SGP. Topics such as climate change and renewable energy, sustainable methods of transportation and development, and the reservation of natural habitats within the county were all raised as potential alternative priorities.

* There is no statutory greenbelt in Leicester and Leicestershire but the term was used by survey respondents to denote greenfields, green space, or similar.

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Several respondents voiced their concerns about housing overdevelopment. Some respondents felt previous growth had already resulting in the overdevelopment of certain residential areas. Others felt the SGP could extend the issue to other areas in order to meet housing quotas. Respondents in rural areas and small villages felt such development could reduce the space between their area and others, resulting in a loss of character or identity. More broadly, other respondents felt the draft SGP to be disproportionately focused on growth in general, and felt other strategies had not been considered. Respondents also often provided a suggestion in relation to housing and residential areas, such as the delivery of small-scale developments, protecting rural and village areas, making use of disused land instead of “greenbelt”, building new towns instead of developing existing ones, and focusing on needs-based housing.

Other respondents were more positive about the Key Priorities. Several respondents simply voiced their agreement with the proposals, and others felt the proposals created the conditions required for development and economic growth in the county, and for Leicestershire to improve its standing in the national context.

Some respondents felt the current road infrastructure and congestion to be a mitigating factor for further development in the county, and that the proposals of the draft SGP would only worsen these aspects. Several respondents felt public transport infrastructure, such as bus or train services, should be improved in order to negate these potential road-based issues.

Several respondents felt they needed more information in order to provide a response.

“Does the local government have no qualms destroying the local countryside, nature & wildlife?”

“I would like to see emphasis on low carbon, green commitment in all development issuing from this Plan”

“The development outlined will destroy the nature of the communities that currently exist ... effectively villages will be amalgamated into large towns”

“Focus should also be given to create homes on existing derelict buildings and sites rather than taking entirely from green belt”

“If housing must be developed, then it should be in keeping with surrounding areas”

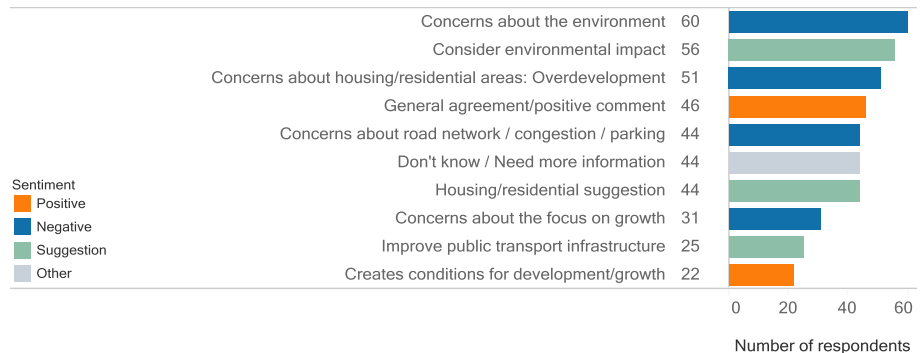
“All the key issues have been well considered and carefully prioritised”

“All the above are essential for the continued growth of the Leicestershire region”

“Road network is totally inadequate. Without improving roads (proper investment, e.g. M1 Junction 21, where it has been tinkered with that will never solve the problem) business will be reluctant to invest. I own a business and am reluctant to invest in this area due to continued congestion”

“There is a strong need for greatly improved local and regional bus or light rail services”

Chart 4: Key priorities - Open comments (Top 10)



The Primary Growth Areas

Respondents were asked a number of questions about the proposed Primary Growth Areas: the A46 Expressway, and Leicester developing its role as the 'central city'.

The A46 Expressway

Respondents were asked to what extent they agreed or disagreed with the proposed corridor of growth around the south and east of Leicester linked to the construction of a new A46 Expressway.

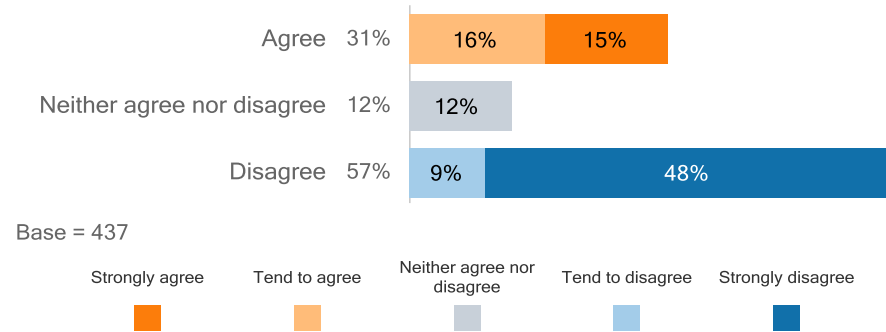
Chart 3 shows the majority of respondents disagreed with the proposed A46 Expressway (57%), whereas a third said they agreed (31%).

Respondents who were significantly more likely to agree were: from northern districts (51%), professionals (49%), from less deprived areas of the county (IMD county quintile 4) (46%), urban city and town areas (41%), or were male (33%). Those who were more likely to disagree were: female (73%), from rural town and fringe areas (69%), members of the public (65%), or from southern districts (62%).

Respondents were then asked to provide comments. Chart 6 lists the top 10 codes.

The most frequent concern from respondents was that of the road network and congestion in relation to the existing road infrastructure and proposed A46 Expressway. Being specific to the

Chart 5: A46 Expressway



proposed A46 Expressway, some respondents felt the new road would add congestion to the south and east of the county, and encourage residents to overly rely on transportation via car. More generally, some respondents felt the existing road network in Leicestershire was already too congested and not of sufficient quality or capacity for growth to occur.

In conjunction, some respondents suggested the road network be improved in various ways. Some respondents voiced this suggestion at a broad level, suggesting the roads in general be repaired or improved, or congestion be reduced, whilst others made reference to specific routes or areas. Other respondents felt greater focus could be placed on improving public transport infrastructure, such as bus or train services, instead of focusing on car-focused growth.

In contrast, some respondents felt the proposal would improve the existing road network and ease congestion.

Similar to the previous question about Key Priorities, some respondents voiced their concern about the implications of the

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proposed A46 Expressway on the environment. Respondents felt the proposal would cause irreversible damage to much of the Leicestershire countryside and wildlife, and add pollution and noise to the affected areas. In conjunction, several respondents suggested that the environmental implications be considered more in the development of the SGP. In relation to the proposed A46 Expressway, respondents often suggested the rural areas affected be offered greater protection from development. Others made their suggestion at a broader level, suggesting the SGP place greater emphasis on environmental responsibility, such as sustainable transport and growth.

As a result of the proposed A46 Expressway, some respondents felt housing and residential areas in villages and towns would be overdeveloped or overused, and lose their character and identity. Some respondents made suggestions relating to housing and residential areas: some felt the SGP should make greater effort to protect the existing size and character of rural villages; others felt housing developments should be more needs-focused; some suggested specific locations of further housing growth; and some felt new towns could be built instead of developing existing areas.

In response to the proposed A46 Expressway, some respondents suggested alternative locations of such development, including improvements to specific roads, routes or areas.

Several respondents felt they needed more information in order to provide a response.

“An expressway to the south of the city will create traffic whilst the development in the A46 corridor will be heavily car dependent”

“The roads in and around Lutterworth already are unsuitable for purpose, the traffic at peak times is unbearable with long delays and many accidents”

“The envisaged road improvements should also include a link between the A6 in Loughborough and the M1 near Shepshed via an improved A512 to reduce pressure on the M1”

“If the scheme is planned properly it should ease congestion at the bottle neck that is currently junction 21 which should persuade businesses that Leicester is more suitable than neighbouring cities”

“The proposal that a new “expressway” be built through some of the nicest countryside adjacent to Leicester City, destroying village & wild life environments is sheer vandalism on a huge scale”

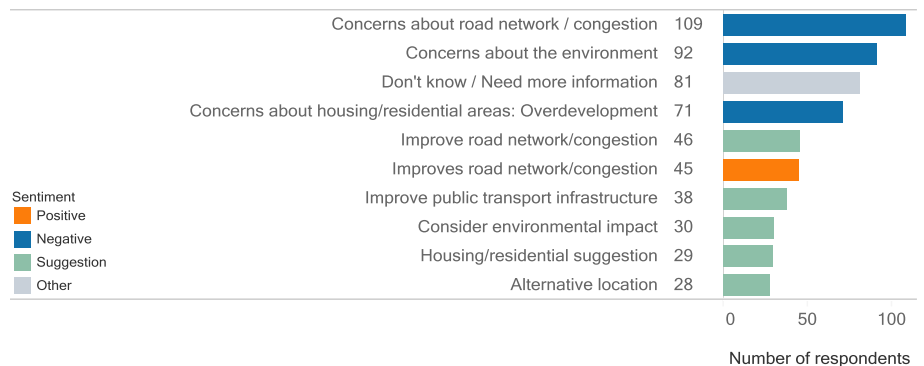
“The strategy must be mindful of the protection of rural villages, the environment, heritage and landscape”

“The details given suggest that Countesthorpe will be adversely prejudiced and might be consumed into a new urban sprawl losing its identity and character as a rural village”

“A new town on the A47 to Peterborough would be a more suitable site for housing which Leicester City is struggling to provide and would allow the number of junctions on the expressway to be minimised”

“The proposed route is being planned too near existing housing and should be built further south”

Chart 6: A46 Expressway - Open comments (Top 10)



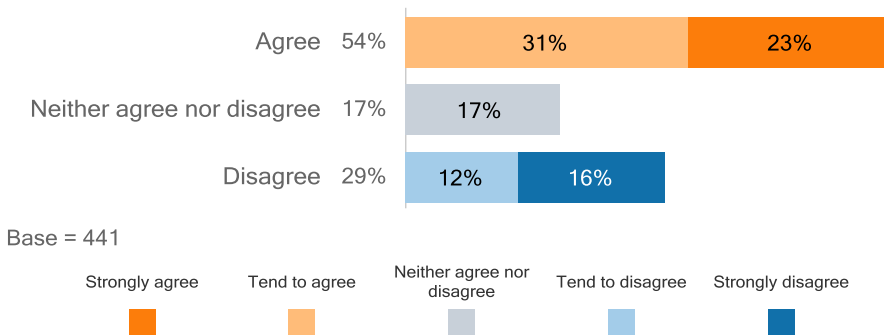
Leicester as the 'central city'

Respondents were asked to what extent they agreed or disagreed with the proposal that Leicester should develop its role as the 'central city'.

Chart 7 shows that the majority of respondents agreed with the proposal of Leicester developing as the 'central city' (54%), whereas three in ten said they disagreed (29%).

Respondents who were significantly more likely to agree were: professionals (66%), male (58%), or from urban city and town areas (41%). Those who were more likely to disagree were: female (36%) or from southern districts (31%).

Chart 7: Leicester as the 'central city'



Respondents were then asked to provide comments. Chart 8 lists the top 10 codes. Many of the comments related to the transport options around Leicester.

The most frequently mentioned comment was to suggest improvements to the public transport infrastructure in the city and county in order to sustainably improve accessibility between residential areas and Leicester. Suggestions regarding public transport made reference to: improving the current general infrastructure; reduced fares or increased subsidies; de-privatisation of bus services; improving railway access between areas; and the development of a Leicester tram network.

In relation to the suggestions above, several respondents felt the current public transport infrastructure to be of poor standard, or to be ill-prepared for the future growth proposed by the SGP. Respondents felt current provision to be expensive, and felt that current accessibility between Leicester and residential areas in the county and other cities to be limited.

Other respondents voiced concerns about the current road infrastructure and congestion, and felt the proposals would only worsen these aspects. Some respondents made specific reference to the city centre, citing current congestion and parking issues as a potential issues of developing Leicester to be the 'central city'. Others felt the proposed developments would only increase the traffic within the city centre. Some respondents voiced their concerns about the roads at a more general level, citing their difficulties in accessing Leicester from their rural residential area via road, and that they felt the proposals to be too car-focused.

Other respondents were more positive about the proposal to develop Leicester as the 'central city'. Several respondents felt

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previous growth in Leicester had already established the area to be the natural 'central city' of the region. Others cited it to be the economic hub of the region, and saw the proposed development as the natural trajectory for the city.

Other respondents placed greater emphasis on the need for Leicester to develop. Some respondents felt the city to be run-down and in need of great investment to modernise and become a more attractive location in terms of employment and leisure opportunities, in order to compete with other nearby cities.

Other respondents felt more negatively about Leicester, suggesting the city to have already been the favoured recipient of much investment and growth in the past, and as a result has become overdeveloped, too busy and crowded, and unattractive as a location. Other respondents felt the proposals would simply add to these issues.

Some felt the focused development of Leicester would be detrimental to the villages and rural areas in the county, as growth in these areas may be limited as a result. Following on, several respondents suggested the developments proposed in the SGP should be spread more evenly across the county.

Lastly, several respondents made suggestions with regards to housing and residential areas. Respondents suggested: using vacated buildings or brownfield sites for housing developments in the city; providing housing within the vicinity or within easy access of the city centre; and providing affordable homes.

"Improvements to public transport into the city from its suburbs and outlying areas - bringing bus services into local authority control and co-ordination"

"Leicester once had a very efficient tram system. It could have one again and transform itself"

"The lack of consideration of new public transport links is very concerning, it will not be possible to deliver all the housing growth and a thriving city centre without vastly improved public transport options"

"Traffic in Leicester is already congested so attracting more people into the City is just going to make it worse"

"Leicester is already the central city, and it would be ridiculous not to build on the range of facilities and services already based there"

"The city needs to develop in this way. The current decay of the city centre needs to be reversed to make it become more attractive, from both a social and business perspective"

"Having everything in the centre is a bad idea as it means that everyone will have to travel to the city. This is not sustainable."

"Focusing investment here will further marginalise the market towns that are already in a state of decline"

"Options to turn vacant space in the city centre into housing should be considered"

Chart 8: Leicester as the 'central city' - Open comments (Top 10)



The Secondary Growth Areas

Respondents were asked a number of questions about the proposed Secondary Growth Areas.

The Northern and Southern Gateways

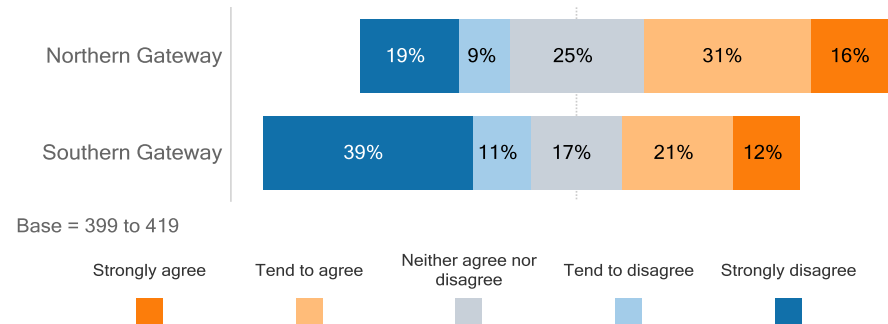
Respondents were asked to what extent they agreed or disagreed with the proposed Northern and Southern Gateways.

Chart 9 shows that respondents were in greater agreement with the proposed Northern Gateway than the Southern Gateway; nearly half of respondents agreed with the Northern Gateway (47%), whilst less than a third disagreed (28%). In contrast, whilst a third (33%) agreed with the Southern Gateway, half (50%) disagreed. Notably, four in ten respondents strongly disagreed with the Southern Gateway (39%).

Respondents who were significantly more likely to agree with the Northern Gateway were: from Hinckley and Bosworth (67%), from less deprived areas of the county (IMD county quintile 4) (65%), professionals (65%), from Charnwood (62%), or were male (55%). Those who were more likely to disagree were: female (42%), or members of the public (33%).

Respondents who were significantly more likely to agree with the Southern Gateway were: from northern districts (58%), professionals (56%), from less deprived areas of the county (IMD county quintile 4) (51%), urban city and town areas (45%), or were male (36%).

Chart 9: Northern and Southern Gateways



Those who were more likely to disagree were: from rural town and fringe areas (67%), female (65%), from the most deprived areas of the county (IMD county quintile 1) (64%), from southern districts (57%), or members of the public (57%).

Respondents were then asked to provide comments. Chart 10 lists the top 10 codes.

The most common comment from respondents was that the area around the Northern Gateway renders it suitable for the development of the proposal. Respondents cited the following factors as supportive attributes for the development of the Northern Gateway: the current and proposed transport infrastructure, such as the East Midlands Airport, rail network (including HS2) and motorway; the proximity of existing and planned employment centres; the proximity of nearby cities, towns and villages, their associated residential areas and other infrastructure; and the availability of development-ready land.

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Some respondents made similar points about the proposed Southern Gateway. For this proposal, respondents cited the following supportive attributes: the current and proposed road infrastructure, such as the M1 and the improvements to the A5; the proximity of employment centres such as Magna Park and Daventry International Rail Freight Terminal (DIRFT); and its accessibility to other regions.

However, several respondents also expressed numerous concerns about the proposed Southern Gateway.

Most often, respondents felt the roads around the Southern Gateway, such as the M1, M6, M69, A5, and village roads, were at full capacity with regards to traffic. Others felt the roads in particular villages would be ill-prepared and adversely affected by the Southern Gateway due to the increased traffic, with particular concern about HGVs. Some respondents voiced the same concern at a general level, without making reference to either the Northern or Southern Gateway.

Following on from the concerns about village roads, several respondents voiced concerns about the impact of the proposals on the residential areas around the Southern Gateway. Respondents felt the proposal could potentially result in overdevelopment of the village and rural areas.

Other respondents felt the proposals would damage the environment around the Southern Gateway, due to the development on “greenbelt” land, and the increased pollution from

additional traffic to the area. Some respondents voiced the same concern at a general level, without making reference to either the Northern or Southern Gateway.

Some respondents felt they needed more information in order to make an informed comment.

“We strongly support the Northern Gateway because it is associated with the A42, M1, East Midlands Airport, and near the Midlands Mainline railway and HS2 at Toton”

“There is sufficient infrastructure along the A5 including DIRFT and Magna Park”

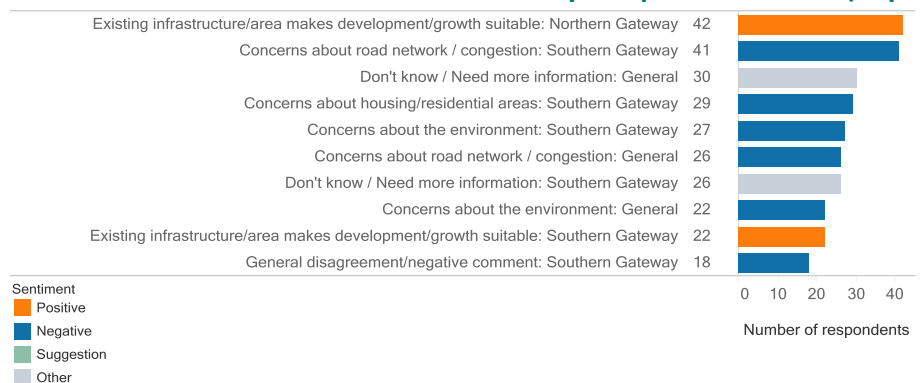
“This will significantly increase traffic and so public safety in villages in South Leicestershire that are already at capacity for road use”

“I can envisage several villages in the Southern Gateway area being subsumed into urban sprawl”

“The Southern Gateway will destroy vast areas of important well-loved countryside, (and) will destroy the landscape character of many out-lying villages”

“We are extremely concerned about the Southern Gateway for the following reasons; 1. The concept of a “Southern Gateway” is not defined, other than a concentration of development growth. We would like to see more detail of the role a gateway plays in the county. 2. The location of the gateway is not clearly specified”

Chart 10: Northern and Southern Gateways - Open comments (Top 10)



Key Centres

Respondents were asked to what extent they agreed or disagreed with Lutterworth and Melton Mowbray being identified as Key Centres.

Chart 11 shows that the response was fairly even between the two proposed Key Centres; nearly four in ten respondents agreed with the proposal of developing Lutterworth (40%) and Melton Mowbray (38%) as Key Centres. However over a third of respondents disagreed with the proposals (36% and 34% respectively).

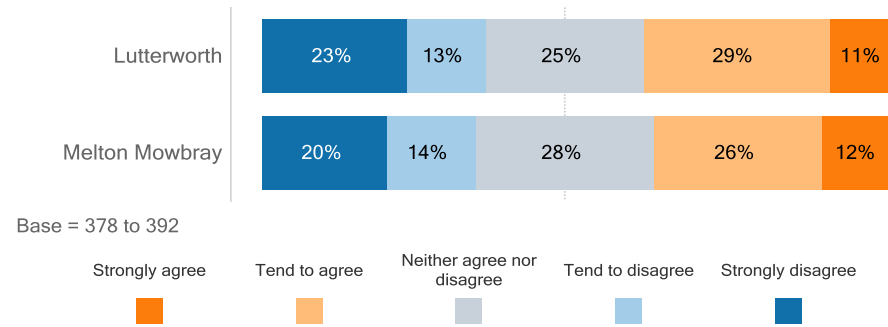
Respondents who were significantly more likely to agree with Lutterworth were: from Charnwood (62%) or Harborough (55%), or were male (48%). Those who were more likely to disagree were: female (49%), from southern districts (39%), or were members of the public (38%).

Respondents who were significantly more likely to agree with Melton Mowbray were: professionals (51%), or male (45%). Those who were more likely to disagree were: female (48%), or members of the public (37%).

Respondents were then asked to provide comments. Chart 12 lists the top 10 codes.

Respondents were most often concerned about the road network and congestion around both Lutterworth and Melton Mowbray.

Chart 11: Key Centres



With regards to Lutterworth, respondents felt the town already had high levels of traffic and congestion, and that the proposed developments in the SGP and that of the growth of Magna Park would worsen the problem by increasing car-dependency without alternative transport options. With regards to Melton Mowbray, respondents also felt the current level of congestion to be a detrimental factor to the SGP proposals, that the town is too far from the proposed A46 Expressway to reap enough benefit, and that the proposed distributor road would have limited impact.

Other respondents had a positive outlook about the proposals. Some respondents felt growth is needed in Melton Mowbray. Whilst some respondents made the point on a general level about economic growth, others cited more specific areas in which the town could grow: town centre redevelopment; expansion of specific business sectors; housing; and education and training.

Other respondents made the same point about Lutterworth. Most respondents commented at a general level with regards to growth

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in Lutterworth, but some specified the need for employment growth, and others felt the town was overdue an expansion. In contrast, some respondents felt concerned about the level of growth in the town, and felt the SGP could lead to its overdevelopment.

Several respondents felt the existing infrastructure and the areas in general, of both Lutterworth and Melton Mowbray, rendered the towns suitable to be 'Key Centres'. Whilst some respondents made this point at a general level, others cited specific infrastructure or aspects.

In reference to positive factors of Lutterworth, respondents cited: the current and planned transport network, such as the M1 and DIRFT; employment centres such as Magna Park; and the other nearby areas, such as Birmingham and Northamptonshire.

In reference to positive factors of Melton Mowbray, respondents cited: the current and planned transport network, such as the Distributor Road, A46 Expressway, and rail network; and its existing identity as a rurally-focused economy.

Some respondents felt concerned about the potential implications of the proposals on the housing and residential areas of Lutterworth. Respondents felt Lutterworth had already undergone significant housing growth, and that any additional growth might damage the historic character of the town. Others questioned the affordability of the new housing developments, citing the employees of distribution parks are likely to be low-wage earners.

Some respondents felt they needed more information in order to make an informed comment.

"The current Magna Park development is already stretching the capacity of the wider road network and further development, even with new roads, would probably be unsustainable"

"Lutterworth town centre has long seemed too small for its recent developments in housing and industry, and its infrastructure too limited"

"Lutterworth is already suffering from excessive development"

"Lutterworth is ideally situated for an expansion of the Logistics/Distribution industry, due to its well established road and rail network. For example Magna Park's proximity to M1 and Daventry International Rail Freight Terminal"

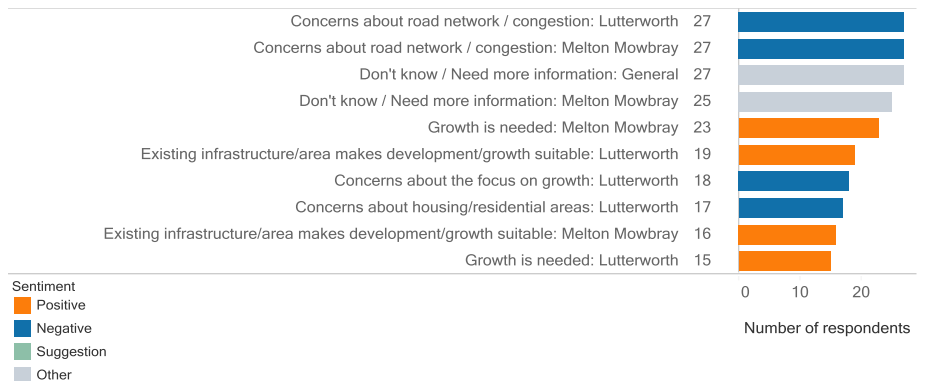
"New houses in Lutterworth will not be affordable for those on low wages at Magna Park"

"Even with the building of the A46 Expressway, Melton Mowbray is still a considerable distance from the proposed road"

"The proposed (Melton Mowbray) distributor road only covers half of the town. The town struggles at time of gridlock. I doubt the new road will help"

"Melton, on the other hand, has the potential for further growth in jobs centred on the food and drinks sector, and agricultural industries. It therefore makes good sense to support expansion there, in a planned way"

Chart 12: Key Centres - Open comments (Top 10)



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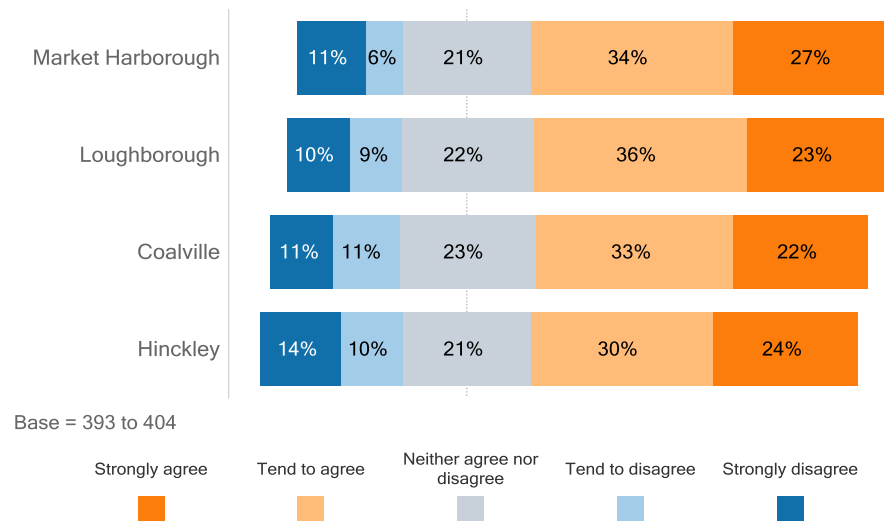
Managed Growth

Respondents were asked to what extent they agreed or disagreed that Coalville, Hinckley, Loughborough and Market Harborough should have 'managed growth' only.

Chart 13 shows that the majority of respondents agreed that Market Harborough (61%), Loughborough (59%), Coalville (55%), and Hinckley (54%) should have 'managed growth' only. However, over one in five respondents disagreed with the proposal for Hinckley (24%) and Coalville (22%).

There were very few significant differences in the responses between different demographics.

Chart 13: Managed Growth



Respondents aged 45-54 were significantly more likely to disagree with the proposal of 'managed growth' only in Hinckley (39%), and members of the public were more likely to disagree with the proposal in regard to Market Harborough (13%).

Respondents were then asked to provide comments. Chart 14 lists the top 10 codes. In line with the previous question, most comments were positive about the proposal for 'managed growth' in Market Harborough, Loughborough, Coalville, and Hinckley.

Several respondents said that each of the four market towns had been overdeveloped by previous growth, or felt that they were the potential locations of future overdevelopment. As a result, respondents welcomed the proposal of 'managed growth' in these market towns in order to mitigate further development and the negative implications associated.

In contrast, some respondents felt the market towns needed significant investment rather than 'managed growth'. Respondents most often felt Coalville, Hinckley and Loughborough needed such investment, citing the need for town centre regeneration and the improvement of road, bus and railway infrastructure.

Some respondents felt they needed more information in order to make an informed comment.

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“Hinckley has already been subjected to huge expansion so any further growth should be limited”

“Market Harborough could quickly lose the charm that makes it attractive if it becomes a large Midlands town rather than a bustling English market town”

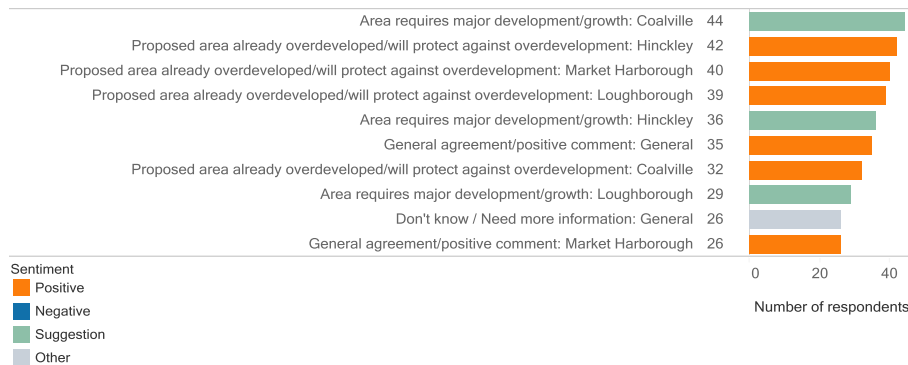
“Loughborough is already heavily developed and has constraints such as the River Soar, the two rail lines to the east, and the M1 to the west - managed growth is best here”

“All growth should be managed, something LCC & NWLDC are not doing in Coalville and surrounding areas. Loads of house building in Ashby without provision of extra infrastructure, libraries not funded properly, no new schools, health centre new but already at bursting, bus services cut to the bone. There appears to be no plan apart from building more homes to see some management would be a start”

“Coalville and Hinckley would benefit from further investment and growth, providing better job opportunities”

“Loughborough still has potential for economic growth with Enterprise Zones and the University and major employers at the heart of its prosperity. This needs to be balanced but some planned growth could still be possible”

Chart 14: Managed Growth - Open comments (Top 10)



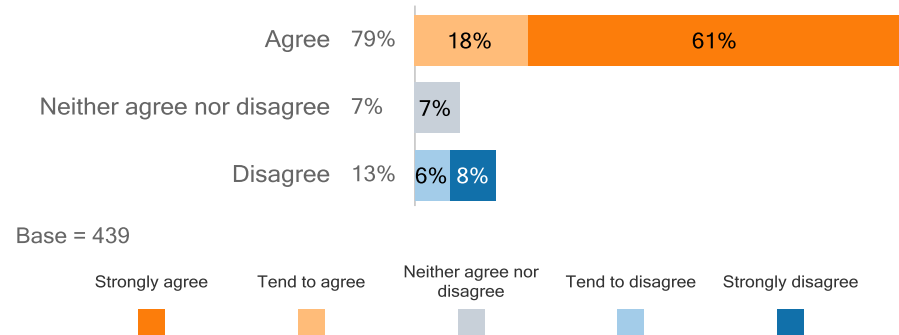
Local Need Growth

Respondents were asked to what extent they agreed or disagreed that growth in villages and rural areas should be limited to providing for local needs.

Chart 15 shows that the vast majority of respondents agreed that growth in villages and rural areas should be limited to providing for local needs (79%), whereas nearly one in seven said they disagreed (13%).

Respondents based in rural areas were significantly more likely to agree with the proposal (86%).

Chart 15: Local Need Growth



Respondents were then asked to provide comments. Chart 16 lists the top 10 codes.

As per the previous question, respondents were very welcoming of the proposal to limit growth in villages and rural areas to meet local

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needs. Respondents made several comments as to why growth in these areas should be limited to local need.

Respondents often felt villages and rural areas had been subjected to growth over recent years, and as a result had become overdeveloped. Other respondents felt that the other proposals within the draft SGP had the potential to affect these areas with additional overdevelopment, therefore the proposal to limit growth was welcomed. Similarly, some respondents stressed the importance to distinguish between rural and urban areas.

A similar number of respondents felt the proposal to limit growth would protect the character and heritage of the villages and rural areas, and preserve the surrounding environment. In a similar vein, some respondents emphasised the importance of protecting the needs of the local area and its residents when considering growth.

Several respondents felt villages and rural areas did not have the infrastructure required for growth. Respondents often cited schools and doctors surgeries being at capacity or lacking in number, inadequate road network for increased traffic, and a lack of public transport infrastructure as potential mitigating factors for growth within villages or rural areas.

In contrast, some respondents felt growth should not be limited to local need in these areas, and felt villages and rural areas needed growth in order to prevent stagnation and deterioration in the future.

Other respondents suggested housing growth should be limited and focused on affordability, and others felt public transport in villages and rural areas required improvement.

“Growth in local villages has almost destroyed rural communities because development has been allowed to be too big and not appropriate to the village size”

“Villages should maintain their individuality and not become urban suburbs of the city”

“Villages should not be overly developed to such an extent that they lose their heritage and character as a historic settlement”

“Local needs must come first”

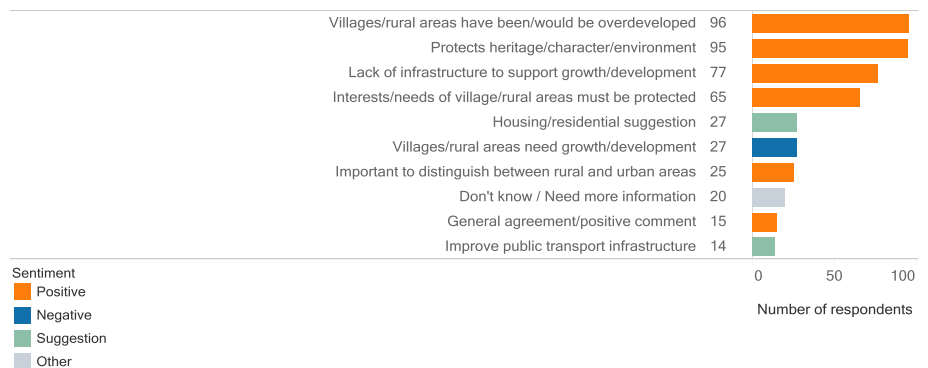
“Villages and rural areas do not have the services and facilities to support population increases. My village, Countesthorpe, has seen excessive development already without infrastructure improvements”

“Local needs does not equate to local growth and without growth, villages and rural areas will continue to stagnate, services close and these villages will become less and less sustainable”

“I am sure all villages would like is some modest affordable housing to meet local need”

“Villages need to have the necessary local facilities but this must include sufficient public transport to access more substantive facilities”

Chart 16: Local Need Growth - Open comments (Top 10)



Any other comments

Respondents were asked whether they had any other comments on the draft SGP. Chart 17 lists the top 10 codes.

Respondents noted two areas in which they felt the draft SGP had either (i) not provided enough information to be able to develop a considered comment, or (ii) presented an argument based on limited evidence, specifically housing/residential areas and the A46 Expressway.

With regards to the information provided about housing and residential areas, respondents expressed a number of concerns: the proposed locations of the new housing developments were too vague and required greater detail; the methodology for forecasting the proposed need for the number of new houses had not been well documented, and appeared excessive; housing needs analysis of the local population have not been taken into consideration; and the residential areas affected by the other proposals in the draft SGP, such as the A46 Expressway, had not been clearly identified.

With regards to the information provided about the A46 Expressway, respondents expressed a number of concerns: the proposed route of the A46 Expressway was too vague regarding the connection to the M69, M1 Junction 20a, the route around the south and east of the county, and the connection to the A46; how traffic will be managed on the new road; a lack of a business case for the Expressway; the lack of information regarding access roads to

the Expressway; the unknown number and location of villages that might be adversely affected by the construction and operation of the new road; and how the Expressway will be funded.

Often following on from these concerns regarding the information provided, respondents suggested that further consultation opportunities should be presented once the information requested had been made available, in order for more considered feedback to be collected. Other respondents made similar comments, suggesting that public input take a greater role in understanding local needs, and that relevant stakeholders should be included in the development of the SGP.

Several respondents expressed their concern that the proposals in the draft SGP might cause excessive damage to the environment, such as rural areas, “greenbelt” land, and wildlife. Respondents felt the proposals, such as the A46 Expressway, would involve building in the valued countryside, and the additional traffic as a result would increase pollution in these areas. Some respondents highlighted their concern that the draft SGP did not consider alternative methods of transport which may be more environmentally sustainable. Respondents sometimes felt the environmental implications should be better considered in the draft SGP, often referring to the importance of preserving the character of such areas for future generations, and felt growth should be focused in urban areas.

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Respondents voiced a number of concerns about the effects of the proposals on villages and rural areas, feeling that: such areas would not have the road capacity to handle additional traffic; proposed growth around these areas appeared excessive, unsuitable, and detrimental to the local character; and the lack of other infrastructure, such as GP practices and schools, would struggle under additional development. Respondents also made a number of suggestions relating to housing and residential areas, including; providing a variety in types of housing to suit local need; providing housing in specific locations; focusing on environmentally friendly housing; building a new town or settlement, rather than extending existing ones; and using derelict land or brownfield sites for housing, instead of greenfield land.

Some respondents felt concerned about the current and proposed road network and congestion within the context of the draft SGP. Whilst some felt current traffic and congestion to be an issue, others felt the proposed development would only add to the problems, often referring to the potential adverse effects it may have on residential areas. Some respondents felt the draft SGP to be too car-focused, and suggested the public transport infrastructure should be improved as an alternative.

Lastly, several respondents were critical of the consultation process, suggesting it had not been advertised adequately, had not engaged enough of the public or stakeholders, and questioning whether it would have any effect on the outcome of the SGP.

“The housing figures are flawed and do not reflect the genuine demographic need”

“There is a lack of detail around some crucial items including: the route of the expressway and access roads onto the expressway”

“Another consultation is required at a later date, when more information is available”

“Hopefully, local views of local people are taken into account and not just those of businesses and developers”

“CEG would welcome the opportunity to discuss any of the matters raised if further input would support the plan preparation process”

“Almost all of the proposals seem aimed at increasing commuting and destroying the beautiful Leicestershire countryside”

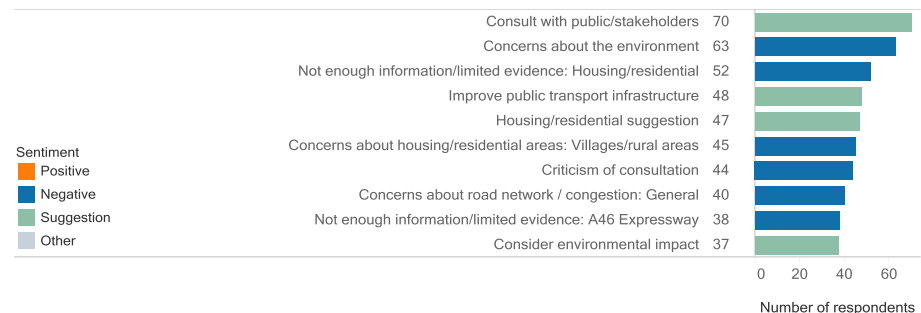
“The growth would significantly impact the amount of traffic going through the villages in this area that do not have the road structure to deal with this”

“The new developments must include an appropriate mix of housing types and tenures, including starter homes, retirement bungalows and affordable housing”

“The plan assumes that road transport (car and lorry) is the only route to growth - the plan must consider alternatives such as expansion of the heavy rail network, the potential development of light rail, and the encouragement of integrated local and regional bus services”

“Poor late engagement with the tax payers as usual. I do hope this consultation isn’t just an “after the event” tick in the box for the communities you tend to irreversible disrupt and ignore”

Chart 17: Any other comments (Top 10)



Chapter 3: Non-survey response analysis

This chapter forms a high-level summary of the responses received within the consultation period which were not made via the consultation survey. These are referred to throughout the report as ‘non-survey responses’.

In total, 130 non-survey responses were received during the consultation period by email, email with attachment(s) or by letter. Any survey response received via email or hard copy was included in the main survey analysis (chapter 2).

The majority of the non-survey consultation responses were submitted by individuals or organisations, the remainder were mostly from Parish Councils and agents on behalf of developers or landowners. See Appendix 5 for a breakdown of the non-survey respondents by local authority planning area.

All of the non-survey consultation responses were collated separately from the survey responses and coded.

In the main these responses reflect the key points raised in the analysis of the survey responses set out in chapter 2.

Spatial strategy

The A46 Expressway received the majority of comments in comparison with other components of the SGP strategy. Some respondents felt that the A46 Expressway was a key piece of infrastructure to support the future growth of Leicester and would considerably improve connections for those in Charnwood, Harborough, Oadby & Wigston and Blaby Districts. Other respondents were uneasy regarding the potential reliance on the A46 Expressway, and felt it may have significant negative environmental and social impacts. One individual mentioned the “Strategy should look at growth without reliance on the car”.

Both the Northern Gateway and Southern Gateway received similar mention. The majority of the comments on the Northern Gateway were positive, with comments noting the potential the contribution that East Midlands Airport and the East Midlands Airport area can make to delivering future economic growth, and support for growth around Loughborough and Shepshed. Negative comments included reference to defining the extent of the Northern Gateway and generally not wanting more growth.

With regards to the Southern Gateway positive comments included the Southern Gateway being of equal importance to the Northern Gateway to the future success of the area, and negative comments included strong disagreement to the gateway, with no specific

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reason given.

The two key centres identified in the SGP, Melton Mowbray and Lutterworth, received similar mention. The comments about Melton Mowbray were mostly positive, regarding support for growth at Melton Mowbray, though one respondent noted limited capacity of Melton Mowbray town so suggested looking at additional options, including Six Hills, a potential site for a new settlement. The negative comment was part of a general objection to growth.

With regards to Lutterworth, comments of support included the need for growth to be accompanied by community infrastructure – schools, public infrastructure and digital connectivity. Negative comments included reference to Lutterworth being endangered by uncontrolled and badly planned growth which is of little or no benefit to the residents of the town and its surrounding villages.

Reference was also made to Coalville, Loughborough, Hinckley, Market Harborough and larger rural communities continuing to represent sustainable locations for growth; and as such, the SGP to make appropriate provision for growth in these locations. One respondent called for Loughborough to have a greater role in the delivery of growth. A suggestion was made for the SGP to consider identifying further secondary growth areas close to Leicester i.e. Ratby, Groby and Desford.

Many respondents referred to the need to maximise the use of brownfield sites for new housing, particularly in the City. Reference was also often made to the need to increase density in the City by building upwards to create taller buildings, with the likely related benefits of reducing commuting times, transport costs and congestion. The re-use of previously developed or derelict land for housing before the use of greenfield land was regularly emphasised; with the use and conversion of empty buildings for housing also stressed. The call was also made for support to decrease the amount of under-occupancy in homes, whether through encouraging people to down size from larger homes, or taking in lodgers.

Specific reference was made to the adverse impact in terms of pollution and safety of the proposed growth within existing urban areas, for example, Aylestone Meadows. The loss of Blaby town centre as a characterful market town was also referred to by one respondent.

Some respondents expressed concern about the downgrading of the rural character of villages and the related adverse effect on wider rural areas, for example, Kilby, Barkby and Barkby Thorpe, Queniborough, Beeby, Keyham, Scraftoft, Houghton, Stoughton, Burbage, Earl Shilton, Sharnford, Stoney Stanton, Wymeswold, Great Glen, Misterton and Walcote.

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Details on several potential new settlements or strategic sites were submitted by agents as a response to the consultation. These included:

1. Availability of strategic land at Home Farm, Park Lane, Castle Donington, potential strategic site in Northern Gateway area;
2. Soar Brook Village (which includes Hogue Hall), located off A5 to south of Hinckley/Burbage, potential new village within Southern Gateway area;
3. Six Hills, potential new settlement with potential for substantial community facilities to the west of Melton Mowbray;
4. Stretton Hall site, south east Leicester;
5. Stoughton Estate Leicestershire (heart of site is Leicester Airport);
6. South of Syston;
7. North-east of Kibworth Harcourt;
8. Finger Post Farm, near M1 J23A (ID Planning on behalf of Litton Properties);
9. Whetstone Pastures Garden Village, near Blaby;
10. Proposed Strategic Rail Freight Interchange called Hinckley National Rail Freight Interchange, north east of Hinckley, within Blaby District.

A suggestion was also received from a parish council to look to the south of Melton; an 'Eastern Gateway' to create a new settlement.

Transport

A substantial number of responses across a range of respondents had referenced transport, with a high proportion of these being negative. There were also a number of suggestions, whilst there were fewer responses giving positive comments.

The most notable concerns were regarding the amount of new road building, the congestion that this may cause, and concerns about poor public transport infrastructure. There were also particular concerns on the lack of infrastructure to promote and support sustainable travel, reducing car usage and promoting more sustainable means such as car-pooling, walking and cycling.

A high number of comments referred to an expected increase in traffic problems in and around villages as a result of the SGP and that traffic is significantly problematic even at current levels. Some felt that developing additional roads such as the A46 Expressway would be counterproductive and cause additional traffic problems. Several comments referred to a lack of traffic impact assessments and a number of objections were made about specific link roads, for example Evesham Road to Aylestone Road across Aylestone Meadows.

A few comments were made regarding a lack of reference to East Midlands HS2 Growth Strategy and its wider implications. East Midlands Airport felt that the SGP should acknowledge and include the Airport's international connectivity value and economic and

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employment contribution to the County Economy. EMA also felt there should be a greater emphasis on setting Leicestershire within a wider East Midlands and Midlands context and how the City and County can contribute to the wider objectives of the Midlands Engine.

There were a number of suggestions on how public transport infrastructure, road network and congestion and access/connections to other areas could be improved. The most prominent suggestion was to improve rail infrastructure for both freight and passenger travel and the re-introduction of existing lines, such as the Leicester to Burton-upon-Trent line, the line through Blaby, and a new railway terminal at Elmesthorpe or Croft. There were also suggestions about alternative road building such as linking the A47 on Clickers Way to the M69 at the shortest route, and improving the existing A46 link by introducing a flyover link at the Hobby Horse instead of the existing roundabout. There was specific reference made to freight travel and the need for new strategies to ensure provision of lorry parking facilities, however there was support for strategies of transportation corridors close to employment centres.

There were also comments about the need to improve links between the East and the West of the sub-region. Specific comments included making improvements around East Midlands Airport and East Midlands Parkway and ensuring that public transport links are considered holistically with regions outside of

Leicester and Leicestershire. One response also referred to improving the waterway network as a sustainable method of travel.

Some other suggestions included discouraging private car use by introducing congestion charges and making parking more expensive whilst more emphasis should be placed on services such as buses and car pooling, introducing trams and improving infrastructure for cyclists.

Health, Wellbeing and Environment

Comments regarding the environment were wide ranging, with the vast majority of these either referring to the negative effects that the SGP may bring about or providing suggestions on how to minimise or mitigate their effects. Common themes amongst responses related to; concerns regarding the loss of, and damage to agricultural land and landscapes, and that the protection of the environment is lacking from key priorities.

Some respondents felt that an adequate environmental assessment had not been carried out. One respondent felt that the natural environment, biodiversity and important habitats have not been properly considered and that reference should be made to the Leicester and Leicestershire Landscape Sensitivity and Green Infrastructure Study.

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One individual suggested that the built and natural environment section needed a detailed statement and targets to provide clarity and strength within the SGP on environmental issues.

There were a few, but fairly detailed responses regarding health and wellbeing. Sport England believed that identified priorities do not raise improvements to health and wellbeing by reference to active travel, active design and creating an active environment to encourage the inactive to become active. Leicestershire Partnership NHS Trust and The University Hospitals of Leicester NHS Trust had concerns that additional services would not receive full funding for the first 12 months and that there is the need to secure financial obligations for NHS services through Section 106. They felt there would be increased need in particular sectors as a result of housing growth with no financial support for increased service provision. Public Health England felt that whilst the Plan offered the opportunity to recognise the role of planning in health and wellbeing, health and wellbeing should be more evident throughout the plan. Another respondent cited a lack of active infrastructure, including provisions for walking, cycling and sport.

Housing

The majority of comments around housing were negative with a notable number of concerns regarding residential areas, in particular the lack of affordable housing and too much housing development in and around villages and rural areas. One particular Parish Council felt that the large scale housing runs counter to the SGP's policy that

“growth in our villages and rural area should be limited to providing local needs”.

Some comments questioned the robustness of projections around the new number of new homes required by 2050 and that a more realistic assessment of need should be carried out. The Housing and Economic Development Needs Assessment (HEDNA) was directly referred to by some respondents, one Action Group felt it was too long and too difficult to understand and its late availability made it difficult to respond to the consultation. One developer recommended that the HEDNA is regularly reviewed on a year/bi-yearly basis. One agent carried out their own review of HEDNA and considered the evidence to underestimate employment growth and suggest HEDNA is re-run on the basis of more ambitious assumptions.

There were multiple concerns around the lack of social housing, particularly from individuals and action groups. Some felt that house building focused too much on building large detached homes, rather than denser developments to cater for single occupancy, those on low incomes and those with disabilities.

There were a number of responses from individuals, action groups and organisations referring to a lack of consideration of environmentally-friendly, low carbon housing, with some suggestions that new homes should be designed on a carbon neutral standard. A number of respondents felt that the SGP would

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contribute to the loss of community and would downgrade the character of rural villages.

It was suggested a number of times, particularly by individuals, that improving existing housing stock and brownfield sites should be prioritised over use of green land.

Overall, there were few positive comments regarding housing. However there was some acknowledgement that the Strategic Growth Plan recognised the need to provide sufficient housing and there was some support, especially from agents, for proposals to place a greater emphasis on housing developments in major strategic locations.

Employment Land

Employment land was referred to either specifically or more generally in connection with other forms of development on several occasions.

Reference was made to no more warehousing being directed towards Lutterworth, with Daventry and Rugby more logically fulfilling the Southern Gateway role. Reference was also made to the low wages and increased road usage associated with logistics and the need to prioritise business growth associated with higher wages. This was a strand of thinking which also came through in other consultation responses where less reliance on logistics was requested. The CPRE suggested an overall assessment of need for

large industrial and logistics sites across the West and East Midlands to inform genuine requirement.

A call for reference to supporting grass root small enterprises was made, as was greater priority for health care, community facilities and low carbon businesses.

One Town Council referred to welcoming employment sites to meet technology, science and renewable energy. Other consultation responses referred to support for local businesses, further investment in training, skills and schools and the importance of the rural economy.

The Road Haulage Association (RHA) requested transportation corridors close to employment centres, providing easy access for HGVs, the provision of adequate lorry parking facilities for existing and new developments, and ensuring the movement of freight in a cost-effective and timely manner.

An agent on behalf of a developer referred to the national and regional shortage of warehousing and distribution employment land and the strong demand from occupiers and investors. Another agent on behalf of a developer promoted a proposed Strategic Rail Freight Interchange (SRFI) near Hinckley, which would be an open facility allowing all occupiers to access rail freight.

Town Centre and Retail

Only a small number of respondents commented specifically on Town Centres and retail.

One respondent felt that Blaby Town Centre is at risk of no longer being an independent and characterful market town and another felt that Lutterworth is endangered by uncontrolled and badly planned growth which is of little or no benefit to the residents of the town and its surrounding villages. A third respondent commented that whilst Shepshed is the second largest town in Charnwood, it does not have indoor leisure facilities or adequate employment.

One individual felt that the City of Leicester is congested and dirty and another believes the Clock Tower area, Granby Street, and Gallowtree Gate is unattractive with cheap shops. Another referenced that a higher density population will support the revival of retail and culture of the city. One respondent thought the SGP did not look at technological changes and its impact on retail.

ICT

There were few specific comments in relation to ICT. However there was acknowledgement by the National Farmers Union East Midlands of the need to invest in infrastructure and an agreement that digital connectivity is a major issue for many in rural areas, in particular those working in agriculture, which is becoming increasingly dependent on the internet and mobile connectivity for information.

One business commented that they were pleased to see that the need for quality internet access has been identified. Another individual felt that growth needs be accompanied by community infrastructure, including digital connectivity.

Waste and Energy

One agent identified that Leicestershire is an important supplier of construction materials and that this should be referred to in the SGP as it will be more sustainable to use local aggregate and operate at local waste management and recycling facilities. The lack of reference to Minerals and Waste Plans was noted by several agents, and another individual felt that the Plan lacked mention of reducing waste or local recycling.

A common response was that there should be more of a focus on the building of carbon neutral housing and increasing use of renewable energy. One individual felt that there should be a mention of the Energy Strategy for Leicester and Leicestershire, and plans about reducing waste and local recycling. National Farmers Union East Midlands felt that there is a need for on-farm renewable energy and planning policies which enable employment sites to use renewable energy.

Process and Consultation

The consultation process itself has had some positive feedback, for example it has been noted that it has been a positive step to listen

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to people at this early stage, and to include the extension of the response deadline. However there has also been some criticism that the consultation lacked local engagement and public examination, with many people being unaware of the consultation or of the plan themselves. There was also some concern that the Strategic Transport Assessment was not available at the start of the consultation. It has been suggested that further consultations are carried out once more detailed proposals are formulated. The CPRE asked for a Public Examination into the SGP to be held where all parties could present their arguments.

A number of respondents felt that the plan is too simplistic, not thought out and/or lacks evidence. Some felt that there are too many unknowns and that projections through to 2050 are unrealistic and too precise, especially with additional external factors such as Brexit. Highways England felt that whilst figures up to 2036 are based on population and employment forecasts, figures up to 2051 are using projections with the same distribution, possibly resulting in a wide margin of error.

Furthermore, there was a suggestion that there should be a review period for the policy, possibly in line with the National Planning Policy Framework (NPPF), which is 5 years. Some also found it difficult to comment without complete details and some felt that the plan was vague, lacking detail and did not show precise routes and locations of developments. Some raised concerns at the lack of traffic assessments and the pressure the SGP was putting on Local

Plans. Some felt that the SGP should remain adaptable to population/economic change.

There were some concerns over the delay in progressing a memorandum of understanding and whilst some praised that the SGP was bringing partners together, a number of developers and Parish Councils had concerns that the SGP wasn't being delivered as a statutory plan, with some feeling it should be.

Additional points

In addition to comments regarding road/public transport infrastructure, a number of responses, particularly from individuals, had concerns over community infrastructure which includes the provision of schools, doctors, dentists and digital connectivity. The Education and Skills Funding Agency (ESFA) showed concern that the appropriate amount of funding from developer contributions towards new schools and new school places in existing schools would not be met.

Some responses, particularly from agents and organisations showed support for the four priorities of the SGP; creating conditions for investment and growth, achieving a step change in the way that growth is delivered, securing essential infrastructure and delivering high quality development.

Some respondents praised the principles set out by the SGP, whilst others felt that the assessments of strengths and weaknesses had

Strategic Growth Plan - Public consultation results

been well defined. Some of these were less clear on how these assessments may be tackled in practice. Homes England welcomed the production and promotion of the SGP and believed it sensible to prepare an overarching document to support Local Plans.

There were a few responses from organisations indicating that the plan should make reference to the importance of tourism.

Appendix 1 - Questionnaire



Have your say on the Draft Strategic Growth Plan for Leicester and Leicestershire

The Strategic Growth Plan is the opportunity for the ten partner organisations - the City Council, the County Council, the seven boroughs and districts, and the Leicester & Leicestershire Enterprise Partnership – to prepare a plan which will shape the future of Leicester and Leicestershire. It will be a non-statutory plan but, in its final form, it will set out our agreed strategy for the period to 2050. It will provide an agreed framework for Local Plans prepared by individual authorities.

A draft Strategic Growth Plan has been prepared for the purpose of public consultation. It explains the approach that we have taken in preparing the draft plan, identifies broad locations where we think that development might take place and the infrastructure needed to deliver it. We would like to encourage local people, businesses, developers, landowners and statutory organisations to work with us and to comment on the draft plan. The feedback will be used to inform the final version of the plan.

Please read the supporting information provided before completing the questionnaire.

Thank you for your assistance. Your views are important to us.

Please note: Your responses to the main part of the survey (Q1 to Q11, including your comments) may be released to the general public in full under the Freedom of Information Act 2000. Any responses to the questions in the 'About you' section of the questionnaire will be held securely and will not be subject to release under Freedom of Information legislation, nor passed on to any third party.

Your role

Q1 In which role are you responding to this consultation? Please tick ONE option only

- Member of the public
- I represent a voluntary and community services (VCS) organisation
- I represent/own a local business developer/ landowner
- I am a developer/ landowner
- I am an elected member/ councillor
- I represent another stakeholder e.g. district/borough/parish council, health, police etc.
- Other

Go to 'Key Priorities' section (Q4)

Continue

Please specify 'other' below

Q2 If you are responding on behalf of a stakeholder organisation, please provide your details.

Name:

Role:

Organisation name:

Organisation postcode:

This information may be subject to disclosure under the Freedom of Information Act 2000

Q3 Are you providing your organisation's official response to the consultation?

- Yes
- No

Strategic Growth Plan - Public consultation results

Key priorities

The draft plan identifies four priorities:

- Creating conditions for investment and growth
- Achieving a step change in the way growth is delivered
- Securing essential infrastructure
- Delivering high quality development..

See page 12 of the consultation document.

Q4 To what extent do you agree or disagree with the four priorities identified in the draft plan?
Please tick ONE option only

Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this? Are there any other priorities you think should be included?

Proposals in detail

Our draft strategy proposes to build more development in major strategic locations and to reduce the amount of development that takes place in existing towns, villages and rural areas. This will allow us to plan for new housing and employment together with new and improved roads, public transport, schools, health services, local shops and open space. To achieve this the draft plan proposes a hierarchy of potential development locations close to economic generators and infrastructure:

- The delivery of a proposed A46 expressway, with a new J20a on the M1
- Leicester as an increasingly important regional city, with a strong City Centre
- Focusing growth in secondary growth areas, known as the Northern and Southern Gateways
- Concentrating growth at growth points in the form of Key Centres, these are identified at Lutterworth and Melton Mowbray
- Managed growth in Local Plans for Coalville, Hinckley, Loughborough and Market Harborough

See pages 13 to 16 of the consultation document.

The following sections explore each element of the proposals in more detail.

The Primary Growth Areas

One piece of infrastructure is absolutely critical to our draft strategy - the 'expressway' proposal for the A46. This is included in the Midlands Connect Strategy and proposes a new road extending from a new or improved junction on the M69, and continuing to the south and east of Leicester, with a new junction on the M1 (J20a). The new road would rejoin the existing A46 near Syston. Improvements to the railway lines and services between Leicester, Coventry and Birmingham are also proposed.

Together with the proposals to create an expressway along the A5 - also proposed in the Midlands Connect Strategy - the combination of new and improved roads and railways in this area creates the opportunity for major development along a corridor extending from the M69 to the north-eastern fringes of Leicester.

Strategic Growth Plan - Public consultation results

Q5 To what extent do you agree or disagree with the proposed corridor of growth around the south and east of Leicester linked to the construction of a new A46 expressway? Please tick ONE option only

Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this?

Leicester has a pivotal role to play in the draft strategy. We propose that it should develop its role as the 'central city' supporting the market towns and rural areas around it. More jobs, leisure, arts, culture and entertainment facilities would be provided within the City Centre.

Q6 To what extent do you agree or disagree with the proposal that Leicester should develop its role as the 'central city'? Please tick ONE option only

Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this?

The Secondary Growth Areas

Two gateways are proposed. These are:

- Northern Gateway - focused around the northern parts of the A42 and the M1.
- Southern Gateway - focused around the A5, and the proposed new link between the M69 and the M1 (part of the A46 Growth Corridor)

Q7 To what extent do you agree or disagree with the two gateways identified? Please tick ONE option only on each row

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
Northern Gateway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Southern Gateway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this? Are there any other gateway locations you think should be included?

Lutterworth and Melton Mowbray are identified as Key Centres.

- Melton Mowbray - Accessibility will be improved to a degree with the completion of the A46 Expressway, and would be enhanced by more localised improvements and better connectivity. Strategic growth, facilitated by the proposed Melton Mowbray Distributor Road, is already planned but there is scope for further strategic development in the town to support economic growth and regeneration of the town centre.

- Lutterworth - New development to the east of the M1, together with new infrastructure to relieve congestion in the town, is already planned. Further new growth would enable better services to be provided. More homes would allow employees to live closer to their places of work and reduce the high-levels of out-commuting from Leicester.

Strategic Growth Plan - Public consultation results

Q8 To what extent do you agree or disagree with these two settlements being identified as key centres? Please tick ONE option only on each row

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
Lutterworth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Melton Mowbray	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this? Are there any alternative key centres you think should be included?

It is proposed that the other four market towns (Coalville, Hinckley, Loughborough and Market Harborough) should have 'managed growth' only. These towns vary in size, location and economic base but all contribute significantly to the local economy. All are already under intense pressure for development and have made substantial provision within and on the edges of the existing towns. Much of this has still to be built and is dependent upon new local infrastructure. It is proposed that further development should be consistent with the need to support local growth. In particular, there are aspirations for continued town centre regeneration and better services.

Q9 To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have 'managed growth' only? Please tick ONE option only on each row

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
Coalville	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hinckley	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loughborough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market Harborough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this?

Q10 To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs? Please tick ONE option only

Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you say this?

Strategic Growth Plan - Public consultation results

Any other comments

Q11 Do you have any other comments on the draft strategic growth plan?

About you

The following questions are for members of the public (as identified in Q1).

Leicestershire County Council is committed to ensuring that its services, policies and practices are free from discrimination and prejudice and that they meet the needs of all sections of the community.

We would therefore be grateful if you would answer the questions below. You are under no obligation to provide the information requested, but it would help us greatly if you did.

Q12 What is your gender identity? Please tick ONE option only

- Male
- Female
- Other (e.g. pangender, non-binary etc.)

Q13 Is your gender identity the same as the gender you were assigned at birth?

- Yes
- No

Q14 What was your age on your last birthday? (Please enter your age in numbers not words)

Q15 What is your full postcode? This will allow us to understand the areas people are responding from. It will not identify your house.

Q16 Do you have a long-standing illness, disability or infirmity?

- Yes
- No

Q17 What is your ethnic group? Please tick ONE option only

- White
- Black or Black British
- Mixed
- Other ethnic group
- Asian or Asian British

Q18 Many people face discrimination because of their sexual orientation and for this reason we have decided to ask this monitoring question. You do not have to answer it, but we would be grateful if you could tick the box next to the category which describes your sexual orientation. Please tick ONE option only

- Bi-sexual
- Lesbian
- Gay
- Other
- Heterosexual / straight

Thank you for your assistance. Your views are important to us.

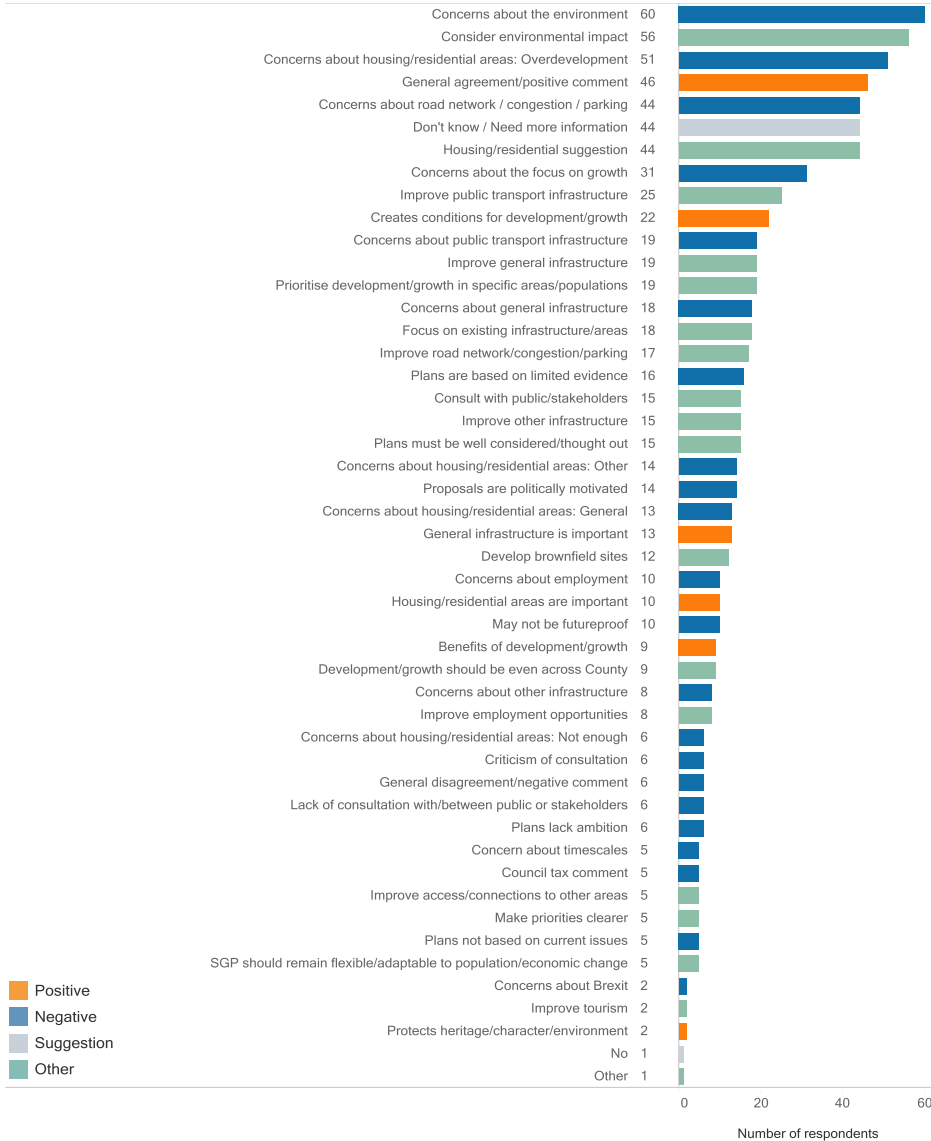
Please return your completed survey to:

Strategic Growth Plan Consultation
Leicestershire County Council
Have Your Say
FREEPOST NAT 18685
Leicester
LE3 8XR

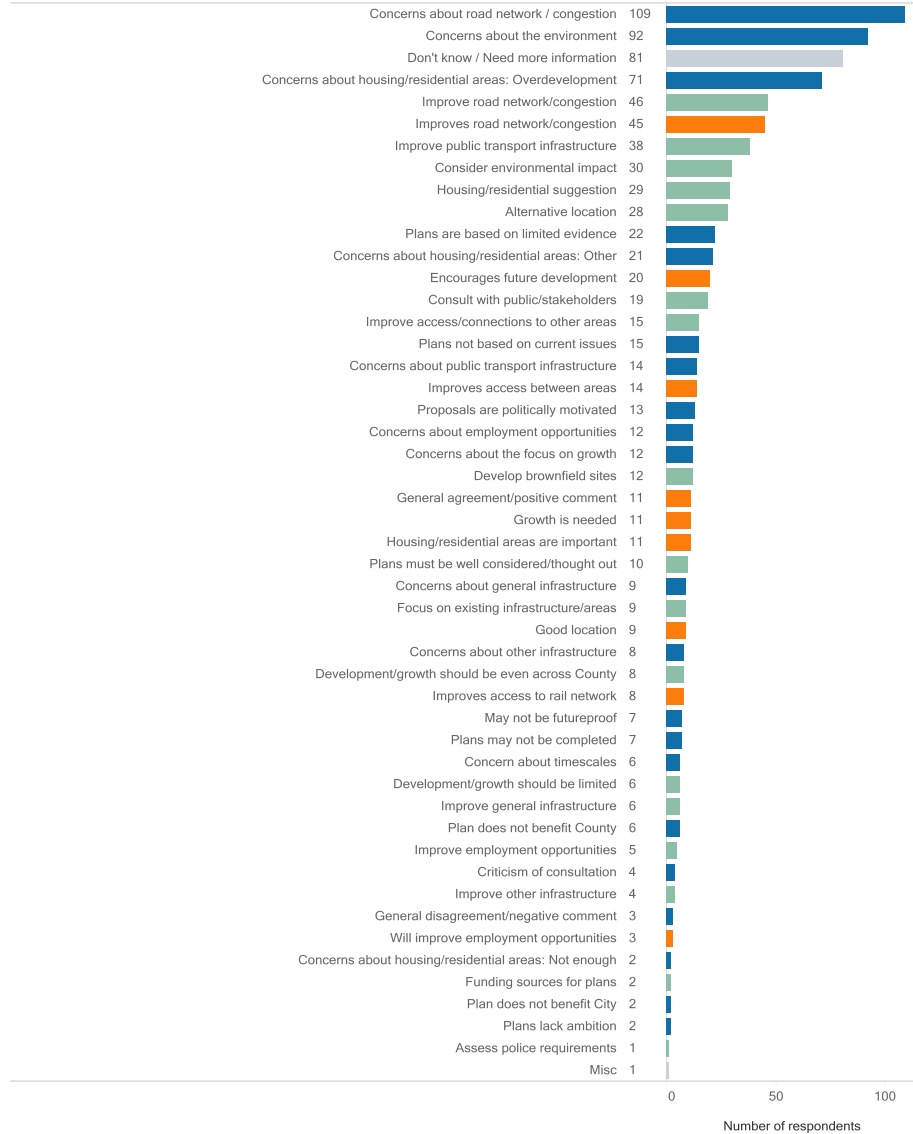
Data Protection: Personal data supplied on this form will be held on computer and will be used in accordance with the Data Protection Act 1998. The information you provide will be used for statistical analysis, management, planning and the provision of services by the Leicestershire County Council and its partners. The information will be held in accordance with the council's records management and retention policy. Information which is not in the 'About you' section of the questionnaire may be subject to disclosure under the Freedom of Information Act 2000.

Appendix 2 - All open comment themes

Q4a: Key priorities

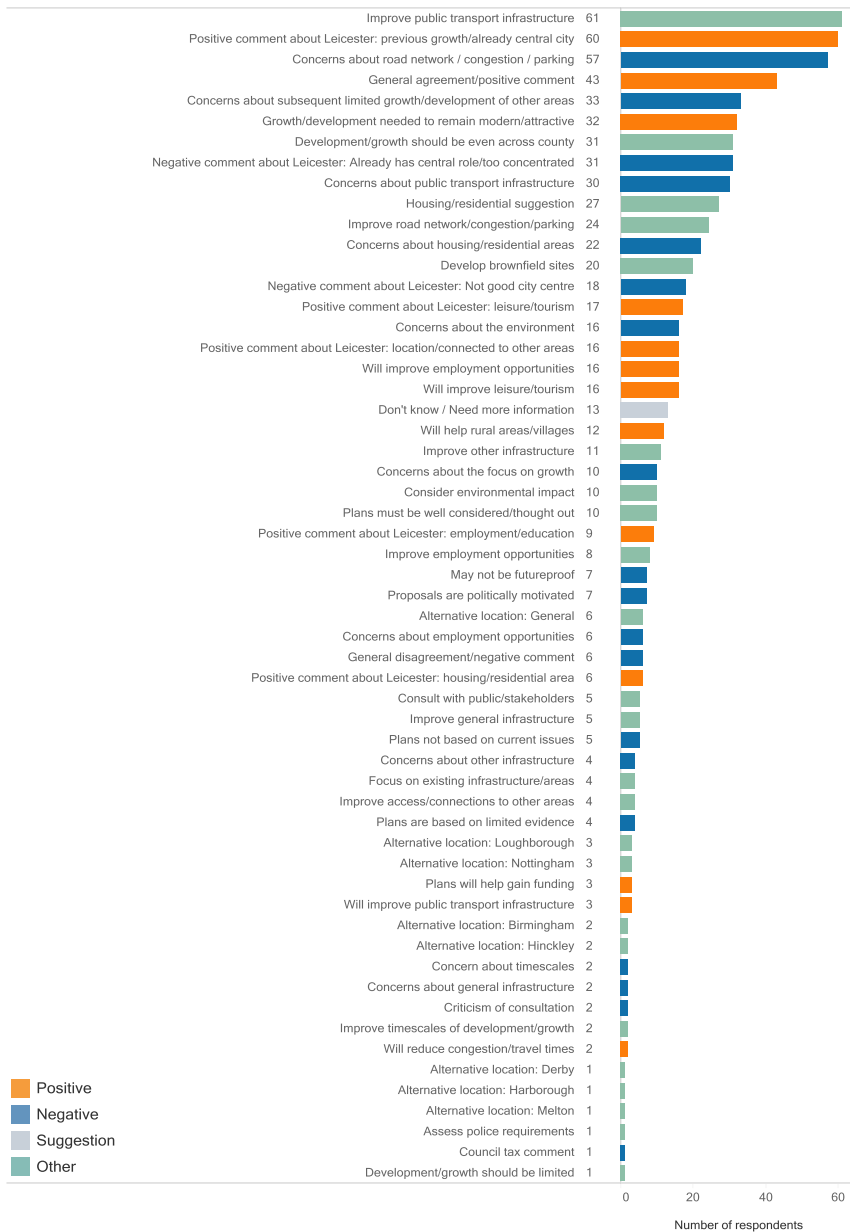


Q5a: A46 Expressway



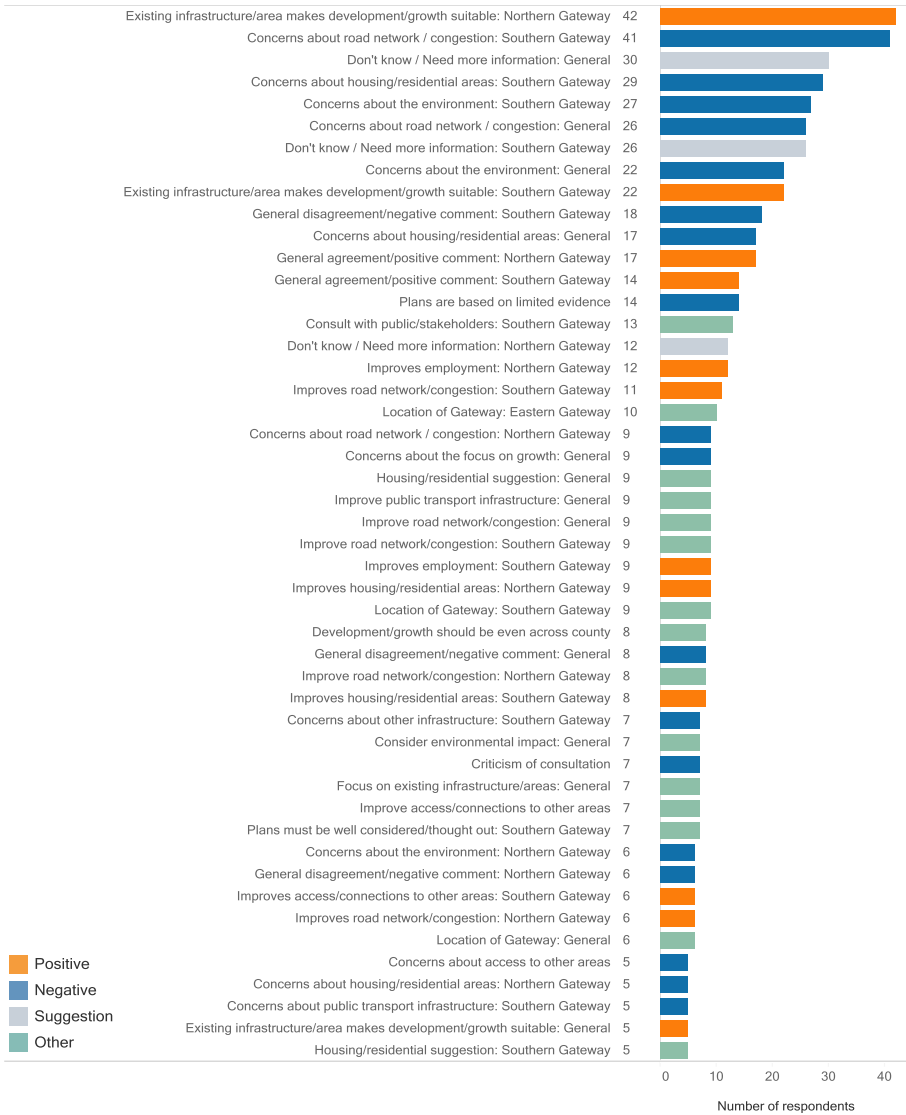
Strategic Growth Plan - Public consultation results

Q6a: Leicester as the 'central city'



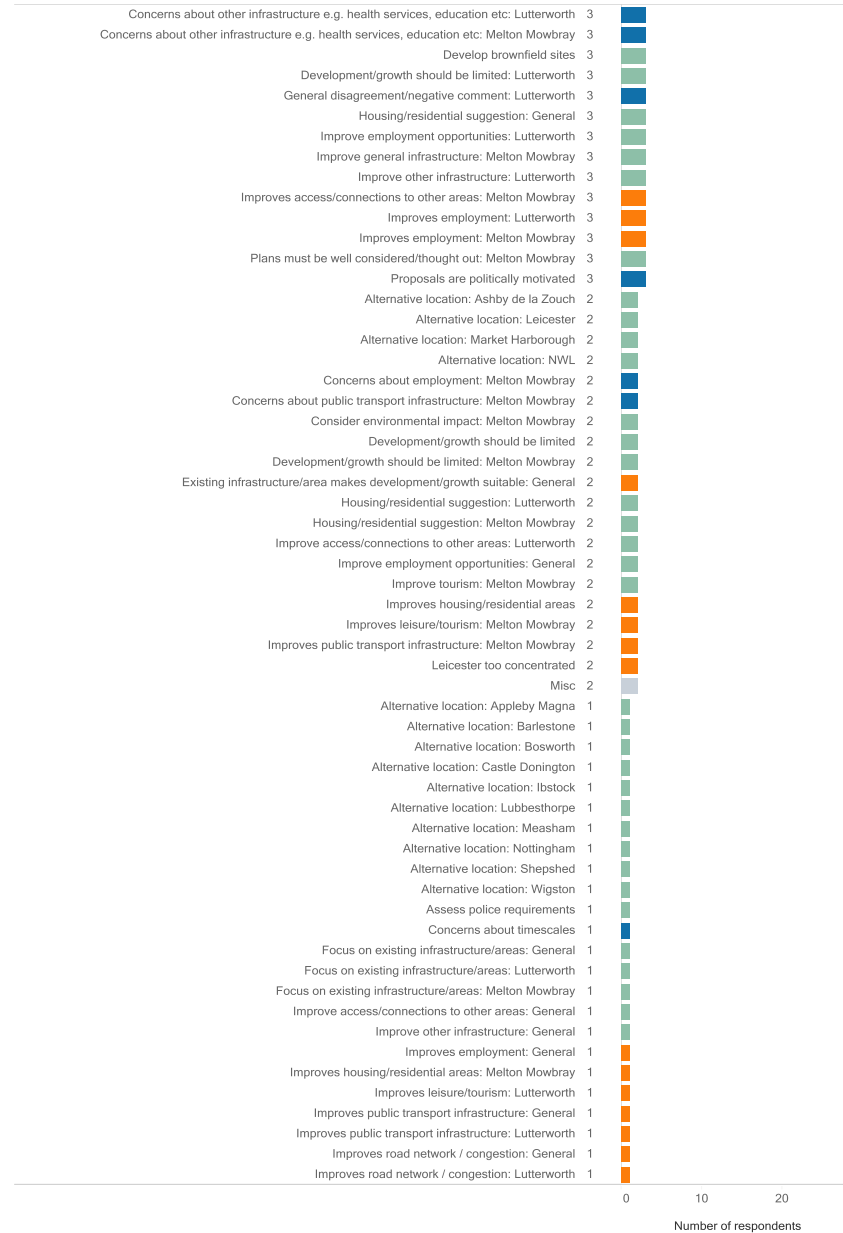
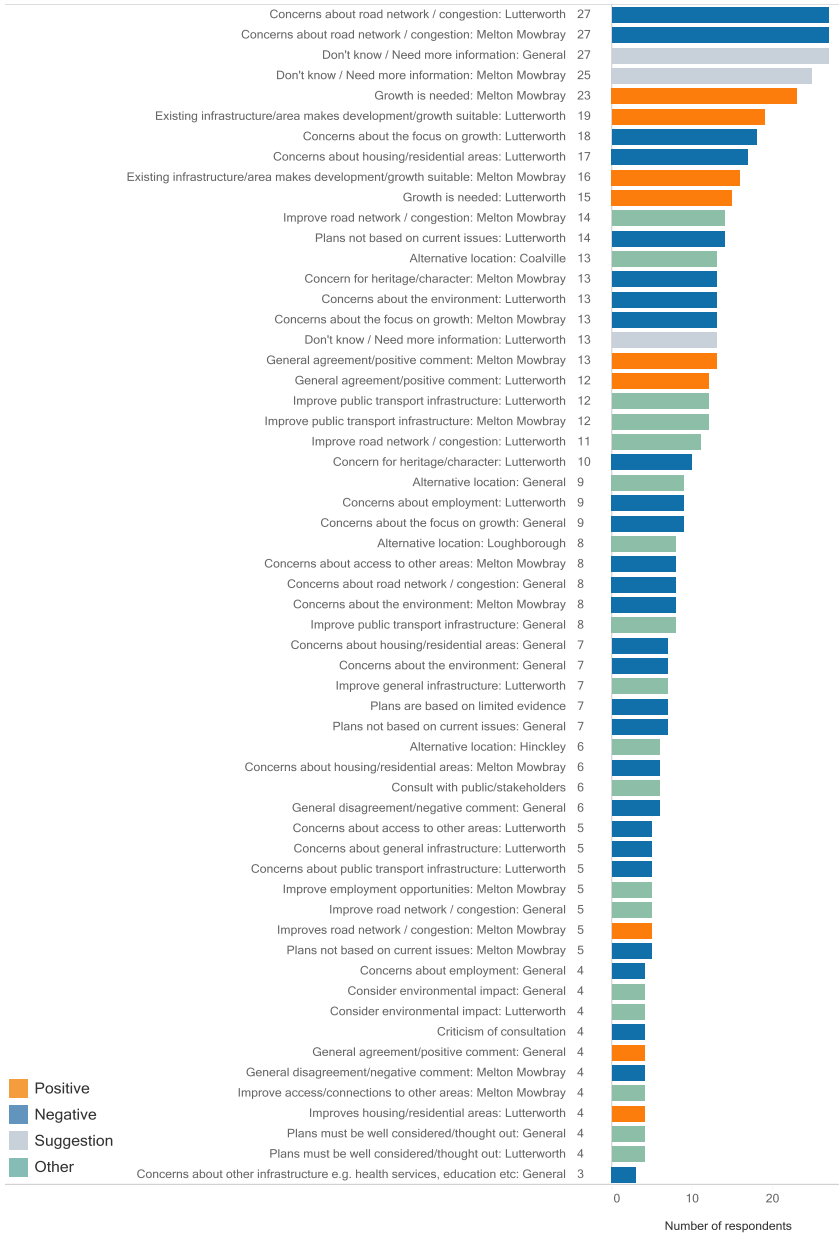
Strategic Growth Plan - Public consultation results

Q7c: Northern and Southern Gateways



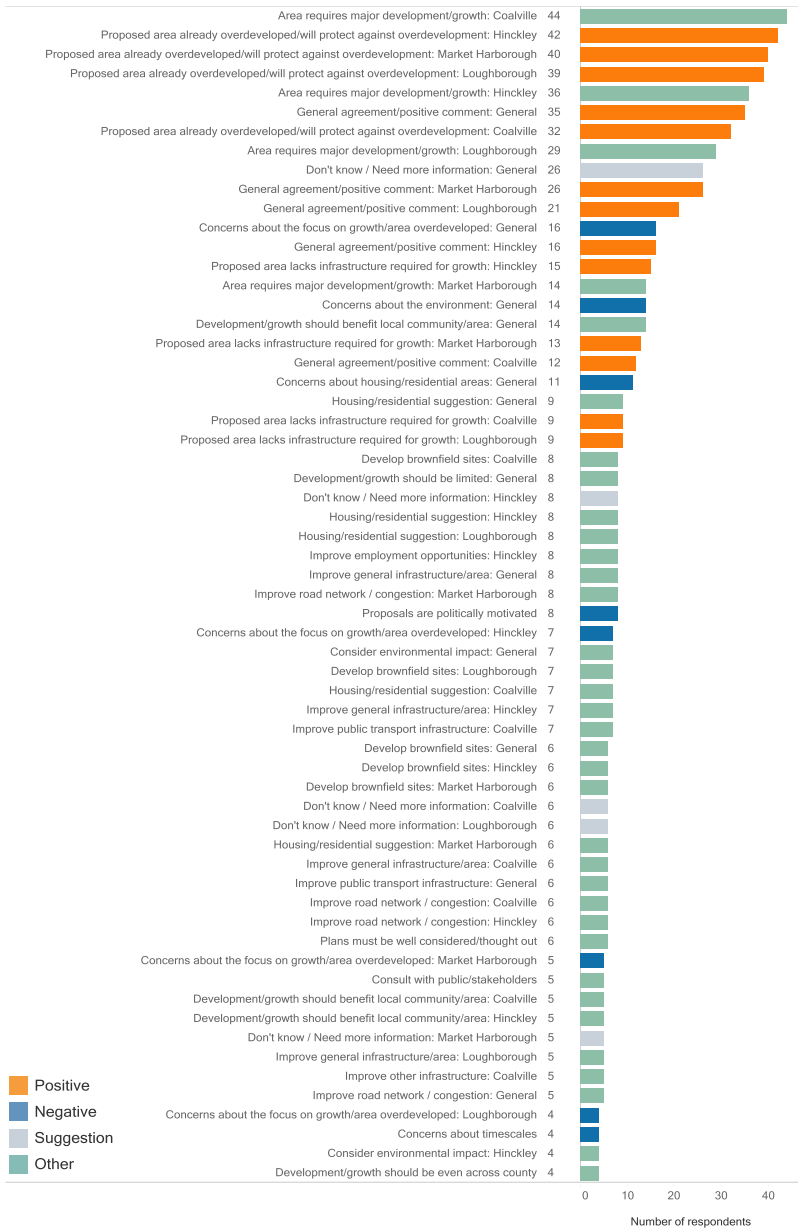
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Q8c: Key Centres



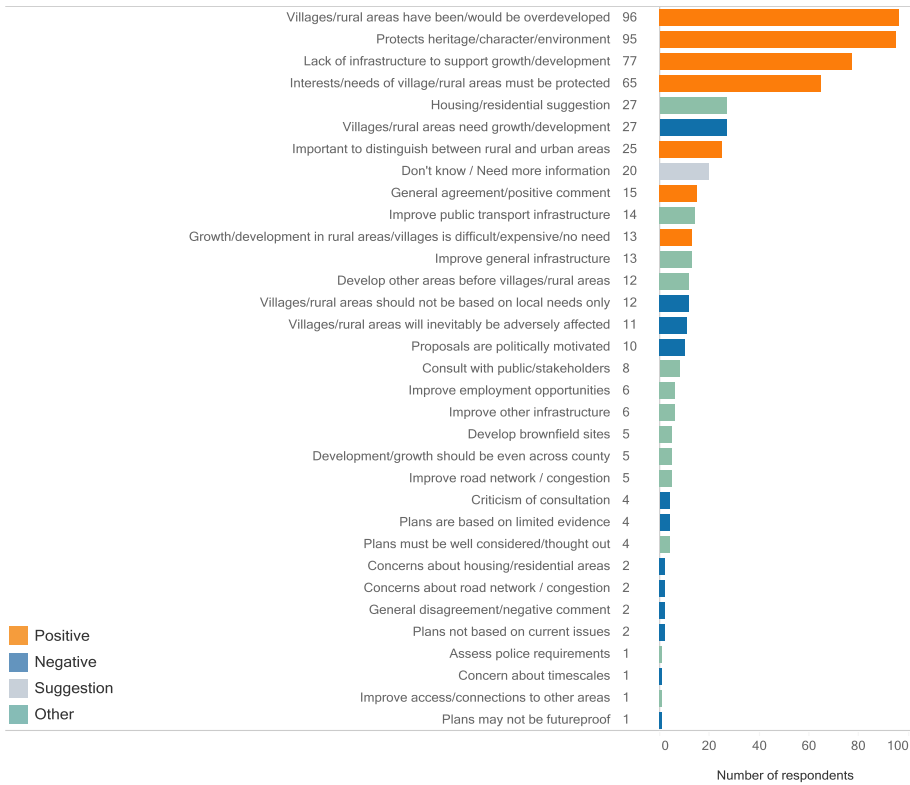
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Q9e: Managed Growth



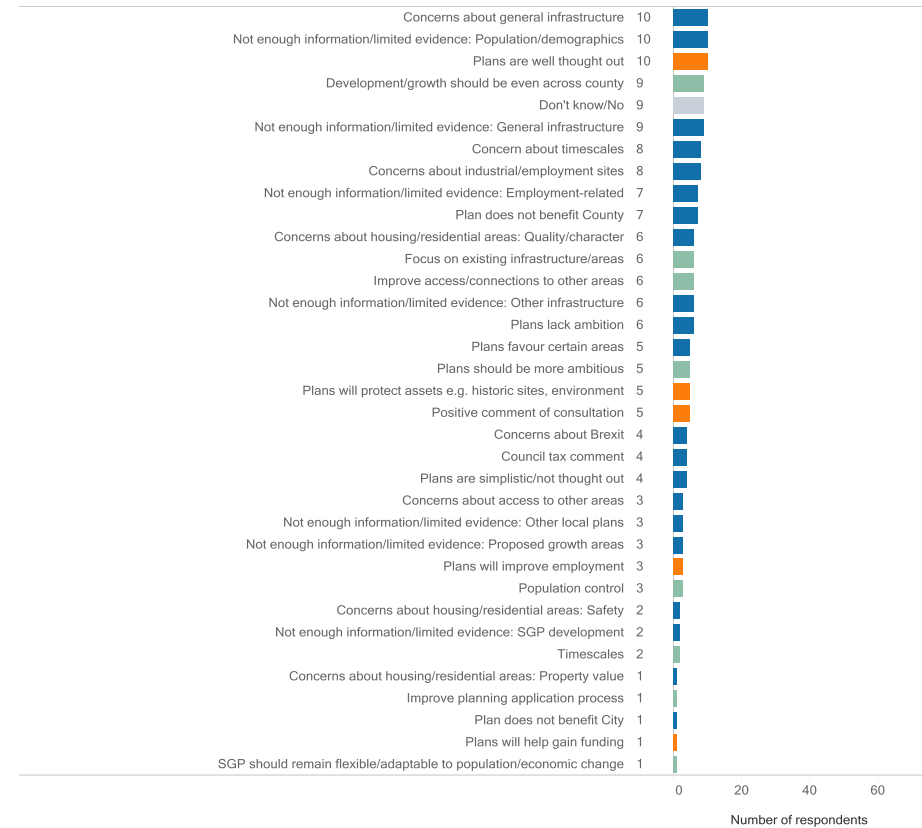
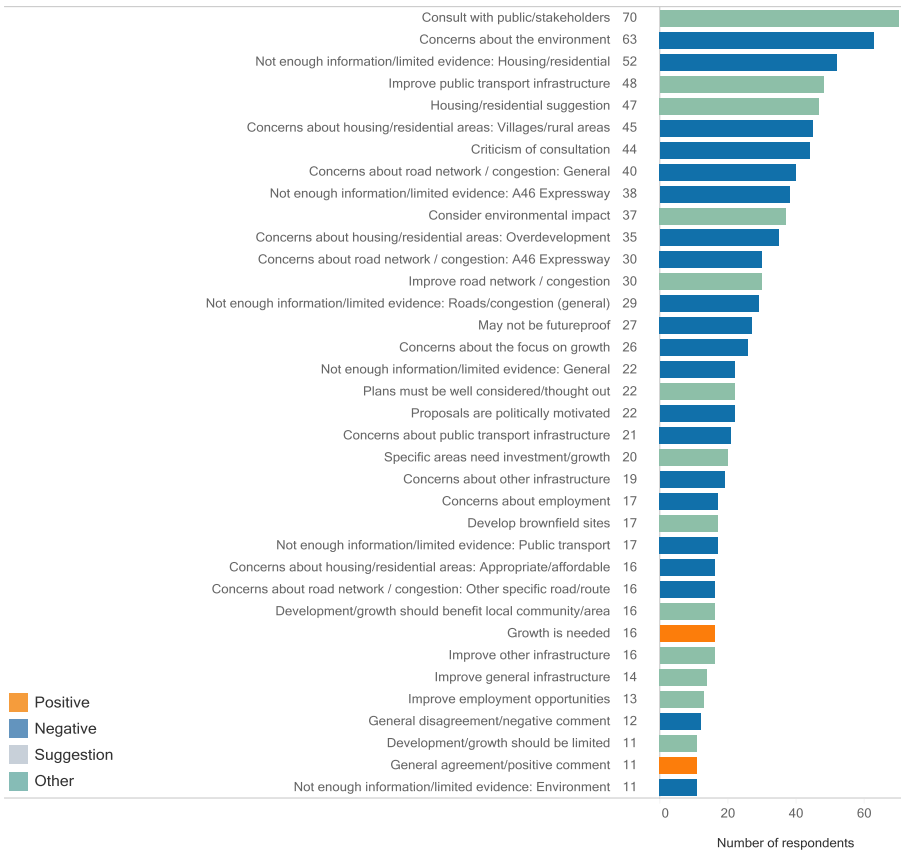
Strategic Growth Plan - Public consultation results

Q10a: Local Need Growth



Strategic Growth Plan - Public consultation results

Q11: Any other comments



Appendix 3 - Survey respondent profile

Gender identity*	Survey Responses			2011 Census (16+)
	458	% Ex NR*	% Inc NR*	%
Male	182	53.1	50.0	49.0
Female	161	46.9	44.2	51.0
Other (e.g. pangender, nonbinary etc.)	0	0.0	0.0	
No reply	21		5.8	
Not asked	94			
<i>*2011 Census asks for respondent gender</i>				
Is your gender identity the same as the gender you were assigned at birth?	458	% Ex NR*	% Inc NR*	%
Yes	333	99.7	91.5	N/A
No	1	0.3	0.3	
No reply	30		8.2	
Not asked	94			
Age	458	% Ex NR*	% Inc NR*	%
Under 15	6	1.9	1.6	
15-24	11	3.4	3.0	14.3
25-34	32	9.9	8.8	13.2
35-44	57	17.6	15.7	17.2
45-54	81	25.0	22.3	17.8
55-64	69	21.3	19.0	15.9
65-74	57	17.6	15.7	11.6
75-84	9	2.8	2.5	7.2
85 and over	2	0.6	0.5	2.9
No reply	40		11.0	
Not asked	94			

District	Survey Responses			2011 Census (16+)
	458	% Ex NR*	% Inc NR*	%
Blaby	146	37.4	31.9	14.3
Charnwood	50	12.8	10.9	25.9
Harborough	89	22.8	19.4	12.9
Hinckley & Bosworth	31	7.9	6.8	16.2
Melton	9	2.3	2.0	7.7
North West Leicestershire	20	5.1	4.4	14.2
Oadby & Wigston	12	3.1	2.6	8.7
Leicester	33	8.5	7.2	
No reply	68		14.8	
IMD 2015 County band	458	% Ex NR*	% Inc NR*	%
Top 10% (most deprived)	8	2.2	1.7	N/A
10-50%	111	31.1	24.2	
50-90%	200	56.0	43.7	
Bottom 10% (least deprived)	38	10.6	8.3	
No reply	101		22.1	
RUC 2011	458	% Ex NR*	% Inc NR*	%
Rural town and fringe	158	40.5	34.5	12.2
Rural village and dispersed	82	21.0	17.9	9.2
Urban city and town	150	38.5	32.8	78.0
No reply	68		14.8	

*NR = No reply

Strategic Growth Plan - Public consultation results

Do you have a long-standing illness or disability?*	Survey Responses			2011 Census (16+)
	458	% Ex NR*	% Inc NR*	%
Yes	32	9.6	8.8	19.1
No	301	90.4	82.7	80.9
No reply	31		8.5	
Not asked	94			

*2011 Census asks if respondents day-to-day activities are limited a lot

Ethnicity	458	% Ex NR*	% Inc NR*	%
White	317	96.1	87.1	92.2
Mixed	2	0.6	0.5	0.8
Asian or Asian British	5	1.5	1.4	6.0
Black or Black British	1	0.3	0.3	0.6
Other ethnic group	5	1.5	1.4	0.4
No reply	34		9.3	
Not asked	94			

Sexual orientation	458	% Ex NR*	% Inc NR*	%
Bisexual	6	2.1	1.6	
Gay	4	1.4	1.1	
Heterosexual/straight	268	92.4	73.6	N/A
Lesbian	3	1.0	0.8	
Other	9	3.1	2.5	
No reply	74		20.3	
Not asked	94			

*NR = No reply

Appendix 4 - Public exhibitions and meetings

Location	Date(s)
St Peter's Parish Hall, Market Bosworth	30 January 2018
Tesco, Ashby de la Zouch	1 February 2018
Memorial Hall, Sheepy Magna	2 February 2018
Reception, Charnwood Borough Council, Loughborough	12 February 2018 - 10 May 2018
The Pavilion, Newbold Verdon	12 February 2018
Main Reception, Leicestershire County Council, Glenfield	13 February 2018 - 10 May 2018
Village Hall, Witherley	15 February 2018
Thurmaston Parish Council, Thurmaston	19 February 2018 - 8 March 2018
Village Hall, Groby	21 February 2018
Hill Court, Bushby	21 February 2018
Kegworth Parish Council, Kegworth	22 February 2018
Hinckley and Bosworth Borough Council, Hinckley	26 February 2018
Blaby District Council, Narborough	27 February 2018
Harborough District Council, Market Harborough	27 February 2018
Customer Services Centre, Granby Street, Leicester City Council	1 March 2018 - 10 May 2018
Whetstone Parish Council, Whetstone	1 March 2018
Broughton Astley Parish Council, Broughton Astley	1 March 2018
Wycliffe Rooms, Lutterworth	3 March 2018
Village Hall, Great Glen	3 March 2018
Syston Town Council, Syston	12 March 2018 - 10 May 2018
Melton Mowbray Borough Council, Melton Mowbray	14 March 2018
Sapcote Pavilion, Sapcote	19 March 2018
Oadby and Wigston Borough Council, Wigston	21 March 2018

Appendix 5 - Non-survey respondent profile

Local Planning Authority area	130	% Ex NR*	% Inc NR*
Blaby	9	7.9	6.9
Charnwood	12	10.5	9.2
Harborough	13	11.4	10.0
Hinckley and Bosworth	9	7.9	6.9
Leicester	38	33.3	29.2
Melton	1	0.9	0.8
North West Leicestershire	4	3.5	3.1
Oadby and Wigston	2	1.8	1.5
Other	26	22.8	20.0
Not provided	16		12.3

If you require information contained in this leaflet in another version e.g. large print, Braille, tape or alternative language please telephone: 0116 305 6803, Fax: 0116 305 7271 or Minicom: 0116 305 6160.

જો આપ આ માહિતી આપની ભાષામાં સમજવામાં થોડી મદદ ઇચ્છતાં હો તો 0116 305 6803 નંબર પર ફોન કરશો અને અમે આપને મદદ કરવા યત્ન કરીશું.

જેવર ત્રહાનું ઇસ જાતકારી નું સમજણ વિષે વ્રજ મદદ ચાહીદી રૈ ત્રાં વિરખા કરવે 0116 305 6803 નંબર ડે ફોન કરે અડે અસીં ત્રહાડી મદદ લઈ વિસે દા પૂર્ણ કર દવાંગો।

এই তথ্য নিজের ভাষায় বুঝার জন্য আপনার যদি কোন সাহায্যের প্রয়োজন হয়, তবে 0116 305 6803 এই নম্বরে ফোন করলে আমরা উপযুক্ত ব্যক্তির ব্যবস্থা করবো।

اگر آپ کو یہ معلومات سمجھنے میں کچھ مدد درکار ہے تو براہ مہربانی اس نمبر پر کال کریں اور ہم آپ کی مدد کے لئے کسی کا انتظام کر دیں گے۔
0116 305 6803

假如閣下需要幫助，用你的語言去明白這些資訊，請致電 0116 305 6803，我們會安排有關人員為你提供幫助。

Jeżeli potrzebujesz pomocy w zrozumieniu tej informacji w Twoim języku, zadzwoń pod numer 0116 305 6803, a my Ci dopomożemy.

Strategic Business Intelligence Team
Strategy and Business Intelligence
Chief Executive's Department
Leicestershire County Council
County Hall
Glenfield
Leicester
LE3 8RA

ri@leics.gov.uk
www.lsr-online.org

Leicester & Leicestershire

Strategic Growth Plan

Partner Responses

(on comments received on Draft Plan)

September 2018

Draft Strategic Growth Plan Partner Response Report

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Chapter 1

Consultation on the Draft Strategic Growth Plan

Partner responses

1. Consultation on the Draft Strategic Growth Plan took place from 11 January to 10 May 2018 (17 weeks). Most of the comments (458 responses) were submitted in questionnaire format. Additional comments (130 responses) were submitted in other formats e.g. letter, email, PDF documents, etc. We have taken these comments into account when deciding whether and how the Plan should be amended.
2. Information on the consultation process surrounding the Strategic Growth Plan is provided in three documents:
 - The **Consultation Overview report**, which describes the various consultation exercises which have been undertaken since the start of the process.
 - The **Consultation Results report**, which provides an overarching summary of comments made and indicates the strength of views on particular issues.
 - The **Partner Responses report**, which includes comments submitted on the draft plan, highlighting key issues and how these have been taken on board in the revised version of the Plan.
3. This document constitutes the Partner Responses.
4. In this document we highlight key issues and summarise some of the detailed comments made. In doing so, we provide more information than is contained in the Consultation Results report but it should be noted that not every comment is highlighted in this way and not every matter of detail is provided. Failure to include a comment in this document, however, does not mean that the comment has not been taken into account.
5. In compiling the document, we have organised the comments in terms of the questions posed in the questionnaire. In responding to each question, many respondents provided additional information which frequently ranged across a number of matters. For each question, therefore, we have grouped the responses under a number of headings i.e.:
 - Spatial Strategy;
 - Transport;
 - Health, Wellbeing and Environment, Waste and Energy;
 - Housing;
 - Employment Land, Town Centre, Retail and Digital;

- Process and Consultation; and
 - Additional points.
6. Inevitably, this means that there is a degree of repetition across the various questions but this was considered preferable to further generalisation. Also, please note that no weighting has been attributed to the comments made.
 7. Some of the responses have led to changes being made to the Plan, either as a variation in the strategy or amendments to the text and/or plans. In other cases, whilst the comments have been considered, they have not resulted in any change. There are two principal reasons for this:
 - Some of the comments related to matters of details which are not the subject of the Strategic Growth Plan – these provide important information which the partner organisations will take into account when they are preparing their individual Local Plans, Local Transport Plans, the Strategic Transport Plan, the Local Industrial Strategy and other documents.
 - Some of the comments did relate to strategic planning matters but, on balance, the partners decided to adopt a different position to the comment made.
 8. It should be noted that this document is being published at the same time as the revisions to the Strategic Growth Plan. As a result, the responses reflect the changes that have been made to the Plan. Please be aware, that the revised Plan is subject to the governance processes of the individual organisations, however, so there is the possibility that there might be further changes to the Plan.
 9. In terms of the partner responses to the comments made, where these have resulted in changes to the Plan we have highlighted these. Also, where the comments related to matters which were outside the scope of the Strategic Growth Plan (often because they related to matters of detail) we have indicated where they might be considered in future. Finally, in terms of comments which have not resulted in changes to the Plan, please be assured that partners have considered these comments in coming to the view that no change should be made.

Chapter 2a
Spatial Strategy – Survey Responses

Q4. To what extent do you agree or disagree with the four priorities identified in the draft plan? Why do you say this? Are there any other priorities you think should be included?

Respondent Comments	Partner Responses
<p>SPATIAL STRATEGY</p> <ul style="list-style-type: none"> • Agreement with the priorities and principles of the Strategic Growth Plan which are well balanced and in theory should ensure properly structured growth. • Support the Plan’s recognition of the need for delivering new homes and objectives well aligned to central government. • Economic development should focus on developing high level, technically advanced engineering and production that will employ output from our Universities. • Priorities well thought out if assuming a continued growth agenda but break-points should be introduced to review external changes such as Brexit. • Should prioritise prosperity of people living in the City, not wealthy business owners with property on newly developed areas. • Support for more development on strategic sites and less on non-strategic sites. • Good quality development is needed in the correct areas. • Strategic growth need not only be developed through large scale Sustainable Urban 	<ul style="list-style-type: none"> • The Strategic Growth Plan seeks to deliver sustainable development across the City and County to ensure sufficient well located homes, jobs and supporting infrastructure for the estimated population growth up to 2050. • The focus of the plan (delivering growth on large sites) supports the delivery of new, significant infrastructure, thereby assisting the delivery of sustainable development. • Growth is explained in the Housing and Economic Development Needs Assessment (HEDNA, 2017). This is available online and is part of the evidence base that underpins the Strategic Growth Plan. • The evidence base underpinning the Strategic Growth Plan indicates there is a need to accommodate growth (housing and employment) into the future. In accordance with Government guidance, this evidence will be reviewed and updated at regular intervals to ensure local plans are delivering the appropriate levels of growth within the framework set out in the Strategic Growth

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Extensions but also through the development of sustainably located sites, which already have access to strategic infrastructure, such as Anstey and Glenfield.

- The focus on development in strategic locations should not necessarily be at the expense of other strategic scale development in sustainable locations such as market towns or non-strategic development at key rural centres and sustainable villages.
- Support for larger strategic development rather than small and medium sized development
- The necessity for growth depends on who benefits from it
- Changing the way growth is delivered through larger strategic sites within the primary growth area may lead to SMEs being pushed out of the market
- There is already over-development and the Plan will only make this worse in particular in south and south-east Leicestershire.
- Question the need for population and economic growth when Leicestershire is a wealthy county with low unemployment.
- Development should be appropriately and sympathetically balanced across different parts of the county (City, towns, villages and rural areas) and targeted to meet local need.
- An alternative site for a new town would be around the Diseworth area to provide housing for the major area of employment growth at Roxhill and the Airport area.
- Support the proposed corridor of growth around the south and east of Leicester, but consider that the Strategic Growth Plan should have an equal focus on how the short–medium term requirements of the area are to be satisfied, through the identification of more immediately deliverable key strategic sites for employment or housing development. Suggestion that Carnival Way in Castle Donington offers the potential to deliver much needed employment

Plan.

- Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester & Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan.
- The Plan considers the infrastructure in place currently and the new infrastructure that would be needed to support growth. New / improved infrastructure is generally funded by associated growth.
- Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan strategy and will be assessed together with all other options through preparation of Local Plans. However, given the quantity of brownfield land available and the level of need, it is clear that development of brownfield land alone will not suffice.
- The Strategic Growth Plan reflects opportunities in the Midlands Connect Strategy which proposes major transport infrastructure to support growth.
- The need for high quality development is emphasised in the Strategic Growth Plan. This will be delivered through the future local plans and through the application of the Garden City Agenda.
- Impacts on Swithland, Countesthorpe and other villages will be

land in the short term, in a highly accessible and sustainable location.

- South Leicestershire is already over-developed.
- North West Leicestershire is being overwhelmed with development.
- New development should be focused in the east of the county.
- The housing numbers allocated to Lutterworth compared with the assessed need is out of proportion.
- There is a disproportional amount of the Notional Housing Needs & Supply 2031-2050 allocated to Harborough District.

INFRASTRUCTURE

- Provision of infrastructure should be clearly established as a pre-requisite to growth
- Need to define requirements for feeder road development in line with key roads (M69, A5 and A46)
- Too much housing development with little investment in facilities
- Developments in Countesthorpe have made no contributions to infrastructure and services
- Hinckley & Bosworth and North West Leicestershire have taken large expansions in housing and businesses with little infrastructure investment

TRANSPORT

- All new developments should facilitate use of environmentally friendly transport
- Concerns over lack of new public transport links - more rail lines should be opened, such as

determined by future local plans.

- The Strategic Growth Plan seeks to shift the focus of development away from the expansion of existing villages (which puts strain on existing services and community) to delivering fewer, larger strategic sites / new developments supported by new infrastructure.
- The details of green infrastructure proposals will be considered in Local Plans.
- Government has recently expressed a commitment to improving infrastructure for ultra-low emission vehicles through its Road to Zero Strategy. This will be pursued through future local plan policies for new developments as well as broader government initiatives beyond the scope of the Strategic Growth Plan.
- The Strategic Growth Plan cannot address issues arising from existing development but seeks to provide new growth sustainably by delivering the necessary, supporting infrastructure. This supports the focus of delivering growth in new settlements with new infrastructure.
- The Strategic Growth Plan recognises that high quality development needs to be supported by investment in local road and rail improvements and in public transport.
- The details of potential strategic sites or new settlements are noted. These potential strategic sites or new settlements will be considered through the preparation of the future Local Plan

the Leicester-Burton line.

- Reinstatement of the Leicester-Burton rail passenger service would provide links to other vital infrastructure.

COMMUNITIES & ENVIRONMENT

- Protection of environment and built heritage should be as a strong a priority as creating conditions for growth.
- Should be working to prevent growth and should be aiming for sustainability and renewable energy.
- Focus should be made to regenerate existing sites and to deliver housing on brownfield sites, particularly in Leicester.
- The Strategic Growth Plan will provide the mechanism to support creation of well-planned new communities.
- Leicestershire should not suffer due to poor use of land by Leicester City.
- Should focus on limited quality development rather than larger developments overwhelming existing communities.
- Villages (e.g. Swithland) want to remain as they are without incursions from nearby developments.
- South Leicestershire is already over developed.
- North Leicester / Melton Mowbray are areas that would better satisfy key priorities.
- More emphasis should be placed on protecting existing communities.

within which the site is located.

Q5. To what extent do you agree or disagree with the proposed corridor of growth around south and east of Leicester linked to the construction of a new A46 expressway? Why do you say this?

Respondent Comments	Partner Responses
<p>SPATIAL STRATEGY</p> <ul style="list-style-type: none"> • Infrastructure should be put in place before bowing to business demands. • Proposed area for development is already over-loaded. • Economic growth predictions are over-optimistic so the proposed level of development is not needed and encourages unnecessary urban spread, in particular proposed house building in Harborough District is unjustified. • Leicester is big enough and should not encroach onto green land and surrounding villages. • Development to the east of Leicester is acceptable but no additional development is needed to the south west. • Concern for rural areas with all the new developments that are planned. • Developing housing in the south will force more cars onto the roads in the City. <p>A46</p> <ul style="list-style-type: none"> • Expressway will potentially provide much needed infrastructure for businesses and communities for the delivery of future growth around the south and east of Leicester however it is late coming in and needs will not be met in the short or medium term. 	<ul style="list-style-type: none"> • The need for growth is explained in the Housing and Economic Development Needs Assessment (HEDNA, 2017). • Evidence shows there is a need for further houses and jobs to be delivered, and legislation and national policy requires local plans to deliver this. • The Strategic Growth Plan aims to deliver growth in the most sustainable way, which is dependent on the provision of significant infrastructure. Text has been added to emphasise the importance of infrastructure delivery to support growth. • Midlands Connect Strategy, reflected in the Strategic Growth Plan, considers both road and rail improvements. • The Strategic Growth Plan seeks to improve highways infrastructure at a strategic level recognising that more local improvements may also be needed to deliver growth. • Planned growth will be delivered in association with the proposed A46 Expressway, appropriate locations will be identified in Local Plans. • The Strategic Growth Plan and the proposal for the A46

- The new road should join the A46 further north than Syston.
- Consider that the A46 expressway begins at J2 of the M69 and that this junction is improved to give access to M69 to the South.
- Proposed route should be built further south.
- Planned route is too far south and will impact on a number of villages.
- The A46 link is needed to cater for current poor infrastructure and should not be used to further expand housing or warehousing.
- The area to the south where the A46 Expressway will join the M69 is overdeveloped and does not need more housing developments.
- A46 Expressway is a good idea but the extent of housing development should be more evenly spread around the City and County.
- Housing should be restricted to the City side of the A46 Expressway, with no development to the South or East of it.
- Implies a Leicester by-pass to allow the expansion of the city causing irreparable damage to the countryside with little benefit to the rest of the county.
- Housing and commercial development must be restricted to the City side of the A46 expressway.
- Improving existing roads such as the A5 and the Western Ring Road would be less disruptive and provide more benefits.
- The proposals are expensive and will take a long time to achieve and the funding could be

expressway reflect the opportunity to deliver significant infrastructure improvements set out in the Midlands Connect Strategy. Associated development sites are to be determined through future local plans, which will be the subject of consultation.

- Existing roads could not accommodate the scale of growth proposed. The anticipated provision of an Expressway would allow growth to be focused around the new road rather than dispersed more widely.
- Improvement of the existing western ring road would not, in isolation, be sufficient to support the scale of growth anticipated.
- The precise route of the A46 expressway is yet to be determined but will be the subject of consultation at various stages in its design.
- Improvements to the A5 are supported in the Midlands Connect Strategy and in the Strategic Growth Plan.
- Further text has been included in the Strategic Growth Plan to outline the current position with regards to specific ongoing and proposed improvements to the A5 corridor.
- Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. A single gateway, referred to as 'The Leicestershire International Gateway', is proposed, focused around the northern parts of the A42 and M1 where there are major employment opportunities notably East

better used.

- Route of the A46 through south-east Leicestershire will cause traffic disruption and expansion in size of already established residential villages and eliminate green wedges.

RAIL

- Need to ensure easy access to Midland Main Line train stations.
- High density housing near rail stations should be considered to allow easy commuting.

LOCATIONS

- Must ensure protection against unsustainable development for rural communities.
- Brownfield sites should be developed first.
- Development should be in the west of the county.
- South Leicestershire should not be expected to pick up the slack.
- A new town would be better suited to the east of the county, for example, there is scope between Melton Mowbray and Market Harborough.
- Concerns about the proposed expansion of Lutterworth and Coalville.
- Main area for growth should be Melton Mowbray and Charnwood.
- Look to the M42 corridor as an additional and primary focus for growth.
- Locations to the north and west of the City (such as Glenfield and Anstey) offer housing potential in the short and medium term and Carnival Way in Castle Donington offer potential

Midlands Airport, East Midlands Gateway (strategic rail freight terminal) and HS2 station at Toton nearby.

- Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan strategy and will be assessed together with all other options through preparation of Local Plans. However, given the quantity of brownfield land available and the level of need, it is clear that development of brownfield land alone will not suffice.
- The Strategic Growth Plan seeks to shift the focus of development to fewer, strategic sites that can deliver their own infrastructure and facilities rather than small - medium sites that add pressure on to existing sites. Precise location of such sites will be determined through the local plan process, and a range of factors including landscape and heritage will inform the site selection process.
- The Strategic Growth Plan seeks to provide growth in a sustainable way in developments that can provide their own infrastructure (e.g. schools, health, etc.) and not add pressure onto existing facilities.
- Loughborough and Coalville are identified in the Strategic Growth Plan as areas for managed growth through local plans, which could assist with town centre regeneration aspirations. Further details will be available in future local plans.
- Protecting our environmental, historic and other assets form the fifth building block of the Strategic Growth Plan. A diagram

for employment land in the short-term.

- New roads will only mean more traffic and more congestion and pollution including on M1, in rural villages which is will pass too close to in particular on and around new feeder roads. Also encourages urban sprawl, more car-building and associated pollution.
- Industrial development should be to west of the city around motorways and major roads and east of county should be left for recreation and farming.
- Will have a negative impact on the suburbs and rural villages in south and south-east Leicestershire, placing increased pressure on existing facilities and services.
- Should be developing in the City and on brownfield sites.
- Do not need rail-freight or more warehouse and distribution businesses, should be focusing on higher quality and better paid sectors.
- Charnwood villages have already seen too much growth.
- Corridor of growth is not suitable for the rural area of Great Glen; a new town would be better suited.
- Consideration should be given to the proposed village development at Six Hills.
- An alternative site for a new town would be around the Diseworth area to provide housing for the major area of employment growth at Roxhill and the Airport area.
- A new town on the A47 to Peterborough would be more a suitable site for housing which Leicester City is struggling to provide.
- Growth corridor will create an urban sprawl. Growth should be by way of new villages built in

showing environmental assets in Leicester & Leicestershire and further text regarding the importance of locally important assets has been added to the Strategic Growth Plan.

- All sites promoted for development will be considered through the preparation of the future local plan for the areas in which they are located.
- Short to medium-term identified development needs (up to 2031) have been accommodated through what is built, committed or allocated in local plans. The partners will work to ensure that the necessary development in the identified growth corridors will be delivered in a timely manner through their local plans to ensure sufficient land is available at the right time. The Strategic Growth Plan does identify other areas of growth beyond the A46 corridor also.
- The details of potential strategic sites or new settlements are noted. These potential strategic sites or new settlements will be considered through the preparation of the future Local Plan within which the site is located.

less densely populated areas, evenly distributed across the county.

- Growth corridor and new housing is a long way from Enterprise Zones at MIRA and the University, which are the proposed centres of employment
- Major growth should be provided in a new town in the east of the County.
- Should focus growth near to the expressway rather than elsewhere in the County.
- Disagreement with the concentration of development in Harborough District and within the High Leicestershire Landscape Character Area.
- Areas affected are villages and not towns.
- Housing should be focussed along the M1/M69/A5, preserving the east of Leicester for recreation and farming.
- Potential junction 20a on M1 will support growth to the South of Leicester for large scale development.
- Outdated assumption that that housing will be occupied by people employed locally and area at risk of becoming a dormitory location for London and Birmingham.
- Corridor of growth is a good opportunity to provide affordable housing and local jobs.
- Concern at the disproportionate level of housing in the south of the county compared with the north which will have the benefit of HS2.
- Locations to the north and west of the city such as Glenfield and Anstey could be utilised for housing development.
- Additional strategic housing and employment growth on both sides of the A5 should be

<p>identified to lever in private sector funding.</p> <ul style="list-style-type: none"> • Suggestion that Whetstone Pastures is well placed to provide a significant element of the proposed housing and employment growth. • Concern that will destroy the lives many tens of thousands of families have built for themselves. 	
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❖ *The rail freight hub is not a proposal within the Strategic Growth Plan; it is being dealt with under the provisions for nationally significant infrastructure projects*

Q6. To what extent do you agree or disagree with the proposal that Leicester should develop its role as the ‘central city’? Why do you say this?

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Respondent Comments	Partner Responses
<p>CASE FOR & AGAINST LEICESTER</p> <ul style="list-style-type: none"> • Focus should be on growth in Leicestershire as a whole. Not everything should be in the centre as this requires everybody to travel to the city and will focus more money into the City rather than market towns. • Leicester is already over-populated and there is already strain on infrastructure. • Developing its role as described will only increase congestion and environmental damage and will ultimately choke further growth. • The City Centre including retail is in decline; too much of it is semi-derelict (e.g. Humberstone Gate, London Road) so should be developed for housing. • The growth of student accommodation is one of the main reasons for the shortage of affordable housing. 	<ul style="list-style-type: none"> • The Strategic Growth Plan recognises Leicester as having a 'central city' role because it has a full range of services and facilities. It also identifies other areas of housing growth close to major employment centres hence reducing the need to commute for jobs and services. • The Strategic Growth Plan provides a strategy to invest in and enable Leicester (including the city centre) to grow, evolve and regenerate. • Potential strategic sites, housing developments and new settlements will be considered through

- Put houses back in the city and re-develop the brownfield sites.
- The major recent investment in Leicester City has resulted in improvements and raised the profile of the city nationally and other areas seem ripe for further development e.g. Frog Island. It now competes and far outshines other local cities.
- Leicester has fewer cultural centres compared to neighbouring cities i.e. Nottingham. Museums should be reopened.
- The City needs serious investment as it is not a pleasant place to visit in the majority of areas and risks becoming worse.
- Leicester is the geographical, administrative, commercial and cultural centre of the county and is at the centre of its transport network so makes sense to build on this.
- The City has services that the small towns can't sustain.
- Development of the city will relieve the pressure on the market towns and rural areas.
- Leicester is already a central city in the East Midlands and is big enough.
- Leicester needs re-developing as it is an awful city and it should be done here rather than in the countryside. Focus should be on brownfield sites and look to develop the City as a cultural, environmental, social/community and economic hub.
- Need to develop jobs and facilities where people live and not facilities in the city and housing around the county.
- The focus on Leicester is based on an outdated model. Other parts of the county should be allowed to develop, in particular Loughborough which is a vibrant, growing urban centre.

- the preparation of future Local Plans.
- The Strategic Growth Plan identifies both the city centre and areas elsewhere within the city and county for growth. This will bring growth and infrastructure benefits to a wide range of locations. Market Towns are identified as either key centres or areas of managed growth through Local Plans.
 - The Strategic Growth Plan seeks to protect the character of market towns and reduce the current development on them. Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan strategy and will be assessed together with all other options through preparation of Local Plans. However, given the quantity of brownfield land available and the level of need, it is clear that development of brownfield land alone will not suffice.
 - Additional text has been included in the Strategic Growth Plan on securing essential infrastructure, and this includes the need for development schemes to be supported by local road, rail and public transport improvements to improve accessibility.
 - The Strategic Growth Plan recognises the need to deliver homes and jobs together on large strategic

THE COUNTY

- Would prefer to see market towns to become destinations and cultural centres with more leisure, arts, culture and entertainment facilities e.g. Loughborough, Melton, Market Harborough and Hinckley.
- The development of Fosse Park will make the town centre less attractive.
- Out of town living and working should be developed, e.g. Meridian Business Park.
- Agree with the idea of jobs being closer to where the people live.
- Needs to develop ideally as a polycentric city, with 'towns' on its fringes that offer employment opportunities in their own right.
- Plan does not suggest the creation of employment zones along the A46 Corridor, reinforcing the notion that it will just be a dormitory for people willing to commute by car into Leicester city centre.
- New housing areas should be supported by having local facilities such as shops, doctors, schools, cafes, pubs, workplaces, etc. so that travel is not essential to a major conurbation/city.

sites and this will require supporting infrastructure.

TRANSPORT

- Leicester is the economic hub but poor transport links around the county hamper this role.
- An improvement of transport links would make it more appealing than neighbouring cities with this service (i.e. Coventry or Birmingham).
- The proposal fails to recognise essential connectivity beyond the borders of the county - to the south, west, north and east, as well as internationally.

Q7. To what extent do you agree or disagree with the two gateways identified? Why do you say this? Are there any other gateway locations you think should be included?

Respondent Comments	Partner Responses
<p>GENERAL POINTS</p> <ul style="list-style-type: none"> • Both are logical with the focus of growth being along the western side of the city and county, but this must not be at the expense of future development for market towns and villages to the east of the county. • The concept of 'Gateways' is vague and ill-defined. • Consider an east gateway (around Melton Mowbray) and a west gateway. • Better infrastructure connections, and housing development, should be focused around Market Harborough. • Having all major urbanisation in 2 particular areas is detrimental to the quality of life of the people who live there. • Against more building and development – build on existing brownfield sites. • Development in the County should be spread out not just concentrated in and around the City. • This is concentrating growth in villages unable to support it and certain villages will be swamped under urban growth. • Also identify opportunities to deliver housing and employment land within and adjoining the city, within the short to medium term. • A third gateway should be considered running from the A42 (Ashby) to Loughborough and across to the A46. • The concept of creating two centres of business and employment on the outer edges of the county appears to 	<ul style="list-style-type: none"> • The Strategic Growth Plan seeks to shift the focus of development away from the continued expansion of existing settlements to new strategic scale sites that can deliver both homes and jobs along with new services and facilities to support the new communities. This will ease the burden of growth on existing settlements. • As set out in the Strategic Growth Plan, the short - medium term identified development needs (up to 2031) have been accommodated through what is built, committed or allocated in local plans. This allows the Strategic Growth Plan to focus on the spatial distribution of development in the period 2031-2050 and securing the delivery of the major infrastructure improvements required to support the broad locations for development identified. • The distribution of housing growth set out in the Strategic Growth Plan reflects the ability to deliver growth with supporting infrastructure, particularly reflecting the opportunities developed in the Midlands Connect Strategy. This is considered to be the most sustainable approach. Development

contradict the Strategic Growth Plan’s stated aim to reduce outward commuting from Leicester City to other places of business in the county.

- Both Loughborough and Hinckley should be identified as 'Key Centres'.
- Magna Park should be given over to housing in particular starter homes and rail-freight should go to existing facility at DIRFT. Development to the north of this would damage the countryside and rural villages.
- Better to use brownfield and derelict sites in particular in the city.
- Concern regarding disproportionate level of housing in the south of the County compared with the north.
- Disagree with location of Whetstone Pastures, consider Bruntingthorpe a better choice.
- Suggestion that Carnival Way in Castle Donington offers the potential to deliver much needed employment land in the short term, in a highly accessible and sustainable location.
- Consider building new cities or expanding rather than taking scattergun approach.
- Should not build houses / dormitory towns in out of the way places that people will need to drive to.
- Too much emphasis on the use of greenfield sites and inadequate consideration of brownfield sites or urban regeneration as alternatives.
- This is concentrating growth in villages unable to support it.
- It is better to focus new housing on two or three larger developments such as Lutterworth, Hinckley and Kegworth, where transport links and connectivity are already in place.
- The two gateways benefit from transport links and existing and planned employment centres so it makes sense to locate homes here.

will be brought forward in local plans, and designed to mitigate any negative impacts on existing communities.

- The Southern Gateway has been removed from the Strategic Growth Plan. A single gateway ‘The Leicestershire International Gateway’ is proposed, focused around the northern parts of the A42 and M1 where there are major employment opportunities notably East Midlands Airport, East Midlands Gateway (strategic rail freight terminal) and HS2 station at Toton nearby.
- The Strategic Growth Plan does not specifically promote the development of Magna Park but recognises its presence as a major source of jobs in the south of the County.
- Brownfield sites in the 'right' locations are sought to deliver the strategy, and will be assessed through the local plan process.
- There is an evidenced need to accommodate growth across the city and county.
- Further consideration has been given to the spatial distribution of development and it has been decided that Lutterworth will no longer be identified as a Key Centre; instead it will be identified as an area of ‘Managed Growth’ in Local

- Concept of creating two centres on the outer edges of the County appears to contradict the Strategic Growth Plan’s aim to reduce outward commuting from Leicester City.
- Opportunities should also be sought to deliver housing and employment land within and adjoining the Principal Area of Leicester.

SOUTH

- There is already too much development around the area proposed for the Southern Gateway.
- Southern Gateway proposal concentrates development around an area that is congested and with limited transport infrastructure.
- Put the gateways near to city locations.
- Lutterworth has already had an excess of planning applications. Poor infrastructure planning to the north should not be taken out on the south.
- There is sufficient development along the A5 including DIRFT and Magna Park, development of the southern gateway will affect countryside and surrounding villages.
- The southern gateway should take care that Hinckley & Nuneaton do not merge into one large conurbation. Due to the linear nature of the A5 it would be better to concentrate developments into one large area rather than spread over several miles of the A5.
- There is a lot of growth around the A5 towards Rugby. The schemes need to integrate with this rather than compete.
- 'Gateways' should be located near to the two Enterprise Zones. Instead, they are proposed to be located close to areas of mainly lower wage, low-skilled jobs (logistics, warehousing).
- Strongly support the identification of the Southern Gateway for significant growth as linked to the A46 Growth

Plans.

- The future of jobs and focus on certain employment sectors will be shaped by the emerging Leicester & Leicestershire Enterprise Partnership's (LEEP) Local Industrial Strategy. This in turn will reflect the Midlands Engine Strategy.
- The Strategic Growth Plan has identified the potential of Loughborough and Hinckley for growth through their status as areas of managed growth through Local Plans. Both areas have substantial Local Plan allocations that have still to be developed.
- Not all jobs in warehousing and distribution logistics are low skilled.
- The combined total of undesignated sites and 'strategic sites' meets the overall housing need, and in meeting needs in full, will reduce the prospect of unplanned development in countryside locations that would be greater if insufficient provision was identified.
- Through the Strategic Growth Plan the partners are working together to accommodate all of the homes that the City needs, but cannot accommodate, in places that are well connected

<p>Corridor and the opportunities for a new Garden Village at “Whetstone Pastures”.</p> <ul style="list-style-type: none"> • Do not need a road in the Blaby area as it will bring more industry and housing. • Concern that Magna Park is still included in the Southern Gateway proposals despite recent developments. • Lutterworth already has an excess of planning applications. • Close Magna Park and use the site for houses instead. • The Southern Corridor states 40,000 houses but this is not sensitive and will not retain the green wedge for Leicester. • Disagreement with the Southern Gateway as a major site for housing development due to damage to local countryside and risks of urban spread. • Agreement with the Southern Gateway with limited, small scale development. • Southern Gateway is less necessary. • Greater housing developments should be focused around Market Harborough and an ‘Eastern Gateway’ (Melton Mowbray) is important. • Concerns that the Southern Gateway will lead to large conurbations (including Hinckley, Nuneaton and Coventry). • Growth associated with Gateways should focus on ‘New Town’s’ around the M69 and M1 rather than increasing existing population centres. • The South is already becoming one large housing estate. • Support the development of Hinckley as a housing and employment centre but employment should be geared 	<p>to it.</p>
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away from logistics.

- Southern Gateway will be well supported by road links once the proposed new roads have been built.
- The Southern Gateway should extend to the A14 in the south east of the county.
- Strong support for the Southern Gateway as linked to the A46 growth corridor and the opportunities for a new garden village at ‘Whetstone Pastures’.
- There is a disproportionate level of housing in the South of the county compared with the North, especially in Harborough district.
- Support for the Southern Gateway, providing an outer ring road around Leicester.
- The Southern Gateway should be moved south near Rugby

NORTH

- The Northern Gateway is better placed near major population centres, has better infrastructure and is more sustainable with the current development of the East Midlands Gateway around J23 and its potential for links to the rail network, with the proximity of East Midland Airport, and the possibility of support of Loughborough University.
- The Northern Gateway is a sensible choice because of the airport and M1/A42 - however care should be taken that development does not overload what is already a busy transport network as the M1 / A42 / A453 and A50 are used for long-distance strategic journeys to the North, North West/Stoke, South, Nottingham and West Midlands.
- There is significantly more space available to the north of the county than the south.
- The Northern Gateway recognises, and should include, major employment centres around Castle

<p>Donington/Donington Park and East Midlands Airport and they should be connected by rail.</p> <ul style="list-style-type: none"> • Northern Gateway is a good location with airport, rail (East Midlands Parkway and planned HS2), and road connections and would meet employment needs – though need to ensure it tackles congestion and improve the A42/M42. • Northern Gateway appears to be the natural choice for this development. • Northern Gateway is a sensible choice because of the airport and M1/A42 however development should not overload the already busy transport network. <p>Northern Gateway has huge potential but concerns about the increase in volume of HGV traffic.</p>	
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❖ *The rail freight hub is not a proposal within the Strategic Growth Plan; it is being dealt with under the provisions for nationally significant infrastructure projects*

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<p>Q8. To what extent do you agree or disagree with Lutterworth and Melton Mowbray being identified as key centres? Why do you say this? Are there alternative key centres you think should be included?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>GENERAL POINTS</p> <ul style="list-style-type: none"> • Focus should be on improvement and environmental protection, not growth and overdevelopment with associated pollution, congestion and over stretched services and infrastructure (health, schools, sewage, and water). • These areas are clearly in need of development as they are close to the areas of Economic Development identified in the Draft Plan. • Both of these settlements should have 'managed growth' only. 	<ul style="list-style-type: none"> • Evidence shows there is a need to provide further homes and jobs in Leicester & Leicestershire into the future. • The Strategic Growth Plan seeks to deliver growth that will create sustainable communities in strategic locations thereby delivering housing and jobs supported by the necessary infrastructure, not putting additional pressures on services in

- Although these two locations make excellent key centres I do not understand why the city is not identified as the key centre as that is where future growth should take place. It has the infrastructure, it has the services, it has the facilities and it has the population to support growth.
- Development and regeneration need to be delivered with Government’s climate change targets in mind i.e. avoid new roads, build on brownfield sites, support downsizing, support employment that aims to reduce the impacts of climate change, improve public transport. Then similar to Leicester, publicise the importance of these centres, in promoting a sustainable, regenerative future.
- Build meaningful communities, providing development which meets the needs of local communities, and encourages integration.
- Need to give thought to services required to support growth when building around these existing hubs, this needs to be in the scope of the Strategic Growth Plan.

LUTTERWORTH

- Lutterworth needs no more houses.
- The Lutterworth junction with the M1 is currently open to greater development opportunities with the close presence of Magna Park, the A5 and links to the M6.
- Development to the east of the M1 is a bad idea as the development will be cut off from the rest of Lutterworth by the M1.
- Lutterworth - it is currently an M1 satellite town. This development will allow the expansion of the business park outside the town proper as has been attempted on many occasions.
- Lutterworth's recent growth has been mainly in low skilled, low wage jobs in warehousing and distribution logistics. It is not a key centre for anything else.
- Lutterworth is a good location due to the M1, Magna Park and proximity to DIRFT but needs better local road

existing centres.

- The strategic objectives of the Strategic Growth Plan set out the importance of 'balancing the need for new housing and jobs with protection of our environment and built heritage'. Protecting our environmental, historic and other assets form the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester & Leicestershire and further text regarding the importance of locally important assets has been added.
- The Strategic Growth Plan highlights the importance of Leicester's role as the central city, and recognises that it will continue to be a focus for growth. Notwithstanding this, it does not have capacity to meet all of its own growth up to 2050, or that of other Districts / Boroughs, so development will need to be located elsewhere in the county also. The Strategic Growth Plan does this in the most sustainable way and ensuring that it can be delivered with the necessary supporting infrastructure.
- Specific sites will be determined through the local plan process taking account of all relevant considerations, including accessibility and transport links, with a view to delivering

connections.

MELTON

- Melton has the potential for further growth in jobs centred on the food and drinks sector, and agricultural industries. It therefore makes good sense to support expansion there, in a planned way.
- Melton is very easily accessible. But regeneration of the town would be a great improvement.
- Melton is a rural location requiring a bypass, but this should not be dependent on an extended A46 Expressway.
- Melton is very isolated and rural by comparison.
- Without joining up across the region towards Cambridge or North towards Lincoln, Melton Mowbray will remain a cul-de-sac.

OTHER TOWNS

- North-west of the county should get a fair slice of the pie.
- Hinckley should be identified as a Key Centre due to its existing infrastructure which can support growth, as well as being more centrally located for Leicester, Birmingham and Coventry. The fact that large companies reside in this area and nearby illustrates the desirability from a commercial perspective and as such housing and employment allocations should be promoted.
- Should be centred around towns like Market Harborough, Loughborough, Coalville and/or Ashby de la Zouch.
- Market Harborough with its rail and road links to the South and East would also seem to be a potential growth key centre.
- Wigston because it has major rail links (north-south and east-west) and therefore should help keep freight off

sustainable development.

- Pollution will be a consideration in identifying sites.
- Text has been added to the Strategic Growth Plan referring to the recent approval of the Melton Mowbray Relief Road and the catalyst for change this provides for the town.
- Text has been added to the Strategic Growth Plan on the A5 improvement corridor.

- the road. This would be a better far place than the proposed Rail Freight Depot near Elmesthorpe/Stoney Stanton/Sapcote.
- A new town between Melton and Market Harborough on the A47 with access onto the proposed expressway would be another good site for a key centre.
 - Should specifically seek to identify Castle Donington as a further Key Centre for growth. This is based upon the fact that Castle Donington already represents a key, strategic location for economic development, through the existing commercial and business development at Carnival Way.
 - Promote growth of towns and villages to the West of Leicester, for example, Bosworth and Barlestone, Measham and Appleby Magna, and Ibstock, all very accessible and communities that need services reinvigorating and investment to drive employment.
 - Other areas would be better e.g. Loughborough, Shepshed, Coalville and around East Midlands Airport.
 - Loughborough second largest centre in Leicestershire and has a renowned university, with opportunity for spin offs leading to future sustainable growth in the new industries of the future.
 - Six Hills proposal downplayed, it dovetails with the strategic aims expressed elsewhere in this consultation.
 - A new town is needed within easy reach of Magna Park with its own access to the M1 and A5.
 - Jobs should be provided in Leicester with homes in new towns encircling it.
 - A new town between Melton and Market Harborough on the A47 with access to the proposed expressway would be a good site for a key centre.

Q9. To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have

'managed growth' only? Why do you say this?

Respondent Comments	Partner Responses
<p>GENERAL POINTS</p> <ul style="list-style-type: none"> • Should not develop areas that do not increase the wealth of the citizens. • Managed growth should mean no more. We can't cope with what we have. • There is no point citing quotas for housing provision as these have already been exceeded within Blaby District Council. • Every town should be as affluent as possible but the majority of development should be in the easily accessible centre. • All towns should remain as they are and not become commuter towns. • All towns need better infrastructure. • Villages need protecting from irreparable damage. • Villages should have managed growth too. • Managed growth should not be limited to any of these areas if there is a demand for people to live and work. • All locations have already suffered extensively from 'bolt on' housing developments that have put unsustainable pressure on infrastructure. • Market forces and labour availability should dictate growth. • It is considered that there is a disproportionate level of housing proposed for the south of the county 	<ul style="list-style-type: none"> • The spatial distribution strategy of the Strategic Growth Plan is focused on the period 2031-2050, not current local plan requirements. Every District / Borough Council, as well as the City, has a need to accommodate growth. • The Strategic Growth Plan is a response to the evidenced need for growth in Leicester & Leicestershire which national policy requires local authorities to meet. • There is a need to provide growth (homes and jobs) across Leicester & Leicestershire both now and into the future. The Strategic Growth Plan sets out a framework for this growth and identifies the strategic infrastructure improvements that are needed to support this growth. • The Strategic Growth Plan is clear in promoting development that is supported by the necessary infrastructure to avoid adding pressure onto existing facilities; the best way to achieve this is through strategic scale developments. • Text has been added to the Strategic Growth Plan

compared to the north which will have the benefit of HS2.

- There are other strategically located settlements throughout Leicestershire and on the edge of the Principal Urban Area of Leicester which can accommodate the dwellings required.
- Growth should be concentrated in existing urban areas, to increase population density and thus reduce the need for road transport.

TOWNS

- Loughborough would be suitable for significant development given its strategic location with good rail and road links. It is also close to but outside the National Forest.
- Loughborough has already had improvements but could do with more so should be identified as a key centre.
- Loughborough is too busy already.
- Loughborough could grow considerably (a new city?) considering the University and good road and rail links.
- Hinckley should be identified as a key centre as it requires major regeneration, expansion and investment.
- Hinckley is overdeveloped and already suffers from heavy traffic and some overwhelmed services.
- Hinckley already has shortages of facilities like doctors and schools.
- Coalville needs to be a priority as currently it is a dying town with little or no town centre improvements including retail.
- Coalville needs investment but has seen significant recent housing development with little infrastructure improvement.
- Regrettable that a major draw to the Coalville area has been closed (Snibston Discovery Park) as this was

acknowledging the importance of local road, rail and public transport schemes to support growth.

- Text has been added to the Strategic Growth Plan elaborating the importance of significant investment in infrastructure and services, and explaining that the strategy makes provision for a greater proportion of growth to be provided in strategic locations.
- Coalville is identified as an area for managed growth through local plans in recognition of its ambition for town centre regeneration, supported by housing and employment growth in strategic locations.
- The area around the north part of the M1/A42 is identified in the plan as the Leicestershire International Gateway. In this area there are major employment opportunities notably East Midlands Airport, East Midlands Gateway (strategic rail freight terminal) and HS2 station at Toton nearby.
- Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan strategy and will be assessed together with all other options through preparation of Local Plans. However, given the quantity of brownfield land available and the level of need, it is clear that development

exactly the sort of attraction that helps energise an area and also celebrated its industrial heritage.

- Re-open the Leicester-Burton passenger rail service to Support Coalville.
- Market Harborough should be left as it is.
- Market Harborough is a very attractive market town and new developments should be carefully controlled to preserve its character and integrity.
- Market Harborough has had lots of housing development but attracts commuters who offer little to the local economy and no additional facilities have been provided.
- Only allow managed growth around Market Harborough.
- Hinckley, Coalville and Loughborough have many areas of brownfield land and any development needs to be managed to ensure this is used up before the towns are allowed to spread out.
- Coalville, Hinckley and Loughborough need to expand toward Leicester. To the benefit of the central city.
- The amount of new homes being built on green spaces, farmland and woodland in North West Leicestershire is appalling.
- Promotion of Castle Donington as an appropriate location to accommodate further employment development, through a strategically planned extension to the existing business park at Carnival Way. This growth can be managed and targeted to meet a specific and demonstrable need, which is currently unmet through existing allocations within the North West Leicestershire Local Plan.
- Questioning why Melton and Ashby De la Zouch are not included as areas for managed growth.
- Promoting Glenfield / Anstey as a strategically located settlement which can accommodate the dwelling numbers and employment development required.

of brownfield land alone will not suffice.

- Hinckley, Loughborough and Market Harborough are identified as areas where growth will be managed through local plans.
- Melton is identified as a key centre for regeneration and growth in recognition of its need for infrastructure to support growth and the desire for town centre renewal and economic prosperity.
- Loughborough is identified as an area where growth will be managed in local plans in recognition of its potential for growth and the need to deliver existing local plan allocations and planning permissions. Infrastructure improvements will support this process.

- Already exceeding housing quotas in Blaby leading to over-development so do not want more.
- Loughborough is a vibrant town that is fine as it is and does not need to grow.
- Huge potential for Loughborough to grow based around top university and high tech industry.
- Growth should be managed and within towns and on brownfield sites. It should be avoided at edge of towns and where villages may become joined.
- Importance of community identity, on which relationships are built and the foundation for economic prosperity are laid. Ensure 'managed growth only' focuses on regenerating town centre, improving current housing stock, creating spaces for relationships etc.
- Major regeneration, expansion and investment required at Coalville and Hinckley. Hinckley has potential for development as a regional centre for the arts, culture and entertainment.
- Hinckley is a lovely place to live and needs to keep attracting more investment to help attract more young people to live, work and raise families here.
- Coalville town centre regeneration needed to increase future prosperity of town.
- Significant brownfield land in North West Leicestershire that could accommodate much economic growth, both housing and commercial.
- Market Harborough is a very attractive market town, new development should be carefully controlled to preserve character and integrity.
- Note Market Harborough will be affected by strategic growth from Kettering area.
- All market towns should remain as small manageable towns.

<ul style="list-style-type: none"> • Focus should be on ensuring there is enough affordable housing for those on low incomes. 	
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Q10. To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs? Why do you say this?

Respondent Comments	Partner Responses
<p>GENERAL POINTS</p> <ul style="list-style-type: none"> • Development needs to be in proportion across the county. • The Western side of Leicestershire has taken all the growth in the last seven decades with very little in the Eastern areas. • Should be utilising brownfield sites in towns before using villages and rural areas. • Protection of the green wedges between villages and the City of Leicester are vitally important in ensuring they retain distinct and separate identities from neighbouring areas. • Access to some affordable housing is an important priority to cater for those who want to live rurally. • Service infrastructure has not grown with increase in population. • It makes no sense to grow areas that are distant from the major employment areas within the county. • Investment should be provided to make these areas more self-sufficient with improved shopping and social infrastructure. • Plan must include sustainable ideas for allowing the growth of green transport between villages, local towns 	<ul style="list-style-type: none"> • The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located including requirements for affordable housing. • Further text has been included in the Strategic Growth Plan elaborating the importance of significant investment in infrastructure and services, and explaining that the strategy makes provision for more growth to be provided in strategic locations. • Protecting our environmental, historic and other assets form the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester & Leicestershire and further text regarding the importance of locally important

and Key centres.

- Suggestions of reopening railway stations on the Leicester-Harborough line, the Leicester-Melton line and the restoration of passenger services on the freight line between Leicester and Coalville.
- Deliver sustainable new growth within the County and protect rural areas, needs to include protection of character of villages identified through neighbourhood planning process.

VILLAGES & TOWNS

- Villages should not be overdeveloped to the extent that they lose their heritage, rural character and become congested.
- Merging of neighbouring villages should be avoided.
- There should be no more development in villages due to a lack of infrastructure and services.
- Some villages need growth to survive. It should not be solely local needs, but provide affordable housing (in all tenures) for some incoming younger families with children and for elderly people.
- Catering for commuters harms local places as they contribute little to communities.
- We all have to bear the brunt of increased development and all villages should expect some development in order to share the load.
- Small growth for local needs will be better supported than imposing large developments and will better protect sensitive sites.
- Growth should be Neighbourhood Plan led, with new small villages being created to support the desire for quality village housing.
- Villages tend to be left out for funding.

assets have been added.

- Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan strategy and will be assessed together with all other options through preparation of Local Plans. However, given the quantity of brownfield land available and the level of need, it is clear that development of brownfield land alone will not suffice.
- Further text has been added elaborating the importance of significant investment in infrastructure and services including improvements to rail connectivity.
- The text of the Strategic Growth Plan has been amended to include references to the Leicester to Burton railway line and rail services to and from Melton Mowbray.
- Local Plans will contain policies and guidance to address important issues such as affordable housing and housing type and tenure needed.
- The Leicester & Leicestershire Rail Strategy (March 2017) sets out the priority proposals for rail enhancements in the area. This will be reviewed as necessary and any additional priorities will be identified at that time. In the meantime, the local authorities will liaise with

<ul style="list-style-type: none"> • Would help if centres for growth were identified to help planning for housing and employment and where rural and village areas could accommodate modest development to accommodate this. • Development so far has been uncontrolled and local people have not had their wishes taken into account. This has and will continue to drive up house prices and destroys character of villages and Plan will not prevent this from happening. • Small number of affordable homes and bungalows required in villages. • The major expansion of existing towns and villages will increasingly become undesirable and inappropriate and we would advocate the creation of new settlements. These should be large enough to justify essential services and facilities such as schools and medical facilities, in order to ensure the creation of proper new communities, not just new housing estates. • Towns already of a certain size have much better capacity than villages and rural areas to deal with increased infrastructure needs and increased populations. • Urban areas should not be overwhelmed with massive developments and villages should take their fair share of development. Some additional homes in each village has less community impact than drowning towns with huge housing developments. • Growth should be located in the City, the Market Towns and the two identified growth areas which are best able to cope with it. 	<p>Network Rail and service providers to deliver the current priorities. The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray.</p> <ul style="list-style-type: none"> • The overall strategy of the Strategic Growth Plan is to provide more delivery in strategic locations and to reduce the amount that is delivered in villages and rural areas. • The plan seeks to achieve a balance between protection in villages and rural areas and allowing for organic growth which will respond to the needs of local communities. • Strategic development locations will be supported by new infrastructure provision, reducing pressure in other areas.
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<p>Q11. Do you have any other comments on the draft strategic growth plan?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>GENERAL POINTS</p>	<ul style="list-style-type: none"> • The draft Plan notes the pressures on existing

- A very exciting and well considered plan with a great vision. It is desperately needed and I wish you all the best in its delivery.
- Plan generally well thought out and should be deliverable.
- The identification of Leicester City as a central hub, to support the market towns and rural areas around it is fully endorsed.
- The plan doesn't take advantage of immediate opportunities for growth, where the possibility to integrate a number of spatially related initiatives could provide a major boost early in the life of the plan.
- Growth of our towns, cities and road network is clearly not sustainable.
- Greater consideration should be given to existing residents of areas that are affected who want fields and nature; not everything needs to be geared up for speed and industry and for villages to become dormitories for larger towns and Leicester.
- Villages will lose their individual identities and green spaces.
- Brownfield sites need to be redeveloped before any further green fields are considered. Plenty available in Leicester.
- Would destroy the natural beauty of the county. It would create a huge industrial and built up conurbation that sprawls for miles and miles with absolutely no character and no sight of countryside as far as the eye can see.
- There should not be a strategic growth plan. Should focus on preservation of our County's unique landscape and communities and rebuilding the community cohesion already lost to excessive growth.
- The plan is driven by development interests rather than social and environmental ones. The needs of the city for housing (which could have been partly met by land given over to student accommodation) have taken

- communities and the need to focus on supporting the economy in line with local and national economic strategies such as the Local Industrial and Midlands Engine Strategy.
- The preparation of the draft Strategic Growth Plan has been underpinned by a sustainability appraisal.
- Further text has been included in the Strategic Growth Plan elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations. Infrastructure studies will assess the potential for such transport options.
- Further explanation on the A46 expressway proposal has been included in the Strategic Growth Plan; the precise route of the expressway is still to be determined and will be the subject of consultation at various stages in its design.
- Protecting our environmental, historic and other assets form the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester & Leicestershire and further text regarding the importance of locally important assets have been included in the Strategic Growth

priority over the preservation and character of suburban centres, smaller towns and high quality landscape.

- The plan focuses on out of town development which damages the environment, communities and people. It means more people will have to travel into the city by car.
- Some smaller scale developments, in sustainable locations, continue to have an important role to play in delivering the quantum and quality housing required to fulfil local housing needs.
- Development should focus on brownfield sites and empty business and housing properties.
- Proposed development is in the wrong places and encourages urban sprawl which will destroy the character in particular of rural areas.
- Development is not wanted nor needed, funding would be better spent on other things.
- Consider growth better achieved through creation of new settlements spread more equally around the County, with speed that technology is progressing in future likely to more home working less commuting by car.
- Use of empty homes first before further growth is planned for and delivered.
- Feel that there should be a development of the infrastructure requirements first, to provide growth opportunities.
- More housing needs to be provided in Leicester City Centre and run down parts needs to be developed first.
- Agreement that housing is necessary but would be better achieved by the creation of new settlements spread equally around the country.
- Many of the proposals do not develop the county as a whole and put ever increasing pressure on areas already suffering under an increasing amount of housing.

Plan.

- Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan strategy and will be assessed together with all other options through preparation of Local Plans. However, given the quantity of brownfield land available and the level of need, it is clear that development of brownfield land alone will not suffice.
- Local Plans will set out requirements for energy efficiency and affordability.
- Proposals for new settlements will be considered through Local Plans, as a concept they are recognised as part of the portfolio of options for delivering growth.
- Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. A single gateway, referred to as 'The Leicestershire International Gateway', is proposed, focused around the northern parts of the A42 and M1 where there are major employment opportunities notably East Midlands Airport, East Midlands Gateway (strategic rail freight terminal) and HS2 station at Toton nearby.
- Through the Strategic Growth Plan the partners are working together to accommodate all of the

LOCATIONS

- A prosperous and well-functioning City is important to the future, but not to the extent suggested in the draft plan - and care should be taken not to over focus on the City alone.
- The plan seems to favour the West of the County and there seems to be no negative compromise for the City.
- The communities to the East and South of the City - not yet in the suburbs - seem to bear the brunt of these proposals with no tangible benefit.
- Consider relocation of hospitals to the A46/A50 junction which would be accessible also from the M1.
- A series of New Towns at the junctions of the A46 Expressway and the major A Roads in Leicester (e.g. A426, A50, A6, A47) would provide all the housing we need if these towns were large enough to be self-sufficient.
- Need to address the possibility/probability of the creation of a further market town to the east of the city and its impact on the unique character of this area.
- Consider a new Leicestershire town, pick an area with great connectivity, both rail and road.
- There are major opportunities in the northern part of the county and related to Loughborough in particular.
- Coalville is a major road linked logistics hub but is only regarded as a secondary development area. It is on a railway line, it should be a rail logistics hub to make passenger services viable.
- The overall approach is supported, in particular the identification of a Northern Gateway which could consolidate the role of Castle Donington as a major employment centre, is fully endorsed.
- Think that it is important to highlight areas where growth will be very limited due to the historic or environmental value e.g. Charnwood Forest and Beacon Hills, High Leicestershire, around Bosworth Field. Often these areas have limited infrastructure, but also are important for future of the County.

homes that the City needs in places that are well connected to it. There is a continuing need for housing which cannot be met within existing urban areas.

- The Strategic Growth Plan has considered how the predicted unmet need for housing from Leicester City can be accommodated by the other local authorities in Leicester & Leicestershire. The partners have decided that these additional needs will be satisfied in part, by development in strategic locations in accordance with the strategy set out in the Plan.
- Ashby de la Zouch is not included as a growth area in the Strategic Growth Plan and any additional development proposed will be allocated through the North West Leicestershire Local Plan review.

- Communities to south and east of City take brunt of the Strategic Growth Plan proposals; accept approach sometimes necessary for greater good, but no consideration appears to have been given to service delivery in newly developed or existing communities.
- Not sustainable to envisage more growth around Ashby-de-la-Zouch.
- The Strategic Growth Plan should be much more forceful in identifying preferred location for at least one new garden city to reduce pressure on existing communities.
- Series of New Towns at junctions of the A46 Expressway and the major A roads in Leicestershire would provide growth need if towns large enough to be self-sufficient (20 to 30,000 residents), linked to Leicester by rail/underground.
- The plan needs to be more forceful and identify at least one site for new garden city/village to reduce pressure on existing communities.
- The expansion of Ashby de la Zouch is a concern.
- Development around Hinckley is far too expansive.
- Objection to the A46 expressway in favour of improving the existing Western Ring Road to avoid massive industrial and housing expansion to the East of Leicester.
- Concern over the designation of Coalville as a secondary development area despite being a major road linked logistics hub.
- Glenfield and Anstey should be considered as suitable locations to accommodate further residential growth.

TRANSPORT

- An emphasis on large-scale road building, particularly a new eastern A46 bypass, without detailed analysis on

<p>genuine demographic and economic need.</p> <ul style="list-style-type: none">• The plan assumes that road transport (car and lorry) is the only route to growth - the plan must consider alternatives such as expansion of the heavy rail network, the potential development of light rail, and the encouragement of integrated local and regional bus services. The plan fails to consider intra-urban movement by the continued development of walking and cycling infrastructure.• Reopen the Leicester-Burton train line to promote growth in Coalville and pull workers, shoppers and visitors from Burton and the outer county in to Leicester.	
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Chapter 2b
Spatial Strategy – Non-Survey Responses

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Respondent Comments	Partner Responses
<p>GENERAL POINTS</p> <ul style="list-style-type: none"> • Support for overall spatial strategy assessment and distribution of growth requirements. • Strategic Growth Plan too concentrated in limited number of locations and so is high risk as no alternatives. • Do not support focus on developing on large scale strategic sites – prefer range of different locations reflecting balanced growth. • Redevelopment of brownfield sites hasn’t been adequately considered with providing for local needs when this conflicts with overall plan strategy. • No recognition of unallocated sites and windfall sites. • Plan is too focussed on developing infrastructure for long term needs not looking at short and medium requirements up to 2036. • Delay in delivery of Sustainable Urban Extensions (SUEs) has affected 5 year land supply. • Status of villages is under threat. • Welcomes the intention to protect small rural communities from further large 	<ul style="list-style-type: none"> • Evidence demonstrates a need to accommodate additional development within Leicester & Leicestershire up to 2050. A range of options have been tested in the development of the Plan, and the preferred approach is considered to be the most sustainable with the best opportunity to deliver major infrastructure. • The Plan proposes to shift the focus for growth away from small and medium sized sites in existing villages and rural areas to more development in major strategic locations. This allows us to plan for and deliver new supporting infrastructure, seeking to reduce the impact on individual locations. • A number of generic options were initially identified in the Strategic Growth Statement and later refined and assessed through a Sustainability Appraisal. The preferred approach is considered to be the most appropriate with the ability to deliver strategic development locations supported by infrastructure and thereby reducing pressure on existing settlements. • The detail of the A46 expressway proposal will be worked up in collaboration with Highways England, the Department for Transport and Midlands Connect. There will be public consultation at various stages. • The proposed A46 expressway and A5 improvement will be subject of significant transport evidence (including detailed modelling) to understand

scale development.

- Housing and employment developments should be equally distributed not concentrated in one area.

ROADS

- A46 is ill-conceived will have a negative effect on the character of rural villages.
- Local roads cannot cope with the current level of transport so to build yet another road (the proposed A46 Expressway) seems counterproductive.
- Leicester does need a new bypass (Expressway) around the south and east of the city and the proposal for it to begin at Syston and continue around the south of the city to the M1 does make sense. If it is to continue to the M69 and if it is to join at junction 2 near Sapcote, then there are considerable implications for the traffic entering Hinckley.
- There are only two entrances from the south-east into Hinckley and both of them become heavily congested at peak travelling times - even before the draft plan provision to turn the A5 into an 'Expressway' and link the M69 by the construction of the A46 'Expressway'.
- Would like to see more consideration given to the impact of proposed Leicestershire growth, particularly the Northern Gateway, on roads in vicinity.
- Improve access to local junctions.
- Disagree that the A46 Expressway corridor is the best way to provide access for 40,000 homes.

how they should be routed, the impact the proposals have and how adverse impacts might be mitigated.

- The proposal for the A46 Expressway is supported by the Midlands Connect Strategy, and will be strengthened by the delivery of growth in the corridor.
- The precise details of the alignment of the proposed A46 expressway are not known at this time. Significant work will be undertaken to inform decisions, and transport evidence will be collected to understand what is needed to mitigate any adverse impacts.
- The Strategic Growth Plan recognises the importance of the rail network, and supports the Midlands Connect Strategy and aspirations within it. Decisions about re-opening of local stations are beyond the remit of the Strategic Growth Plan, but could be subject to separate discussions in the future, should such schemes be viable.
- All districts will see increased levels of development. The distribution of housing is based upon the opportunities presented to deliver growth in association with existing centres of population and services, as well as the potential for delivery of significant infrastructure provision. Housing distribution is considered proportionate.
- The Strategic Growth Plan acknowledges the importance of Green Infrastructure and retaining the identity of individual villages. Designation of such policies will take place through Local Plans.
- Potential to deliver improved road and public transport links will be considered in association with development through Local Plans.
- Infrastructure for shorter and medium term requirements (up to 2036) is being

- Strongly agree with the proposals to focus residential and employment growth around A46 expressway.

OTHER TRANSPORT

- Would welcome any improvements in public transport links between East Leake (and Nottingham) and Leicestershire, particularly towards East Midlands Airport, East Midlands Parkway, and the developments around junction 24. Public transport links for the Northern Gateway should be considered holistically in cooperation with Derbyshire and Nottinghamshire.
- Improved rail transport required.

LOCATIONS

- Consider Northern Gateway area can help provide an opportunity to accommodate the unmet demand whilst also providing better positioned housing and employment growth that is in close proximity to the proposed rail and road infrastructure as part of the Midlands Connect Strategy.
- Draft plan does not appear to consider the potential of East Midlands Parkway despite proximity to Northern Gateway area.
- Opposition to development across Southern Gateway, Northern Gateway, Lutterworth, Melton Mowbray, A46 corridor and Leicester.
- Various landowners and developers with land holdings put forward potential sites for development within the Northern Gateway, Southern Gateway and by the A46 growth corridor.

brought forward in current and emerging Local Plans.

- Detailed delivery of Sustainable Urban Extensions (SUEs) and 5 year supply will be addressed through Local Plans.
- Suggestions for potential strategic sites or new settlements are welcomed. These will be considered through the preparation of future Local Plans.
- The degree of expected delivery of windfall sites across the County will be taken account of in Local Plans. The Strategic Growth Plan seeks to reduce the reliance on bigger, unallocated sites in accordance with the plan-led system by ensuring delivery of properly planned sites with supporting infrastructure.

- Questioning the omission of Ashby De La Zouch within plans.
- An area of separation and green space should be retained between the surrounding villages of Castle Donington.
- Strategic Growth Plan should identify further secondary growth areas close to Leicester i.e. Ratby, Groby and Desford.
- Melton, North West Leicestershire and Leicester appear much less affected by the proposed development. South orientated approach to the plans.
- Harborough District is proposed to take more development than other Districts.
- Coalville, Hinckley, Loughborough and Market Harborough (given their role and function) should be identified as key centres with Melton Mowbray and Lutterworth.
- A new town near Billesdon would be a better site for housing requirements and infrastructure.

Chapter 3a
Transport – Survey Responses

Q4. To what extent do you agree or disagree with the four priorities identified in the draft plan? Why do you say this? Are there any other priorities you think should be included?

Respondent Comments	Partner Responses
<p>ROADS</p> <ul style="list-style-type: none"> • Road networks must be developed before further development. • Current road network inadequate. • Specific road network/junction improvements proposed. • Too much emphasis on highways improvements. <p>RAIL</p> <ul style="list-style-type: none"> • Potential to reopen rail lines, or trams/light rail to reduce need for cars or lorries. • Improved east-west rail links, including provision for freight. • Suggestion for reopening of Leicester-Burton line. • Importance of local rail connections. <p>PUBLIC TRANSPORT</p>	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • Our strategy makes provision for a greater proportion of growth than previously to be provided in strategic locations thereby reducing pressure in villages and rural areas. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. • Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary

- Poor public transport, particularly buses.
- More emphasis on sustainable transport e.g. public transport, walking and cycling etc.

GENERAL POINTS

- Impact on business investment.
- Volume of traffic coming through Sapcote and other villages, particularly HGVs.
- Related noise and air pollution.
- Reduction of reliance on fossil fuels.
- Congestion caused by existing and proposed development.
- High levels of commuting.
- Car parking strategies to support sustainable transport options.
- Impact of new technology on sustainable transport options.
- Insufficient detail, including lack of costs for major infrastructure projects.
- Lack of clarity over delivery.
- A46 Expressway won't come on stream until 2030s.
- Impact on lower order routes.
- Inappropriate to focus growth around the A46 Expressway.

(including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures.

- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester-Burton railway line and rail services to and from Melton Mowbray.
- The Strategic Growth Plan recognises the importance of local businesses to the economy, the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the Leicester & Leicestershire Enterprise Partnership, and will attempt to keep any uncertainty to a minimum.
- The A46 'expressway' proposal has been identified as critical long-term infrastructure to support growth beyond 2031, whereas growth up to 2031 will be facilitated by infrastructure identified through Local Plans and planning applications. Specific opportunities to fund and deliver the expressway (including phasing) will need to be considered in parallel with emerging growth proposals as part of future Local Plans and strategies.
- The Strategic Growth Plan's strategy proposes to move the focus of development to major strategic locations and reduce the amount taking place

<ul style="list-style-type: none"> • Vehicle movements arising from warehousing and distribution. • East-West highways improvements. • Responsiveness to business interests. • Improved connectivity between market towns. • Increased infrastructure and housing means more traffic on already slow roads resulting in more congestion with slower car and bus journeys and increased noise and air pollution. • Should be more focus on rail, sustainable and public transport infrastructure rather than on roads. • The supporting infrastructure including roads and broadband (in particular in rural areas) should come first before the economic and housing sites to avoid congestion and lack of connectivity. 	<p>in existing towns, villages and rural areas.</p>
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<p>Q5. To what extent do you agree or disagree with the proposed corridor of growth around south and east of Leicester linked to the construction of a new A46 expressway? Why do you say this?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>A46</p> <ul style="list-style-type: none"> • Lack of detail on how A46 Expressway will be funded. • Development in A46 corridor will be heavily car dependent without high capacity public transport options to 	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • The strategy makes provision for more growth to

the City Centre.

- Support for A46 Expressway and links to existing road network.
- A46 Expressway will be huge benefit for the south of the City, improve congestion and unlock opportunities for much needed new housing, including the potential new Garden Village at Whetstone Pastures.
- A46 Expressway would assist growth of the City and vastly improve transport links whilst protecting rural roads from congestion.
- Concern that the A46 Expressway will go across a major gas pipeline to the south of Countesthorpe.
- Careful consideration required regarding exact route of A46 expressway.
- Sceptical the A46 expressway will happen and even if it does it will be piecemeal as per approach to previous road projects so benefits have been lost.
- Feeder roads into the A46 Expressway also need to be considered, such as A47 to the east of Leicester, A6 to the south of Leicester, etc.
- A46 Expressway and intersections need better design (hard shoulders, etc.) bearing in mind existing problems of northern A46.
- Concern A46 corridor will become dormitory for Leicester City as significant portion of new housing far away from proposed new centres of employment.
- A more sustainable solution would be to improve the M69 and A46 junctions and build to the north-west.
- Funding better spent improving - M1 junctions 21 and 21A and adding an additional carriageway to the existing A46 link rather than building an entirely new road.

be provided in strategic locations thereby reducing pressures in villages and rural areas.

- As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. It will be through these processes that details of the route, type of road, and number of junctions on the A46 Expressway will emerge, and consultation will take place. Mitigation measures to improve the safety of the road network and to protect and improve the quality of the environment within villages and existing urban areas will also be considered, with key measures set out in Local Plans and Transport Strategies/Studies.
- The strategic nature of the A46 expressway is such that significant public sector investment will be required to deliver this, although private sector investment in the corridor will also be sought where opportunities exist. Specific opportunities to fund and deliver the expressway (including phasing) will need to be considered in parallel

- Long term, A46 is vital for Leicestershire.
- Proposed A46 Expressway does little to link existing Enterprise Zones; - A5 Expressway in contrast addresses current traffic issues and improves flow between East and West Midlands.

RAIL

- Scope for two new railway stations where A46 Expressway crosses two radial railways.
- Need for A46 Expressway to link with HS2.
- Rail or light rail links should be considered, including use of former rail lines, bus routes will not be sufficient.
- Support for electrification of Midland Main Line.
- Support for improvement of Leicester to Birmingham rail line.

GENERAL POINTS

- Development should be focused in west of the County where there is existing transport infrastructure, and existing and planned employment sites.
- Focused growth is needed; the new road will promote organic development with ease of access to Midland Main line stations.
- Infrastructure must come first.
- Lack of detail on route, type of road and number of junctions mean that it is hard to respond to the consultation. Precise location of proposed road must be considered at earliest opportunity and made available for public consultation.
- Lack of consideration of public transport infrastructure; heavy investment in public transport must be a

with emerging growth proposals as part of future Local Plans and strategies.

- The Strategic Growth Plan recognises the important role that new settlements can play in the delivery of growth. It will be through the preparation of future Local Plans that the specific location of potential new settlements will be considered.
- Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local, transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will also identify the need for additional improvements not specifically identified in the Strategic Growth Plan, and will work closely with the LLEP and other partners to maximise funding opportunities. They will also work together to improve accessibility across the city and surrounding urban areas, particularly by public transport.
- The Leicester and Leicestershire Rail Strategy (March 2017) sets out the priority proposals for rail enhancements in the area. This will be reviewed as necessary and any additional

priority.

- Better integrated public transport is required.
- Very congested, improved road network long overdue needed to ease congestion now.
- Radial routes into and out of the City need to be drastically improved, difficult to access Leicester City centre and hospitals.
- Inner City park and ride schemes needed; more frequent and convenient bus services required.
- Concern smaller villages in vicinity do not have road width to cope with increase in traffic, such as Stoney Stanton, Sapcote (particularly with proposed Rail Freight development), Witherley, Thurnby, Bushby, Scraftoft, etc.
- Road through Sapcote needs to be made safe for residents.
- Limited scope for mitigation in some villages, due to listed buildings etc.
- Must ensure protection against unsustainable development for rural communities.
- Support for upgrading the A5, including removal of low bridges.
- Links to south and east are weaker, makes sense to strengthen these.
- Improve access to north of Leicester City from its southern areas.
- Concern regarding safety of existing junctions.
- Concern regarding costs when funds are limited.
- Object to road building which will lead to over development of Hinckley area.

priorities will be identified at that time. In the meantime, the local authorities will liaise with Network Rail and service providers to deliver the current priorities. The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester-Burton railway line and rail services to and from Melton Mowbray.

- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- The Strategic Growth Plan recognises the importance of local businesses to the economy and the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the LLEP, and will attempt to keep any uncertainty to a minimum.
- Strategic infrastructure in the western part of the County (and close to existing/already planned

- Concern regarding road capacity given the development proposed in the West of Loughborough Sustainable Urban Extension.
- Over congestion already exists, further development with the proposed infrastructure will worsen this situation.
- Concern more urban sprawl, building more roads not the answer.
- Need for local communities to access road network and move along these corridors by providing high quality cycling and pedestrian infrastructure.
- Cut parking costs and stop further out of town developments - which encourage more cars and are unsustainable.
- Detrimental effect on nearby communities.
- Road network in and around Lutterworth already unsuitable for purpose.
- Concern Lutterworth becomes an extension of Wigston.
- Object to loss of beautiful local countryside, resultant congestion and increase in air pollution.
- Long term goal should be to create efficient infrastructure, improvement in high-speed infrastructure most pressing concern for future growth in L&L.
- Include proposals for refuel/recharge points, truck depots and general 'driving break' locations.
- M69 needs a four way junction at Sapcote.
- Concern regarding the effect on the countryside and quality of life of existing residents.
- Should enable main traffic flow to use new road network and more local traffic to use existing network links.

- employment sites) is already congested with limited scope for further enhancements. Transport proposals in the Strategic Growth Plan are designed to address this and provide alternative routes for both longer-distance and more local traffic, whilst also creating new opportunities for employment and housing development.
- Further explanation on the A46 expressway proposal is to be included in the Strategic Growth Plan; the precise route of the expressway is still to be determined and will be the subject of consultation at various stages in its design. A new expressway has the potential to benefit existing communities by removing traffic from local roads and improving access around Leicester. The A46 expressway is just one aspect of the Strategic Growth Plan.
 - The Strategic Growth Plan recognises that alongside the A46 expressway measures to increase capacity on the radial roads and improve public transport would be needed.
 - Through the Strategic Growth Plan the partners are working together to accommodate all of the homes that the City needs in places that will be well connected to it.

- Support for proposed new roads and motorway junction.
- Must be mindful of protection of rural villages, the environment, heritage and landscape.
- Begin M1 Junction 20a as soon as possible; needed to ease pressure on J21.
- Other improvements need to be made to current road network, especially on major bus routes.
- Consider scope to create a new key centre between Melton Mowbray and Market Harborough.
- Huge impact on rural landscape to eastern side of Leicester, including area known as High Leicestershire.
- Money could be better spent on more sustainable transport options e.g. electric and autonomous vehicles, which could bring improvements.
- Encourages more people to avoid Leicester rather than getting them to stop in the city. In particular damaging business and employment to south-east of the city.
- Should be encouraging alternative (rail, bus, sustainable) transport options not more roads, in particular looking to develop rail links from the county into the city.
- Should be encouraging people to work, shop etc. locally with suitable public transport.
- It will relieve traffic in Leicester city and on rural roads, helping to tackle current congestion and pollutions issues including areas that are currently used as cut-throughs.
- Need to ensure communities are sheltered from the road by use of tunnels and cuttings, encouraging use of old railway lines.
- Further housing will dramatically worsen traffic on the roads from the South and East of Leicester.
- Existing residents will not benefit without junctions for local traffic.

Q6. To what extent do you agree or disagree with the proposal that Leicester should develop its role as the 'central city'?

Respondent Comments	Partner Responses
<p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Roads into City need to be improved, traffic is a problem. • Higher concentrations of development within City required limiting travel. • Significant public transport infrastructure investment required such as new rail or light rail, road based transport will not be sufficient. • 'Step changes' required such as in Nottingham, frequent modern buses and successful tram network. • Prevent competing centres, such as Fosse Park, and improve public transport into City from suburbs and outlying areas. • Reduce public transport fares. • Leicester is a vibrant City, though needs to improve and maintain local and regional transport infrastructure. • Improved access and car parking required. • Better connections between City, surrounding towns and villages required, do not ignore rural areas. • Affordable homes must be provided in or close to the City Centre with access to 	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • Our strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. • Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures. They will also work together to improve accessibility across the city and surrounding urban areas, particularly by public transport.

jobs and services by transport for non-car owners.

- Should open up the Great Central Way linking Lutterworth and Leicester and other lines to improve access into the City.
- Extend time Park and Ride operates in evening so can access City in evening.
- Wish to see inclusion of Leicester-Burton line, mention of improvements to the railway line to Melton Mowbray, Oakham and beyond, and any additional stations on existing routes.
- Incorporate positive proposals in Leicester & Leicestershire Rail Strategy within the Strategic Growth Plan.

CONCERNS

- Leicester is dirty, unsafe and roads can't cope.
- Lack of consideration of new public transport very concerning.

GENERAL POINTS

- Communities to north of County use other centres such as Burton-upon-Trent.
- Leicester is the economic hub for County but poor bus and rail links hamper this role.
- Current transport issues mean encouraging more people into the City is a bad idea.
- Expansion and improvements in City should not impact on safety of the public.
- It will not be possible to deliver all housing growth *and* a thriving city centre

- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- The Leicester and Leicestershire Rail Strategy (March 2017) sets out the priority proposals for rail enhancements in the area. This will be reviewed as necessary and any additional priorities will be identified at that time. In the meantime, the local authorities will liaise with Network Rail and service providers to deliver the current priorities. The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray.
- The Strategic Growth Plan recognises the importance of local businesses to the economy and the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the LLEP, and will attempt to keep any uncertainty to a minimum.
- The Strategic Growth Plan acknowledges that new ways of living and working are evolving and that this might entail a greater proportion of home working in the future. Ease of movement to access facilities will still be important to individuals and businesses and the underlying strategy of the Strategic Growth Plan seeks to enable this to happen.

without significant improvements to public transport.	
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Q7. To what extent do you agree or disagree with the two gateways identified?

Respondent Comments	Partner Responses
<p>SOUTHERN GATEWAY</p> <ul style="list-style-type: none"> • Southern Gateway will destroy green spaces in the area, and surrounding Sapcote, Stoney Stanton, Burbage and Hinckley will be overrun with traffic. Put gateways near to City locations. • Southern Gateway has limited public transport connectivity. • Will significantly increase traffic in villages, public safety in villages in South Leicestershire is a concern. • Already excess planning applications in Lutterworth area. • Southern Gateway is less necessary; suggest an ‘Eastern Gateway’ is considered, our connection to the port towns must be prioritised. • Support for Southern Gateway as linked to proposed A46 growth corridor. • Current pinch points around proposed Southern Gateway need to be removed, A5 prime example around Hinckley and the M69 junction. • Southern Gateway unrealistic, low unemployment and completely road dependent. • A46 Expressway and Southern Gateways would help by constraining development in known areas and avoid damaging dispersed development i.e. not all along the A5 and not merging Hinckley and Nuneaton. 	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • Our strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. In relation to this, further text has been included in the Strategic Growth Plan to outline the current position with regards to specific ongoing and proposed improvements to the A5 corridor.

NORTHERN GATEWAY

- Northern Gateway has some wonderful countryside around it which people treasure.
- Northern Gateway is better serviced by existing infrastructure, less intrusive to local villages.
- Northern Gateway more sustainable with the current development of the East Midlands Gateway around M1 J23, potential for rail links, proximity to EM Airport and Loughborough University.

SOUTHERN AND NORTHERN GATEWAY

- Northern Gateway is a no-brainer; Southern Gateway needs much more thought and should involve the adjacent counties.
- Concern regarding Nottingham and Derby taking credit for development in Northern Gateway area, Southern Gateway better links to Birmingham.
- Gateways merely locations of huge warehousing, to support Leicester as ‘Central City’ important for Northern Gateway (M1 J22 to M1 J23), Southern Gateway (M1 J20a), Eastern Gateway the A46 Expressway, Western Gateway (A5/M69).
- Both gateways will increase traffic and air pollution.
- Concept of gateways makes sense but to position new housing away from them does not.
- Gateways could relieve pressure on the City with traffic not needing to go into the City.

SUPPORT

- Businesses will benefit from improved infrastructure and transport links.

CONCERNS

- Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures.
- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray.

- Flawed approach to build roads to take traffic away from busy areas, and then build around them to make busy areas, just perpetuates the demand for road building.
- Do not need a new road in the Blaby area; infrastructure is not in place to deal with more industry and housing.
- The Plan will lead to a significant increase in traffic and concern over public safety in villages in South Leicestershire.
- Over emphasis on large scale road building and failure to identify alternative transport solutions.
- No link road through Aylestone Meadows in the City.

SUGGESTIONS

- Better public transport before more road building, already greater air pollution and associated poor health in the City.
- Road upgrades needed e.g. A5, A42 to motorway status.
- The Strategic Growth Plan should look additionally to the M42 corridor as an early primary focus for growth.
- A512 into Loughborough from the M1 needs improvement, solution is not mentioned in the Strategic Growth Plan.
- New fresh approach to the south would alleviate and provide opportunities to control heavy traffic.
- Improve existing junctions, M1 J21A, intersection with M1/M69 etc.
- Need better east-west connection, suggest along A47 through the City and County with growth corridors on the A5 (working with Warwickshire).

- The Strategic Growth Plan recognises the importance of local businesses to the economy and the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the LLEP, and will attempt to keep any uncertainty to a minimum.
- Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. A single gateway, referred to as 'The Leicestershire International Gateway', is proposed, focused around the northern parts of the A42 and M1 where there are major employment opportunities notably East Midlands Airport, East Midlands Gateway (strategic rail freight terminal) and HS2 station at Toton nearby.
- The Strategic Growth Plan proposes major improvements to both rail and road facilities throughout the area.
- Precise route of roads are still to be determined and will be the subject of consultation at various stages of design.

<ul style="list-style-type: none"> • Suggest continue A50 across M1 J24 to the A46 and the A1 and create more crossings over River Trent. • Direct rail line to East Midlands Airport is required, current Roxhill development for rail freight goes within one mile of EM Airport, use line not just for freight but for passengers to commute too. • Support for re-opening Leicester-Burton railway line. • Re-open the existing freight only railway through Castle Donington to regular passenger services, to accelerate direct services between Nottingham and Birmingham City Centres and to provide more local transport needs. • New distributor road for Melton Mowbray is needed, so is a bypass for the Kibworth's, both have congestion and decreasing air quality. • Future employment to be non-logistics, and resist further development along the A5 corridor. • Smaller gateways required to spread the load. • Eastern part of Leicestershire has worse employment prospects, in part due to access and infrastructure; A46 expressway and gateways would help to alleviate this. • Should be consultation on location of proposed M1 J20a. • More investment needed in existing road networks to alleviate existing problems. • Development should not increase car use but have good public transport and walking and cycling links. 	
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<p>Q8. To what extent do you agree or disagree with Lutterworth and Melton Mowbray being identified as key centres?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>

MELTON

- Melton is a rural location and needs a bypass, but this should not be dependent on an extended A46 Expressway.
- Melton Mowbray has poor traffic flow, this needs improving.
- Support for Melton Mowbray as key centre but needs to be supported by balanced programme of rail as well as road improvements rather than entirely based on road infrastructure.
- A46 too far from Melton.

LUTTERWORTH

- Good if those who work at Magna Park can afford to live in Lutterworth, otherwise those who need to commute will find their journey much worse as roads more congested.
- Better links from new East Lutterworth to existing villages required.
- At Lutterworth, development to east of M1 is a not a good idea as development will be cut off from rest of Lutterworth, lead to high use of car with limited options for sustainable travel. Request for further motorway bridge to ensure existing J20 does not become gridlocked.
- Lutterworth already unsuitable for the traffic it attracts.

MELTON AND LUTTERWORTH

- Support for Melton Mowbray bypass to remove congestion in town centre. No further developments in Lutterworth or Melton until proper transport infrastructure in place.
- Better public transport and sustainable transport goals for Melton and Lutterworth. Note current reduction in public transport in rural areas.

- Our strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas.
- As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies.
- Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures.
- The Strategic Transport Plan will set out short,

- Railway infrastructure needs to be considered, no rail line between Leicester and Lutterworth. Ask for reinstatement of rail line offering potential to link Magna Park to the West Coast Main line at Rugby, also consider rail improvements for Melton Mowbray and possible use of disused colliery branch line to Cotgrave, where major new housing is planned.
- Melton is very isolated in comparison with Lutterworth; proposals do not address this, Melton Mowbray still considerable distance from proposed A46 expressway.
- Increase in homes at Lutterworth moves pull from Leicester towards Rugby and Coventry. A46 expressway correctly configured will draw Melton Mowbray more into the Leicester sphere.
- Congestion needs to be addressed in the two towns but they appear to function well as they are.

SUGGESTIONS

- Ideas detailed to improve Coalville and justify opening the Leicester-Burton Railway line as a passenger with a stop at Coalville.
- New rural public transport links need to be included.
- More detail required on ordnance survey map base so implications of development and infrastructure can be assessed and comments can be made.
- Widening of A5 more a priority.
- Suggest new east west corridor from M1 J23 to connect A46 and A1 for more commercial activity.
- Prioritise company buses for transporting people from home to place of work.
- Need to work with neighbouring authorities to secure improved rail infrastructure and services.

medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.

- The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray.
- Further consideration has been given to the underlying strategy of the Strategic Growth Plan and it has been decided that Lutterworth will no longer be identified as a Key Centre; instead it will be identified as an area of 'Managed Growth in Local Plans'.

Q9. To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have 'managed growth' only?

Respondent Comments	Partner Responses
<p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Improve transport infrastructure before any development takes place. • Consider Loughborough can grow further, particularly extend to the north, has good rail and road links and is close to but outside the National Forest. • Current growth has led to congestion and gridlock in Hinckley; need investment in infrastructure to ease this. Improvements to the A5. • Coalville has underused rail link, and potential for improved road links without serious disruption to local environment. Coalville needs more investment. • Electrification of East Midlands mainline required allowing growth to continue. • Risk of increased road transport leading to congestion and air pollution. <p>CONCERNS</p> <ul style="list-style-type: none"> • Conspicuous absence from draft Strategic Growth Plan is existing railway between Leicester and Burton upon Trent via Coalville. • Limited parking and no decent public travel options for families, elderly or disabled people. 	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • Our strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. • Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures. • The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green

	<p>transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.</p> <ul style="list-style-type: none"> • The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray. • The Strategic Growth Plan recognises the importance of local businesses to the economy and the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the LLEP, and will attempt to keep any uncertainty to a minimum.
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<p>Q10. To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Reopen the Burton-Leicester line. • Need to improve public and sustainable transport links and public footpath network, roads, services and utilities for existing village residents. • Infrastructure should support local needs first, and then assist with the new large developments around the villages and essential bypasses to remove traffic from the small villages. • Public transport for rural villages must significantly improve; need to reduce 	<ul style="list-style-type: none"> • Our strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. • Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport

<p>dependency on cars.</p> <ul style="list-style-type: none"> • Reduce scope for loneliness in villages by better public transport. • Villages need to have necessary local facilities; this must include sufficient public transport to access more substantive facilities. • Encourage growth of ‘green’ transport between villages, local towns and key centres. • Protect airfields for aviation not housing. <p>CONCERNS</p> <ul style="list-style-type: none"> • Too many houses being built creating traffic dangers. 	<p>improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures.</p> <ul style="list-style-type: none"> • The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised. • The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray.
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<p>Q11. Do you have any other comments on the draft strategic growth plan?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>CONCERNS</p> <ul style="list-style-type: none"> • Already too much congestion, related pollution and parking issues. • Do not agree that more roads are needed; if M1 was to be improved through the County would the A46 expressway be necessary? 	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • Our strategy makes provision for more growth to be provided in strategic locations thereby reducing

- Fails to mention need for restoration of Leicester-Burton passenger railway line nor upgrading of the A42 and M42.
- Insufficient consideration of rail and other public transport (e.g. re-introduction of the Leicester-Burton rail line and other local commuter rail routes into the city); green economy, sustainable transport options, rail transport of freight and sustainable/green development.
- No need for East Leicestershire to have better connections as it will just cause congestion.
- How will A46 expressway be funded?
- Has proposed ban on petrol and diesel cars been considered?
- No account has been taken of growth on the other side of A5 in the West Midlands, will increase traffic in Lutterworth many fold.
- Insufficient infrastructure provision in the draft Strategic Growth Plan to accommodate growth plans for south east Leicestershire.
- Lack of evidence to assess the impact of growth on local roads, congestion, and sustainable transport choices.
- Proposals limit access to live or visit areas and encourage commuting.
- When transport so central to the strategy, transport evidence should have been prerequisite.
- A6006 is a 'rural' route under considerable strain; Wymeswold is already physically divided in two by traffic.

SUGGESTIONS

- Do not create Leicestershire equivalent of M25.

pressure in villages and rural areas.

- As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. It will be through these processes that details of the route, type of road, and number of junctions on the A46 Expressway will emerge, and consultation will take place at this time.
- Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of

- Reopen the Leicester-Burton Line to promote growth in Coalville.
- Substantially more information required to properly comment on proposals.
- Support for strategic co-ordination in the planning, funding and delivery of necessary improvements to infrastructure, this must be co-ordinated with the delivery of new housing and employment.
- High quality public transport infrastructure needs to be delivered if growth is to be sustainable.
- Invest in existing road infrastructure.
- Stoney Stanton and Sapcote would need to have a 7.5 tonne weight limit restrictions with further development.
- Charging points required for lorries on new A46 expressway.
- The Strategic Growth Plan must consider alternatives such as expansion of the heavy rail network, potential of light rail, integration of local and regional bus services, and intra-urban movement by walking and cycling.
- Foresee need for transport links from Northern Gateway (and M1 in general) to Melton, south east of City and the A47, without these blight on Wymeswold and Walton with high volume of HGVs.
- Air needs to be more breathable and less toxic, focus on renewable energy, active public transport and low carbon housing.
- Dynamic, ambitious and creative plans for Leicester as the central City are needed; large scale projects should include e.g. an indoor arena, integrated transport system with car free routes etc.
- Keep ambition strong and simple; modern integrated transport infrastructure required, not new roads, just better roads.

such measures.

- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray.
- Further consideration has been given to the underlying strategy of the Strategic Growth Plan and it has been decided that Lutterworth will no longer be identified as a Key Centre; instead it will be identified as an area of 'Managed Growth' in Local Plans.
- Existing strategic infrastructure (including the M1) across the western part of the County is already congested with limited scope for further enhancements. Transport proposals in the Strategic Growth Plan are designed to address this and provide alternative routes for both longer-

<ul style="list-style-type: none"> • More segregated cycle lanes required to ensure safety and encourage take up of cycling. • Technology is going to fundamentally change how we live, work, travel and socialise, i.e. smart cars. Plan needs to be future facing or transformational. • A46 expressway should be an expressway with dual carriageway, national speed limit, grade separated junctions and an overall improvement of public transport. • Bypass for the Kibworth's is long overdue. • Focus on improvement of existing roads rather than A46 expressway. • Dedicated light rapid transit system for City and much improved public transport required. • Focus on completing the outer ring road through Evington and Oadby first. • Focus needs to be on how average person can have more opportunities without moving, cheaper energy that is clean, green sustainable and provides economic benefits at home and for transportation. • Support for strategic thinking behind this plan; have risks inherent in delivery of plan been addressed? Consider adoption of a different delivery mechanism. 	<p>distance and more local traffic, whilst also creating new opportunities for employment and housing development.</p> <ul style="list-style-type: none"> • The transport evidence base developed in support of the Strategic Growth Plan is proportionate to the high-level nature of the proposals and demonstrates the in-principle acceptability of the Plan from a transport perspective. More detailed transport evidence will be produced to support more specific proposals as they emerge through future Local Plans, planning applications and transport strategies/studies. • The strategic nature of the A46 expressway is such that significant public sector investment will be required to deliver this, although private sector investment in the corridor will also be sought where opportunities exist. Specific opportunities to fund and deliver the expressway (including phasing) will need to be considered in parallel with emerging growth proposals as part of future Local Plans and strategies.
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❖ *The rail freight hub is not a proposal within the Strategic Growth Plan; it is being dealt with under the provisions for nationally significant infrastructure projects*

Chapter 3b
Transport – Non-Survey Responses

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Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • There is a lot of emphasis on the construction of new highways and lack of aspirations for developing rail option for both freight and passenger travel. • Supporting ‘strategic assessment of traffic’ impacts reports (26th Mar 18) does not consider the minor road network in any detail. • Effect of the A46 Expressway on Kilby will be increased traffic problems in villages. • High stationary traffic levels are already causing environmental issues in Castle Donington. • An underpass at the black spot Seagrave/Thrussington crossroads which will become more dangerous with the proposed Leicester City development at the Park Hill golf club. • The expansion of East Midlands airport, in both freight and passenger travel, has caused more vehicles of all sizes to drive through the middle of the village [Wymeswold]. The expansion plans also fail to recognise the impact of the road system. Infrastructure needs to support the plans for expansion. • Leicester & Leicestershire have excellent connections however there are gaps from East-West. • Concern about the proposed loss of through services from Wellingborough in its response to the Rail Franchise consultation; the Strategic Growth Plan should support the maintenance of these through services. • East Midlands Airport does not appear important enough in the plan– nothing on logistics businesses who rely 	<ul style="list-style-type: none"> • Further text has been included highlighting the essential relationship between infrastructure, services and growth. • Our strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. • Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified

on the airport for access to strategic Road Network. Therefore identifying the Northern Gateway without recognising the Airport is significantly underplaying the role of the area.

- No alternative is suggested should the development of the A46 road not go ahead and growth for Harborough District will have to be accommodated elsewhere within the district, causing issues for traffic, flooding, drainage and heritage.
- Figures for 2036 are based on population and employment forecasts but figures for 2050 are using projections using the same distribution, possibly resulting in a wide margin of error in this assumption. This would have implications for exact locations of congestion and the problems indicated would almost certainly occur in the places where the housing and employment growth actually occurred.
- Assumes future growth will follow past growth this disadvantages low income groups with no own transport.
- Nothing on impact of new developments on Rights of Way network.
- The Strategic Growth Plan makes it more difficult to reduce carbon footprints by encouraging car use through building houses in the countryside rather than in the towns and city, and building roads to support them.
- Concern that the Great Central Way cyclist route will be disrupted.
- Proposals for South of Leicester could still impact on S.Notts – nothing on mitigating infrastructure to manage this growth.
- Northern Gateway – no ref to East Midlands HS2 Growth strategy – need to include information as becomes available to explore synergies.

SUPPORT

- Leicester clearly does need a new bypass (Expressway) around the south and east of the city and the proposal for it to begin at Syston around the south of the city to the M1 does make sense.

within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, LLEP, other statutory bodies and service operators) to develop and secure the delivery of such measures

- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- The Leicester and Leicestershire Rail Strategy (March 2017) sets out the priority proposals for rail enhancements in the area. This will be reviewed as necessary and any additional priorities will be identified at that time. In the meantime, the local authorities will liaise with Network Rail and service providers to deliver the current priorities. The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton

- Proposal to link transport and spatial planning is welcome but evidence of deliverability and achievability are required.
- The proposals for a new expressway route for the A46 south/east of Leicester would improve connectivity and strategic links, particularly for Corby and Kettering.

SUGGESTIONS

- A flyover link at the Hobby Horse instead of the existing roundabout. An accident and congestion hotspot.
- A new underpass/ flyover system at the M1/M69 junction, a serious congestion point which can slow down all south-bound M1 traffic.
- Leicester City – should be recognition of the difficulties associated with existing levels of traffic, parking and poor use of Birstall Park and Ride.
- The centre of Leicester is the most vulnerable part of our infrastructure and heritage, and development there needs prioritising, but only in a way that enhances environmental sustainability and liveability, so we need trams or electric buses, more pressure to use Park and Ride, including looking at road charging or taxing city employers for car parking and more pedestrianisation and cycle ways.
- Need for a bus service to be introduced from Ashby de la Zouch in North West Leicestershire to East Midlands Airport and the adjacent Business Park to provide essential employment opportunities from areas of high unemployment.
- Buses in Blaby could also do east west routes, but don't currently e.g. it is only possible to get to Fosse Park from Blaby by going into Leicester and then out again.
- Improved connections between North Northamptonshire and Leicestershire could facilitate wider connectivity to the Cambridge-Milton Keynes-Oxford (C-MK-O) corridor which will be a key focal point for housing growth and economic development.

railway line and rail services to and from Melton Mowbray.

- The Strategic Growth Plan recognises the importance of local businesses to the economy and the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the LLEP, and will attempt to keep any uncertainty to a minimum.

- Clarification of funding availability to assist in the introduction of a conventional type of local bus service to assist access to work for residents of Leicestershire would be welcome.
- The land immediately either side of the new link road, and backing onto the M69 itself from junction 2 down to the A5 could be used to accommodate large modern industrial businesses, whilst the regular farmland between the businesses and Hinckley should be filled in with new housing.
- Rail service levels should not be unduly reduced for the larger towns in Leicestershire e.g. Loughborough and Market Harborough, particularly the latter given its connections with North Northamptonshire.
- Request for Leicester-Burton line be reinstated as a strategic intention.
- The strategic assessment acknowledges that the actual distribution of growth, post 2036 will differ from assumptions. Appropriate mitigation measures should be considered in order to ensure that the long-term operation of the Strategic Rail Network is maintained.

GENERAL POINTS

- One of the key means of connectivity between the two areas is rail travel between Wellingborough, Kettering, Corby and Leicester via the Midland mainline, primarily for commuting purposes but also for leisure, health and education.
- Northamptonshire Joint Core strategy (JCS) not only seeks the electrification and line speed improvements of the Midland Mainline northbound, but also seeks the continuation of through services from North Northamptonshire to Leicester, Derby and Nottingham and connecting with HS2 for onwards northbound travel.
- Building in city will enable traffic demand management to be used.

Chapter 4a
Health, Wellbeing and Environment – Survey Responses

Q4. To what extent do you agree or disagree with the four priorities identified in the draft plan? Why do you say this? Are there any other priorities you think should be included?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Environmental impacts of the Plan will be, air, water and noise pollution; loss of biodiversity, nature and wildlife; and loss of/reduced access to public green space, countryside, rural environment and landscape. • The Plan ignores the wishes of people who moved to rural areas for the quality of life benefits this brings, which will be undermined by (continued) progressive urbanisation. • A46, Southern Gateway and rail-freight sites will cause unacceptable loss of countryside, farmland and woodland. • Climate change impacts of the Plan will be increased risks of higher carbon emissions, flooding and water supply shortages and low pressure. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Education and Health should be recognised as separate priorities. • Houses should meet high environmental and energy standards. 	<ul style="list-style-type: none"> • There is a national and regional imperative to provide more homes and jobs which means that Leicester and Leicestershire will grow. The government encourages the preparation of strategic plans such as the Strategic Growth Plan. • The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. • The Strategic Growth Plan's priorities include reference to the protection of the environment/ built heritage, securing essential infrastructure and maintaining the essential qualities of Leicester and Leicestershire. • The Strategic Growth Plan sets out a suitable strategy for balancing the need for new housing and jobs with protection of the environment and built heritage. • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of

<ul style="list-style-type: none"> • Need to give greater consideration to the physical, mental and emotional health and wellbeing of residents and workforce. • The Plan needs to include commitments to low/zero carbon development, green infrastructure and investment in green sectors and jobs including a focus on renewable energy and carbon reduction technologies. • Development should be on brownfield and ex-industrial sites and in City, not on greenfield sites and a priority should be to retain rural character of the countryside including “High Leicestershire”. • Need better evidence on environmental impacts of proposed developments including road traffic levels and impact. • Need to take greater account and make more explicit mention of environment and climate change as drivers for the Plan and balance these better with the economic growth driver. It needs to be the right development in the right places that mitigates environmental impact and ideally enhances the environment. • Needs to take account of and preserve the built environment and heritage. 	<p>locally important assets have been added to the Strategic Growth Plan.</p> <ul style="list-style-type: none"> • Maintaining the essential qualities of Leicester and Leicestershire is recognised in the priorities. • Local Plans will provide the detail of where growth will be located taking into account environmental and other constraints, accompanying green infrastructure and mitigations. • Local Plans will provide the detail of where growth will be located, including the redevelopment of brownfield sites in the 'right' locations where appropriate. • Local Plans, local transport plans and other strategies will consider the potential impacts on air quality. • Any local requirements for the sustainability of buildings will be set out in Local Plans. • The Strategic Growth Plan states that the highway authorities are collaborating on a Strategic Transport Plan which will identify projects and sustainable transport initiatives. • Addressing climate change is a core land use principle which Local Plans have to reflect. • The timely delivery of well-designed and high quality development, raising the bar in terms of environmental standards, quality of life and local distinctiveness, forms part of the Vision of the Strategic Growth Plan, that will be reflected and implemented through Local Plans.
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	<ul style="list-style-type: none"> • The overall strategy embraces the ‘garden cities’ agenda which seeks to balance social, economic and environmental matters. • Health and well-being is reflected in the vision whilst protection of the environment (encompassing biodiversity) is referred to in the priorities. • The importance of digital connectivity to support low carbon growth for both rural and urban areas, is acknowledged as an essential part of the infrastructure planning process.
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❖ *The rail freight hub is not a proposal within the Strategic Growth Plan; it is being dealt with under the provisions for nationally significant infrastructure projects*

Q5. To what extent do you agree or disagree with the proposed corridor of growth around south and east of Leicester linked to the construction of a new A46 expressway? Why do you say this?

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Respondent Comments	Partner Responses
<p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Farm land should not be used for housing developments. • Generally a good idea but the A46 Expressway would need to be shielded from existing communities. • Need to consider flooding risk, in particular proposed development to south of city is on floodplain so is not suitable. • Need to consider health and safety risks, e.g. proposed routes go over major gas line. • Needs to be a more equal balance between growth and protecting the 	<ul style="list-style-type: none"> • The Strategic Growth Plan's strategy proposes to move the focus of development to major strategic locations and reduce the amount taking place in existing towns, villages and rural areas. • The combined total of undesignated sites and 'strategic sites' meets the overall need, and in meeting needs in full, will reduce the prospect of unplanned development in countryside locations that would be greater if insufficient provision was identified. • Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage. • The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans, and gives us the opportunity to identify strategic development

environment and rural way of life.

- Need to ensure footpaths and precious/endangered wildlife habitats and species are preserved and replaced during development.

CONCERNS

- Ignores the economic benefits of the countryside, e.g. landscape, heritage, community, which could be developed and maximised.
- Ignores likely future trends that suggest a different approach, e.g. home-working, improved ICT, end of diesel and petrol cars.
- No assessment of air and noise pollution and road traffic accident impacts or consideration of Government’s air quality strategy.
- Sacrifices green space, green belt, the countryside, wildlife and the environment.
- People derive mental health benefits from countryside and green space and this is negatively impacted by greater pollution, noise and traffic congestion.
- Undermines the physical and cultural elements of a rural way of life.
- Risks undermining tourism, leisure and recreation activities in High Leicestershire.
- Loss of high quality agricultural land which should be used for food production.
- Benefits will not be felt by local residents as they already have good access and a good quality of life which will be undermined.
- Object to the impact that the A46 expressway and associated housing will have on landscapes of High Leicestershire.

locations along with the infrastructure that is essential to their delivery.

- Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan.
- Local Plans will provide the detail of where growth will be located, including potential impact on air quality, environmental mitigation and green infrastructure policies to support communities, taking into account a range of constraints and up to date evidence.
- Addressing climate change is a core land use principle which Local Plans have to reflect.
- Local requirements for the sustainability of buildings will be set out in Local Plans.
- Considerations such as land quality, flood risk and pollution levels will be taken into account in determining the route of the expressway and in Local Plans Consultation will take place in relation to both these processes.
- Measures to reduce the reliance on car usage will be explored in local plans, transport plans and other strategies.
- Text has been included on how the highway authorities are collaborating on a Strategic Transport Plan which will identify sustainable transport initiatives.
- Alternative options were explored at a high level and these are included in the Sustainability Appraisal of the Strategic Growth Plan.

<ul style="list-style-type: none"> • Concern that development would not be contained within the A46 and would result in urban sprawl spreading into countryside. • Rural east Leicestershire has contributed to the character of Leicestershire and the A46 expressway would destroy the balance between infrastructure and rural life. • Concern that building up to 40,000 new homes does not keep in line with the priority to protect the qualities and environment of Leicester and Leicestershire. 	
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<p>Q6. To what extent do you agree or disagree with the proposal that Leicester should develop its role as the ‘central city’?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>CONCERNS</p> <ul style="list-style-type: none"> • Need to limit damage to rural areas, countryside and the environment. Concern that this is just an opportunity for developers to ruin the countryside. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Need to limit damage to rural areas, countryside and the environment. Concern that this is just an opportunity for developers to ruin the countryside. • There is an opportunity to encourage balanced development of business, living, wellbeing and environment. • Need to discourage car use and encourage use of public and sustainable transport and consider people who do not have access to cars. 	<ul style="list-style-type: none"> • The Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage. • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan. • Local Plans will provide the detail of where growth will be located taking into account constraints and up to date evidence. • Local requirements for the sustainability of buildings will be set out in Local Plans. • Addressing climate change is a core land use principle which Local Plans have

<ul style="list-style-type: none"> • Need more social and sustainable housing that is carbon neutral and use renewable energy. • There is an opportunity to use local creativity and expertise to tackle the environmental challenges and develop the green economy including greater openness to new and different ideas and approaches. 	<p>to reflect.</p> <ul style="list-style-type: none"> • The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised. • Consultation on detailed proposals will take place through the Local Plan process. This will be a key opportunity for local creativity and expertise to tackle environmental challenges and develop the green economy to inform the Local Plan.
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Q7. To what extent do you agree or disagree with the two gateways identified?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Gateways and associated housing and road infrastructure will lead to loss of rural areas, farmland, countryside, wildlife and greenbelt in particular Southern Gateway. • Gateways will cause noise, pollution, urban sprawl and damage to the countryside and contribute to climate change and associated physical and mental health problems in existing communities. • Risks of overloading local services e.g. doctors, hospitals, schools, when they 	<ul style="list-style-type: none"> • The strategy aims to maintain the essential qualities of Leicester and Leicestershire. • The Strategic Growth Plan envisages a ring of strong, independent market towns of character which deliver managed development without being overwhelmed by it. • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of

<p>already receive less funding.</p> <ul style="list-style-type: none"> Negative impact on the countryside and villages, including pollution. Southern Gateway will impact rural communities more than the Northern Gateway would. Focusing major urbanisation in 2 areas is detrimental to the quality of life for the people living there. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> Focus of plans should be on renewable energy and carbon neutral housing and other developments. Funding could be better used to improve peoples' lives to make them happier and healthier, e.g. address homelessness, child poverty. We are a rural county, protect farmland for food production. Growth should be on hold; any development should be just to be to improve quality of life. 	<p>locally important assets have been added to the Strategic Growth Plan.</p> <ul style="list-style-type: none"> Local Plans will provide the detail of where growth will be located and the type of development, taking into account constraints, local services, public transport, walking and cycling links, up to date evidence and national policy. Local Plans, Local Transport Plans and other strategies will consider the potential impacts on air quality. Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. Addressing climate change is a core land use principle which Local Plans have to reflect in delivering sustainable development. The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
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<p>Q8. To what extent do you agree or disagree with these two settlements (Lutterworth and Melton Mowbray) being identified as key centres?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>CONCERNS</p> <ul style="list-style-type: none"> Lutterworth and Melton are historic market towns and risk losing their character 	<ul style="list-style-type: none"> Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of

<p>if developed too much, in particular by too many new houses.</p> <ul style="list-style-type: none"> • The proposals risk further over-stretching local services, utilities and road infrastructure, and generating increased crime. Co-locating housing and jobs is supported but housing needs to be accompanied by supporting sustainable infrastructure. • Do not need jobs near where people live as in modern society they travel. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • It would be better to improve rail links to Leicester and other larger centres so that people can live in Melton and Lutterworth and work elsewhere. • Melton has potential as a centre for rural businesses including food, drink and has the livestock market but needs better connectivity. • There should be more emphasis on protecting the environment, green space, countryside, wildlife and farmland with more sustainable transport and lower carbon impacts. • The Plan should consider physical and mental health impacts of development on residents. 	<p>locally important assets have been added to the Strategic Growth Plan.</p> <ul style="list-style-type: none"> • Local Plans will provide the detail of where growth and accompanying green infrastructure be located, taking into account constraints, up to date evidence and national policy. • Local Plans will consider the potential impacts of development on air quality. • Addressing climate change is a core land use principle which Local Plans have to reflect in delivering sustainable development. • The revised draft has been amended so that Lutterworth is now an area of managed growth in local plans and not a key centre. • Further explanation in relation to Melton Mowbray as a key centre for regeneration and growth has been included, with reference to the recent approval of the Melton Mowbray Relief Road which will remove congestion in the town centre. • Further text has been included to provide more explanation on the improvements to the A5 corridor. • Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan Strategy.
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<p>Q9. To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have 'managed growth' only?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>

CONCERNS

- Risks loss of environment, green space, countryside and farmland.

SUGGESTIONS

- All areas of county should have managed growth not just towns identified.
- Need to balance growth and environmental protection, encouraging sustainable and low carbon development and transport.
- Coalville and Hinckley are well located near motorways and are in need of major re-development and investment as long as it generates local jobs and attracts families and does not damage the environment. Growth should be accompanied by supporting infrastructure and ensure high quality design and access to green space.
- Focus should be on improving what is already there in particular in Coalville, needing to ensure there are sufficient local services for local people.
- Development of Market Harborough should be carefully controlled but does need leisure facilities and has some potential for growth to the south.
- Should aim for cheap green sustainable energy use for each person.

- The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans, and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery.
- The Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage.
- The Strategic Growth Plan's strategy proposes to move the focus of development to major strategic locations and reduce the amount taking place in existing towns, villages and rural areas.
- A strategy of managed growth would help to sustainable development and protection of areas without adversely impacting on local infrastructure.
- Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan.
- Local Plans will provide the detail of where growth will be located, taking into account constraints and up to date evidence and national policy. These will be subject to public consultation.
- The scale and location of growth will be set out in Local Plans, taking into account the need for continued town centre regeneration and better services.

Q10. To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Risk that villages become dormitories – should not be encouraging people who commute. • Development would overwhelm existing services and infrastructure. • Risk loss of greenbelt, landscape and heritage of villages and rural areas around villages which needs preserving. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Should maintain village character, way of life, community and heritage, these do not need improving – they are fundamental to Leicestershire being “at the heart of the rural shires”. • Should maintain countryside for leisure, tourism, mental health and environmental benefits with new development limited to brownfield sites. • Development in villages should be sensitive, carefully controlled and limited, with sufficient facilities. 	<ul style="list-style-type: none"> • The Strategic Growth Plan proposes that in future there will be limited growth in villages and rural areas, consistent with providing for local needs. • The Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage. • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan. • There is no Green Belt designation in Leicester and Leicestershire, but the diagram of environmental assets includes Green Wedges. • Local Plans will provide the detail of where growth will be located taking into account constraints, up to date evidence and national policies. • Local Plans will provide detail of the redevelopment of brownfield sites in the 'right' locations where appropriate.

Q11. Do you have any other comments on the draft strategic growth plan?	
Respondent Comments	Partner Responses
<p>CONCERNS</p>	<ul style="list-style-type: none"> • The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans, and gives us the opportunity to identify strategic development

- Plan is based on outdated principles of growth and road infrastructure and does not properly factor in other drivers, e.g. environment, health, wellbeing and foreseeable technological developments such as driverless cars and move to internet shopping.
- Proposals will be detrimental to the countryside, environment, road safety, health and the opportunities and health of children and young people.
- Several areas are prone to flooding; need assurance for local residents that they are being safeguarded.

SUGGESTIONS

- Council’s priorities are wrong; instead the focus should be on tackling poverty and rebuilding community cohesion.
- Need greater focus on impacts on and protection of farmland, countryside, wildlife, the environment and climate change in particular air quality and flood risks, landscape, leisure amenities, facilities for young people and quality of life for everyone.
- Agricultural land should be properly assessed and valued.
- The plan should recognise the role of the National Forest in growing green infrastructure and supporting economic development including through development of the natural environment.
- Need to build affordable carbon neutral homes that utilise renewables and battery technology and provide access to green space.
- Need to create safe-routes within new developments to enable families and

locations and the infrastructure that is essential to their delivery.

- Housing is fundamental to the health of the population. Leicester and Leicestershire local authorities have a duty to cooperate on accommodating the housing needed across the area.
- The Strategic Growth Plan is not yet finalised and ratified by the individual local authorities.
- The Strategic Growth Plan is informed by a number of other strategies and evidence documents.
- The Strategic Growth Plan partners are committed to working with local communities to ensure that new development brings with it the local services that are needed.
- The Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage.
- Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan.
- The combined total of undesignated sites and 'strategic sites' meets the overall need, and in meeting needs in full, will reduce the prospect of unplanned development in countryside locations that would be greater if insufficient provision was identified.
- Local Plans will provide the detail of where growth will be located taking into account constraints, up to date evidence and national policies. These plans will

<p>children to walk to school, work and exercise.</p> <ul style="list-style-type: none"> • Suggest consideration given to relocation of hospitals onto more accessible sites (possibly A50/A46 junction) and reuse of sites for housing and employment. • Prioritise health care, community development and low carbon businesses. 	<p>include public consultation and independent examination.</p> <ul style="list-style-type: none"> • Local Plans will provide the detail of where growth will be located and the nature of the development to take place including standards and design matters. • Any local requirements for the sustainability of buildings will be set out in Local Plans. These are principles which will be considered as part of the Local Planning process to deliver 'well-designed and high quality development, raising the bar in terms of environmental standards, quality of life and local distinctiveness' as set out in the Strategic Growth Plan's vision. • Local Plans will provide the details of how this will be delivered and consider the air quality impacts. • Addressing climate change is a core land use principle which Local Plans have to reflect. • Partners acknowledge that further work is needed and to identify the potential impacts of plans on villages, countryside and environment.
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Chapter 4b
Health, Wellbeing and Environment – Non-Survey Responses

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Respondent Comments	Partner Responses
<ul style="list-style-type: none"> • Concern about the environmental effects of the A46 expressway. • No reference to LL Landscape Sensitivity and Green Infrastructure Study – Green Infrastructure opportunities should be identified. • Protecting the environment and existing heritage is lacking from key priorities. • The viability and success of farmers in Leicestershire is crucial to the county’s economy and the environment. • Farmers need planning policies which enable amongst other things, on farm renewable energy. • High stationary traffic levels are already causing environmental issues. • Ensure the provision of adequate flood alleviation and water infrastructure facilities for both existing and new developments, as well as schools, healthcare and employment. • There appears to be no suggestion how the loss of green space and habitats will be mitigated and no concept of sustainability. • Insufficient acknowledgement of the need to protect green belts and green wedges. 	<ul style="list-style-type: none"> • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan. • Protection of the environment and built heritage forms part of one of the priorities. • Addressing climate change is a core land use principle which Local Plans have to reflect. • The Strategic Growth Plan acknowledges that individual local authorities are focusing on supporting the rural economy, including tourism, leisure, health and wellbeing. Local Plans will set out policies relating to support rural diversification. • A diagram showing environmental assets (including flood zones 2 and 3) in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added. Local Plans will provide details of where growth will be located and consider constraints, including potential flood risk and pollution impacts. • Sustainability Appraisal is part of the Local Plan preparation process.

<ul style="list-style-type: none"> • No environmental impact assessment undertaken nor impact assessment on rural communities. • Canals and rivers should be included within the existing environmental and historic assets. • The benefits of the waterway network are significant and provide a valuable contribution to the economy. This should be recognised within the final strategy. • Very little is said about environmental concerns and the development of a greener agenda – new development should be carbon neutral and linked to sustainable infrastructure and renewable energy. • There should be a stronger commitment to promote landscape, environmental and heritage assets. • The natural environment, biodiversity and important habitats have not been properly considered. There are no commitments or plans in place for improving the natural environment and making it resilient to future changes. • Need to ensure development sites are located to avoid adverse impacts on environmental assets including nationally and internationally designated conservation sites and SSSI's. • Recommend use of SSSI impact Risk Zones to decide which developments will affect designated nature conservation zones. • The Plan should adopt a more aspirational approach regarding biodiversity. • The plan focuses on out of town development which damages the environment, communities and people. 	<ul style="list-style-type: none"> • Local Plans will provide details of where growth will be located and accompanying policies relating to the type of development to be provided to promote health and wellbeing as set out in comments. • A diagram showing environmental assets (including Green Wedges) in Leicester and Leicestershire and further text regarding the importance of locally important assets has been added. There is no green belt designation in Leicester and Leicestershire. • Firm proposals do not yet exist on which to carry out an Environmental Impact Assessment. • Strategic Green Infrastructure is identified in Local Plans. Local Plans will provide the detail of where growth will be located along with strategic Green Infrastructure opportunities based on up to date evidence and constraints. • There is an acknowledgement that the document cannot convey the full range of assets which will be taken into account in the Local Plan preparation process. Waterways and canals are recognised as an asset in the 'Our Strengths' section. • Urban areas do not have the capacity to accommodate the level of housing needed. The Strategic Growth Plan envisages well-designed and high quality development which raises the bar in terms of environmental standards, quality of life and local distinctiveness. Local Plans will provide the detail of where growth will be located and the nature of that development. Addressing climate change is a core land use principle which Local Plans have to reflect. Any local requirements for the sustainability of buildings will be set out in Local Plans. • Local Plans will provide the detail of where growth will be located (taking into
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<ul style="list-style-type: none"> • Need more dense development of energy efficient housing on inner city brownfield sites that people can afford and from which they can walk, cycle or use public transport to access jobs in the city rather than having to drive and cause even more pollution/greenhouse gases. • Identified priorities do not raise improvements to health and wellbeing by reference to active travel, active design and creating an active environment to encourage the inactive to become active. • The plan has the opportunity to embed health and wellbeing as an overarching aim for all decisions which flow from the plan. • Need to secure financial obligations for NHS services through Section 106 Agreements. • Leicester faces a greater level of health need than rest of county. Sustainable growth requires an ongoing supply of healthy workers therefore need to create an environment in which people live and work that is health related. • Health and wellbeing should be treated in same way other cross – cutting themes and should be evident throughout the plan. • There is too little on cycling and pedestrian movements which will reduce noise and pollution. • There is no mention of physical activity and sport infrastructure within the Plan. • A lack of police presence in North West Leicestershire will discourage business and people moving into the area. • The quality or local distinctiveness of new housing estates is poor. 	<p>account constraints and up to date evidence) and include policies for the redevelopment of brownfield sites in the 'right' locations where appropriate.</p> <ul style="list-style-type: none"> • The timely delivery of well-designed and high quality development, raising the bar in terms of environmental standards, quality of life and local distinctiveness, forms part of the Vision. • The countryside as an asset is recognised in the 'Our Strengths' section. • A fundamental part of the Strategic Growth Plan's vision is that growth will contribute to people's health, happiness and well-being through the timely delivery of high quality developments. Securing health and wellbeing benefits is a recurring theme in the Plan and will be progressed through Local Plans which will provide the details of where growth will be located. • The Strategic Growth Plan references the importance of delivering infrastructure to support health and wellbeing which incorporates provision for physical activity and sport. • Leicestershire's importance as a mineral producer is recognised in the statutory Minerals and Waste Local Plan as is the role of its waste management facilities. The importance of both in supporting new development and growth is similarly recognised and also emphasised in the NPPF. The need to avoid the unnecessary sterilisation of mineral resources, mineral infrastructure and waste management infrastructure is recognised in the Minerals and Waste Local Plan. • The reduction of waste and increase in recycling is supported through the Leicestershire Minerals and Waste Local Plan. Recycling locally is promoted as is the need to reduce the need to travel in Local Plans.
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- Concern over the impact on already flood prone areas e.g. Great Glen.
- Villages of Burbage, Stoney Stanton, Sapcote and Elmesthorpe will lose individual identities.

WASTE

- Leicestershire is an important supplier of construction materials and also operates waste management facilities and re-cycling. The importance of both should be reflected in the Strategic Growth Plan as both will be required and it is more sustainable to use local aggregate. Plan also needs to secure a future supply of aggregate by not sterilising sites for non-mineral development required to deliver the growth.
- No mention of reducing waste or recycling locally.

RENEWABLE ENERGY/ENERGY EFFICIENCY

- Need to focus on development of renewable energy.
- Need move to 100% renewable energy generation.
- Need to develop modern, energy efficient public transport.
- Require more dense development of energy efficient housing on inner city brownfield sites.
- Developments need to allow people to walk, cycle or use public transport to access jobs in the city.
- Need to promote and support the green economy and should be aiming to attract businesses which are manufacturing green technology such as renewable energy generation and carbon neutral housing.

- The Leicester & Leicestershire Enterprise Partnership is preparing an Energy Infrastructure Strategy for Leicester and Leicestershire, with a consultation paper to inform the strategy published in July 2018. Once prepared the Energy Infrastructure Strategy for Leicester & Leicestershire will shape the delivery of proposals within the Strategic Growth Plan Local Plans.
- The Leicester & Leicestershire Enterprise Partnership is actively working with ‘green’ businesses to grow the ‘green’ economy in Leicester and Leicestershire.
- Addressing climate change is a core land use principle which Local Plans have to reflect in delivering sustainable development.
- The Strategic Transport Plan will set out short, medium and long term aspirations for maximising sustainable transport (including walking and cycling, public transport and other ways of reducing the use of the private car, green transport initiatives etc.) as well as addressing the opportunities afforded by new technology; this will include examining ways in which air pollution, noise and impact on health can be minimised.
- One of the four priorities of the Strategic Growth Plan is to deliver high quality development; low carbon and carbon neutral housing will be sought as part of delivering this priority.
- More new jobs are expected in the Leicester & Leicestershire Enterprise Partnership’s priority sectors of life sciences (medical technologies); advanced manufacturing and engineering; advanced logistics; space and digital technologies; and textiles. These reflect the priorities of the Midlands Engine Strategy and the growth of the national economy.
- Within the Strategic Growth Plan, high levels of commuting are identified as

<ul style="list-style-type: none">• There is no mention of the Energy Strategy for Leicester & Leicestershire.• Low emission targets should be set. <p>LOW CARBON LIVING/HOMES</p> <ul style="list-style-type: none">• Should be building low / carbon neutral housing.• Plan discriminates against people who have less money and live lower carbon lives.• Government is committed to cutting carbon emissions by 2050 and as the Strategic Growth Plan is the same time frame, it should follow it as top priority.• Focus on logistics is increasing effects of climate change with reliance on road transport.	<p>one of our weaknesses. Our strategy proposes to build more development in major strategic locations and to reduce the amount that takes place in existing towns, villages and rural areas. This will allow us to plan for new housing and employment together.</p>
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Chapter 5a
Housing – Survey Responses

Q4. To what extent do you agree or disagree with the four priorities identified in the draft plan? Why do you say this? Are there any other priorities you think should be included?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Concern over what will happen once we eventually run out of space to build housing on. • There is no focus on ensuring property is used fully or converted for housing or employment. • Too much local housing and too little investment in facilities. • Villages are already big enough. • Developers will build wherever they want and ignore the wishes of those already living there. • Scepticism over need for new housing. • Concern that there is no definition of 'delivering high quality development' and that it may become a costly requirement that is not supported by a viability assessment, which in turn increases build costs, delay in providing houses and an increase in house prices. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • The vast majority of building should be done on brownfield sites. 	<ul style="list-style-type: none"> • There is a national and regional imperative to provide more homes and jobs which means that Leicester and Leicestershire will grow. The government encourages the preparation of strategic plans such as the Strategic Growth Plan. • The Housing and Economic Development Needs Assessment (HEDNA) study provides evidence of Leicestershire’s identified housing requirement to 2036 and this is reflected in the growth plan. • Brownfield sites in the ‘right’ locations are sought to deliver the Strategic Growth Plan Strategy. • Text on the garden city agenda has been given a more prominent position to emphasise the importance of delivering high quality

- Accommodation for students in the City is vital.
- Policies should improve what we have with less emphasis on growth.
- Should be limited quality development rather than widespread development.
- Need a long term plan to avoid piecemeal housing developments and developing without important local facilities.
- Strategic level housing should be located within easy reach of employment zones.
- New homes must make provision for electric cars.
- Requirement for more affordable homes and homes suitable for families.
- More high rises should be built in Leicester.
- If housing must be developed, then it should be in keeping with surrounding areas and not tower blocks.
- Believe it is necessary to appreciate the role of small scale housing delivery in sustainable rural locations in maintaining and enhancing the vitality of rural communities.

SUPPORT

- Fully agree with the draft Strategic Growth Plan’s recognition of the need to deliver new homes across the Leicester and Leicestershire Housing Market Area.
- Recognise the effect that provision of new housing and infrastructure can have in resulting in further investment and development opportunities.

development.

- Issues specific to housing type and tenure including affordable housing requirements will be addressed through Local Plans.
- Local Plans will contain policies and guidance to address the housing and employment local needs balance and environmental concerns such as climate change.
- Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations.
- The strategy makes provision for more growth to be provided in strategic locations and is clear there is a need to reduce the amount of development that takes place in existing, villages and rural areas. Local Plans will provide the detail of where this growth will be located.
- The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will

	be located.
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Q5. To what extent do you agree or disagree with the proposed corridor of growth around south and east of Leicester linked to the construction of a new A46 expressway? Why do you say this?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Predicting housing needs to 2050 is impossible. • No protection for the many villages that will line the expressway and these will either face an increase in traffic or expansion in size to accommodate private premises. • Concern that proposed housing numbers in Harborough District is unsustainable and disproportionate. • HEDNA figures used have been overestimated and proposed concentration of housing in Harborough district is without evidence. • Housing locations are designated in local plans but in practice are dictated by developers. • Concern that the infill of housing development will extend the City right up to the expressway and increase levels of pollution. • Concern that long timeframes for major infrastructure works will mean housing needs for the area will not be met in the short and medium term. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Should prioritise development of brownfield sites rather than greenfield sites. 	<ul style="list-style-type: none"> • The Housing and Economic Development Needs Assessment (HEDNA) study provides evidence of Leicestershire’s identified housing requirement to 2036 and this is reflected in the growth plan. • The Strategic Growth Plan provides a longer term strategy, spatial distribution and a framework for our Local Plans and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. • The strategy makes provision for more growth to be provided in strategic locations and is clear there is a need to reduce the amount of development that takes place in existing towns, villages and rural areas. Local Plans will provide the detail of where this growth will be located.

<ul style="list-style-type: none"> • Considers that the Strategic Growth Plan should positively encourage new residential development along the A46 growth corridor and that there should not be a cap of 40,000 new homes unless it has evidence to demonstrate otherwise. • Suggest focus on strategies such as moving people out of large homes that they no longer need. • Suggest increasing population density in existing urban areas. • New homes need to be built on smaller, carbon neutral brownfield sites, accessible by foot, cycle and well served by public transport and jobs. <p>SUPPORT</p> <ul style="list-style-type: none"> • A46 expressway is necessary to open up new opportunities for housing delivery within the City. 	<ul style="list-style-type: none"> • The Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage. • Local Plans will provide the detail of where this growth will be located and allocations will be based on a range of evidence about a site’s suitability/sustainability to be developed. • Local Plans will contain policies and guidance to address importance issues related to density, releasing capacity from existing stock and planning for an ageing population. • Local Plans will contain policies and guidance to address important issues such as affordable housing and housing type and tenure needed.
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Q6. To what extent do you agree or disagree with the proposal that Leicester should develop its role as the ‘central city’?	
Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • The City receives all services and facilities whilst other areas only get houses. • Concern with rural areas picking up additional housing requirements with 	<ul style="list-style-type: none"> • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan. • Brownfield sites in the ‘right’ locations are sought to deliver the Strategic

inadequate infrastructure.

- Plan does not evidence the City and Oadby & Wigston being unable to take further development.
- Concern over Melton taking on some of Leicester’s housing need, conflicting with Melton’s Local Plan.

SUGGESTIONS

- Brownfield sites (including derelict factories and shops) to be regenerated and redeveloped as housing rather than using greenfield sites.
- A higher concentration of development to take place within the City, including multi-storey house building.
- Options to turn vacant space in the City centre into housing should be considered.
- Less emphasis should be placed on building student accommodation.
- Should prioritise improving the substandard housing in the City.
- Affordable homes must be provided in or close to the City centre.
- Increase housing stock within pedestrian access to City.
- Additional housing distribution should be evenly distributed.
- The City should be the focus for a major percentage of housing and that more accurate figures are required regarding housing needs and capacity.

Growth Plan Strategy; development of brownfield sites alone will not deliver the scale of growth that is needed

- The Strategic Growth Plan provides a longer term strategy, spatial distribution and a framework for our Local Plans and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery.
- The strategy reflects the Midlands Connect Strategy in terms of the need for long term transport investment priorities to help unlock jobs and growth.
- The Strategy seeks to support and further develop Leicester’s role as the ‘central city’ which supports the market towns and rural hinterland.
- The Housing and Economic Development Needs Assessment (HEDNA) study provides evidence of Leicestershire’s identified housing needs to 2036 and this is reflected in the Strategic Growth Plan.
- The Strategic Growth Plan's priorities include reference to the protection of the environment/ built heritage, securing essential infrastructure and maintaining the essential qualities of Leicester and Leicestershire.
- The strategy makes provision for more growth to be provided in strategic locations and is clear there is a need to reduce the amount of development that takes place in existing villages and rural areas. Local Plans will provide the detail of where this growth will be located.
- Issues related to the local road network will need to be addressed through Local Plans and Local Transport Plans.
- Local Plans will provide the detail of where growth will be located and how it

<ul style="list-style-type: none"> • More creative housing solutions such as along the canal and on surface carparks should be considered which would help the city meet their own housing need. • More emphasis needs to be place on short-medium housing requirements given the timeframes for the A46 and A5 expressways. • Housing should be carbon neutral and supporting renewable energy wherever possible. 	<p>will be delivered.</p> <ul style="list-style-type: none"> • Local planning authorities are required by planning legislation to plan to meet identified and housing and employment needs within their housing market area, in this case Leicester & Leicestershire. • Local Plans will contain policies and guidance to address important issues such as increased student accommodation and affordable housing. • Local Plans will contain policies and guidance to address the housing and employment local needs balance and environmental concerns such as climate change. • Local Plans will contain policies and guidance to address identified needs for local and community facilities. Current and emerging Local Plans deal with the short to medium term housing and employment needs.
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<p>Q7. To what extent do you agree or disagree with the two gateways identified?</p>	
<p>Respondent Comments</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Concern that the recently adopted North West Leicestershire Local Plan has ignored the need for additional housing in the Northern gateway area. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Need for more flats to be built rather than just houses. 	<p>Partner Responses</p> <ul style="list-style-type: none"> • The strategy makes provision for more growth to be provided in strategic locations and is clear there is a need to reduce the amount of development that takes place in existing towns, villages and rural areas. Local Plans will provide the detail of where this growth will be located.

<ul style="list-style-type: none"> Should focus on affordable homes and use of brownfield sites and encouraging people to downsize to smaller homes. 	
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Q8. To what extent do you agree or disagree with these two settlements (Lutterworth and Melton Mowbray) being identified as key centres?

Respondent Comments	Partner Responses
<p>MELTON</p> <ul style="list-style-type: none"> Connectivity to Melton Mowbray is limited and proposals do not effectively address this. Correct configuration of the A46 expressway will draw Melton more into Leicester and away from Nottingham. Melton Mowbray appears to be a good choice for development due to its location and distributor road. <p>LUTTERWORTH</p> <ul style="list-style-type: none"> Lutterworth does not need any more houses and is big enough already. Lutterworth is unsustainable as a key centre. Lutterworth does not seem an obvious area on which to focus housing growth as recent growth has been mainly in low skills, low wage jobs in warehousing and distribution. Proposals for Lutterworth are supported provided that appropriate housing 	<ul style="list-style-type: none"> Identification of Coalville and Hinckley as potential key centres is noted by partners. The Strategic Growth Plan provides a longer term strategy, spatial distribution and a framework for our Local Plans and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. The strategy reflects the Midlands Connect Strategy in terms of the need for long term transport investment priorities to help unlock jobs and growth. Local Plans will contain policies and guidance to address identified needs for local and community facilities. Such social infrastructure is vital for sustainable, cohesive communities. Lutterworth will no longer be identified as a Key Centre; instead it will be identified as an area of 'Managed Growth' in Local Plans. Castle Donington is already included within a growth area (Gateway) so does not need a further designation.

meets local employment need and affordability.

- New homes will not be affordable in Lutterworth and will not reduce levels of commuting.

CONCERNS

- Already too many houses in these areas.
- Towns will just be used as dormitories.

SUGGESTIONS

- Coalville, Hinckley, Castle Donington and Market Harborough should be designated as key centres.
- People working in these places will need to be able to afford local homes to avoid having to commute.
- Need for more houses but alongside facilities.
- Development in the way proposed is only acceptable if the housing type satisfies the needs of the community i.e. starter houses rather than large properties.

SUPPORT

- Agreement with two areas being identified as key centre given their supporting infrastructure.

- Evidence relating to the need for different types of housing (e.g. affordable housing) up to 2036 is set out in the Housing and Economic Development Needs Assessment (HEDNA).

Q9. To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have

'managed growth' only?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> Rural areas have been overdeveloped when housing is not necessary. Concern over the amount of new homes being built on green spaces in North West Leicestershire, whilst brownfields are being ignored. Managed growth is not in line with what appears to be being proposed for the number of houses to be built, such as doubling the number of houses in Harborough District. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> Support redevelopment of town centres but not building more on the outskirts. Loughborough does not need to grow any further. Other towns all have better infrastructure than Lutterworth and will therefore take additional housing more easily. Market Harborough has a unique opportunity for major growth due to excellent connections and should be considered central to growth plans, not tertiary. Coalville is not a market town. Further infrastructure should be provided to support Hinckley. Loughborough has scope for further growth potential. 	<ul style="list-style-type: none"> Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan Strategy. Lutterworth will no longer be identified as a Key Centre; instead it will be identified as an area of 'Managed Growth' in Local Plans. Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations. Proposals for potential strategic sites or new settlements are noted. These potential strategic sites or new settlements will be considered through the preparation of the future local plan within which the site is located. The Strategic Growth Plan provides a long-term strategy and a framework for our Local Plans, and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their

- Glenfield and Anstey should be promoted as appropriate locations to accommodate further housing growth.
- Development in Coalville should be managed effectively with developments that will help serve existing communities whilst also attracting new investment.
- Coalville is in need of regeneration and increasing population will help improve spend and footfall in the centre.
- There are opportunities to the south and west of Hinckley, off the A5, for further housing and employment growth.
- The focus should be on services and public transport and ensuring there is enough affordable housing for those on low incomes.
- All locations have the potential for further housing and business development and it is more sensible to build on these than create new 'garden towns'.
- Small rental houses and houses for older people are required, near existing services.
- Planning should be undertaken very carefully including ideas to tackle an ageing population to free up housing stock for others. Develop schemes to encourage people to take on lodgers to provide more housing options.
- There are opportunities for limited growth on the edge of Loughborough given the town's proximity to the new HS2 station at Toton.

SUPPORT

- All towns identified have major opportunities.
- Agreement with proposal for all areas.
- Proposals are supported on the basis that managed growth means less environmental damage.

delivery. Local Plans will provide the detail of where this growth will be located.

<ul style="list-style-type: none"> Town centre regeneration is a sustainable way forward and required housing can already be provided within towns through brownfield developments. 	
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Q10. To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> Disagree if it means areas like Burbage and Hinckley will receive even more housing and industrial estates. Affordable housing provided by private developers is less affordable in rural areas as will still cost far more than an equivalent house in a market town. Do not need or want any more homes in villages as they will become dormitory towns. Villages need to remain independent and not merge. Housing calculations are not in line with ONS predictions which suggest only <i>circa</i> 100,000 dwellings would be required. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> Many villages have already been damaged by suburban sprawl with healthcare, retail and leisure provision already lacking. Affordable housing is required. Some growth in villages is desirable and influx of younger families is required but needs provision of affordable housing. There should be aspirational but managed growth to attract a wide range of people including families, and for 	<ul style="list-style-type: none"> The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans, and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. The Strategic Growth Plan proposes that in future there will be limited growth in villages and rural areas, consistent with providing for local needs. The Strategic Growth Plan sets out a strategy for balancing the need for new housing and jobs with protection of the environment and built heritage. Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more

<p>the existing ageing population and meeting accessibility needs.</p> <ul style="list-style-type: none"> Local areas should be improved on an equal footing. Growth should be neighbourhood plan led. Housing development in rural areas must be controlled so that actual needs are met, not just the needs of the developer and which are most profitable. Development in village and greenfield areas needs to be limited. Advocate creation of new settlements which are large enough to justify essential services and facilities. The Strategic Growth Plan and Local Plan Reviews must positively address the National Planning Policy Framework, which is imperative to support rural communities. It is important for the Strategic Growth Plan to differentiate between rural villages, hamlets and areas of countryside that may not be suitable to accommodate strategic growth Should make it more affordable for most of population to live near existing facilities. Need affordable housing for younger people and families to meet local needs and maintain village communities with supporting leisure facilities. 	<p>growth to be provided in strategic locations.</p> <ul style="list-style-type: none"> Further text has been included to emphasise the importance of delivering high quality development. Brownfield sites in the 'right' locations are sought to deliver the Strategic Growth Plan Strategy'. The Strategic Growth Plan will need to take account of the final version of the National Planning Policy Framework (NPPF).
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Q11. Do you have any other comments on the draft strategic growth plan?	
Respondent Comments	Partner Responses
CONCERNS	<ul style="list-style-type: none"> The Housing and Economic Development Needs Assessment (HEDNA) study provides evidence

- The Plan will decrease the price of thousands of homes which will be surrounded by industrial estates.
- Blaby has already completed the required quota of new houses so questioning the need for more.
- Green villages are being taken over, no more built up areas are needed.
- Building more houses encourages over-population of small villages and towns, but there isn't an increase in services.
- Some villages have already seen growth without improvements to local infrastructure and services.

SUGGESTIONS

- Affordable housing needs to be considered.
- Housing should include flats, apartments and maisonettes to increase density.
- New housing estates must be made as energy efficient as possible, including carbon neutral housing.
- The construction of more attractive smaller dwellings could contribute to people downsizing.
- New developments should include a mix of housing types and tenures including starter homes, retirement bungalows and affordable housing.
- The needs of the city for housing could have been partly met by developing land that has been used instead for student accommodation.
- Local distinctiveness and quality of design of new housing needs improving.

of Leicestershire's identified housing need to 2036 and this is reflected in the growth plan.

- Local Plans will provide the detail of where growth will go taking into account constraints, up to date evidence and national policies. These plans will include public consultation and independent examination.
- Any local requirements for the sustainability of buildings will be set out in Local Plans. These are principles which will be considered as part of the Local Planning process to deliver 'well-designed and high quality development, raising the bar in terms of environmental standards, quality of life and local distinctiveness' as set out in the Strategic Growth Plan's vision.
- Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations.
- The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this

	growth will be located.
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❖ *The rail freight hub is not a proposal within the Strategic Growth Plan; it is being dealt with under the provisions for nationally significant infrastructure project*

Chapter 5b
Housing – Non-Survey Responses

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Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Disagree with increasing housing numbers because of the City’s shortfall. • The amount of unmet need in Leicester City is a concern and the Plan does not give confidence that the demand can be picked up elsewhere. • Do not agree that new homes and employment land can be met through existing and emerging local plans with permissions up to 2031. • Query that the projection of 180,000 new homes required by 2050 is based on genuine demographics. • Plan does not justify why the City’s unmet housing is being taken mainly by Harborough and Blaby whereas Charnwood and NW asked to take very little. • Housing need for Blaby and Harborough is low but delivery targets are not. • The Plan makes insufficient allowance for undesignated sites to come forward to meet housing need which means there are risks that development will occur in areas of countryside at expense of urban regeneration. • Housing development in the countryside encourages more car trips. • Loughborough is listed as an ‘area of managed growth’ rather than as key centre, 	<ul style="list-style-type: none"> • Housing needs identified are for the whole of Leicester & Leicestershire and need to be accommodated within the area as a whole. • The Strategic Growth Plan provides an overall strategy for allocating housing numbers to individual districts; it is also a government requirement to work cooperatively to meet the unmet housing needs from other areas of the County. Local Plans will identify the supply and meet the needs identified in the Strategic Growth Plan. • The needs identified in the Strategic Growth Plan extend beyond the time horizon of the current Local Plans and the delivery timescales of most developments that are underway now. • The type and location of dwellings is a matter to be dealt through individual Local Plans and individual planning applications. Identification of new growth areas that accord with the overall Strategic Growth Plan spatial approach is a matter for individual Local Plans. • The type of housing to be provided will be addressed in individual local authorities' local plans. • The provision of new homes is part of the solution to the housing requirements of Leicester. It will be for Leicester City Council to propose policies, such as on housing type and tenure, in its Local Plan, to complement

yet housing needs of Charnwood are second only to Leicester.

- The Housing and Economic Development Needs Assessment (HEDNA) is too long, hard to understand and its late availability makes it difficult respond to the consultation.

SUGGESTIONS

- The housing shortfall in Leicester is likely to have implications for those other areas picking up the shortfall. This will affect the number of commuting trips.
- The City Centre should take more housing in the form of apartments.
- Large scale housing development runs counter to the plans policy that “growth in our villages and rural area should be limited to providing for local needs”.
- There has been a large amount of new building recently and there are still many sites which appear to be awaiting new housing.
- Affordable housing is required, including social housing for those on low incomes and with disabilities.
- Denser developments and less detached properties are required.
- Support strategy to locate new development close to new strategic infrastructure until new infrastructure is provided, and then for existing settlements to be targeted for development.
- National planning guidelines should ensure that developers do not undermine them and build where they like, stricter rules should be in place.
- Evidence in HEDNA underestimates employment growth, and the HEDNA should

this.

- Potential strategic sites or new settlements will be considered through the preparation or the review of future Local Plans.
- Housing and employment development proposals have been informed by the 'Housing and Economic Development Needs Assessment' January 2017, and sustainability and infrastructure considerations.
- The scale of development needed is such that both brownfield and greenfield sites will be needed.
- The combined total of undesignated sites and 'strategic sites' meets the overall housing need, and in meeting needs in full, will reduce the prospect of unplanned development in countryside locations.
- One of the purposes of the Strategic Growth Plan is to ensure that strategic housing and infrastructure are planned in step. The delivery targets have been agreed with all the LPAs that make up the Strategic Growth Plan area.
- The strategy of the Strategic Growth Plan is to integrate the accommodation of growth with economic strategies and infrastructure, in order to provide a sustainable solution. The proposed growth areas reflect this approach and result in numerical provision and growth areas that are closely linked to the provision of major infrastructure.
- The Strategic Growth Plan has considered how the predicted unmet need for housing from Leicester City can be accommodated by the other local authorities in Leicester & Leicestershire. The partners have decided that these additional needs will be satisfied in part, by development in strategic locations in accordance with the strategy set out in the Plan. The Strategic Growth Plan

be re-run on basis of more ambitious assumptions.

- There should be a more realistic assessment of housing need.
- Against additional homes, especially in rural areas.
- Need to be investing in, and building carbon neutral housing.
- There should be a focusing on building more in the city, using existing brownfield sites or derelict sites and building upwards.
- The plan should ensure improved infrastructure to cope with housing increase.

SUPPORT

- The joined up approach to infrastructure, housing and economic development is welcome.
- Support the proposal to place a greater emphasis on housing developments in major strategic locations and identify the essential infrastructure need to support that expansion.
- It is acknowledged that the plan recognises the need to provide sufficient housing – linked to infrastructure and facilities to support growth.

will help support bids for infrastructure funding from the Government, so that it can be provided in advance or in step with planned new housing and employment development.

Chapter 6a

Employment Land, Town Centre, Retail and Digital – Survey Responses

Q4. To what extent do you agree or disagree with the four priorities identified in the draft plan? Why do you say this? Are there any other priorities you think should be included?

Respondent Comments	Partner Responses
<p>EMPLOYMENT</p> <ul style="list-style-type: none"> • The employment land at Hinckley East is an area of concern, taking over working farms. • Must get away from growing reliance on logistics as most jobs in this industry are low paid and low skilled. • Manufacturing jobs should be the focus for the future. • Rural / village areas are underrepresented in respect of their ability to provide relatively small scale but offer key employment opportunities for local (mainly smaller) companies. • Plan is not balanced. It focusses on business infrastructure that supports consumption and distribution, already well provided for under existing plans across the Midlands region. • Economic development should focus on developing high level, technically advanced engineering and production that will employ the output of our three universities. • Focus on green investment and job creation would be welcome. • Already have a very low rate of unemployment so cannot see the need to create conditions for investment and growth. Disagreement that new employment opportunities will be provided for those moving into the area as people tend to 	<ul style="list-style-type: none"> • Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations. • More new jobs are expected in the LLEP’s priority sectors of life sciences (medical technologies); advanced manufacturing and engineering; advanced logistics; space and digital technologies; and textiles. These reflect the priorities of the Midlands Engine Strategy and the growth of the national economy. • It is considered that the spatial distribution of new employment will need to reflect the overall strategy of

<p>stay in the jobs they already have.</p> <ul style="list-style-type: none"> The order of the priorities is wrong. Infrastructure must be put in place first before development is allowed. High quality development needs to include the type of jobs that are to be attracted to the area - not just warehousing and logistics. <p>RETAIL</p> <ul style="list-style-type: none"> Small businesses in Leicestershire need to be supported to grow through the key priorities in the Strategic Growth Plan, e.g. opportunities to find the right employees and for those employees to get to their place of work with ease. <p>DIGITAL</p> <ul style="list-style-type: none"> The Strategic Growth Plan should also address other key infrastructure issues for successful growth. One of the most important to the community is broadband connectivity in the long term to ensure that rural areas are a priority in adoption of latest technology to ensure communities remain connected and home working remains viable. 	<p>the Plan, enable homes and jobs to be located in close proximity, and take advantage of opportunities for commuting by public transport. The need for new employment land will be monitored and reviewed on a regular basis through the preparation and adoption of Local Plans.</p> <ul style="list-style-type: none"> The Strategic Growth Plan acknowledges digital connectivity as an essential part of the infrastructure planning process.
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<p>Q5. To what extent do you agree or disagree with the proposed corridor of growth around south and east of Leicester linked to the construction of a new A46 expressway? Why do you say this?</p>	
<p>Respondent Comments</p> <p>CONCERNS</p> <ul style="list-style-type: none"> Creating more jobs will create more commuting into the City Centre due to a lack of housing. Concern about proposed expansion of Lutterworth. Support boost to local economies and jobs but not if it means more concentration on building or expanding logistics parks as this drives the low paid (often zero hours) workforce, identified within the plan as a key weakness. 	<p>Partner Responses</p> <ul style="list-style-type: none"> Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations.

- Unclear how 40,000 new homes alongside a new A46 would help the travel network to better route workers to key employment sites both within the City and the County.
- Appears to be an assumption that housing will be occupied by people employed locally. This is a social model which has been outdated for 20 years.
- The growth corridor to the east and south of Leicester is a long way from the two areas that have been identified as having the potential for significant growth in employment, namely the Enterprise Zone at MIRA and the University Enterprise Zone extending from Loughborough to the north side of Leicester.
- The area where the A46 Expressway will join the M69 will see most impact. This area is already over developed. It does not need more employment, housing developments or warehouses.
- Creating the A46 expressway and then directing up to 40, 000 new homes along its route would be creating new towns where there is no current employment demand. Most of this growth would therefore need to be accompanied by employment growth, but this would contradict the location of employment growth expectations in the growth strategy.

SUGGESTIONS

- High-speed infrastructure and better connections is the most pressing need for Leicestershire to improve regional employment opportunities.
- Need to be more ambitious about creating employment opportunities for young people and look to develop other sectors such as technology, manufacturing and engineering, not just low paid warehouse jobs.

SUPPORT

- Significant employment opportunities during construction and development.

- The precise route of the expressway is still to be determined and will be the subject of consultation at various stages in its design.
- More new jobs are expected in the LLEP’s priority sectors of life sciences (medical technologies); advanced manufacturing and engineering; advanced logistics; space and digital technologies; and textiles. These reflect the priorities of the Midlands Engine Strategy and the growth of the national economy.
- The Strategic Growth Plan has been amended so that Lutterworth is now an area of managed growth in local plans and not a key centre.

Q6. To what extent do you agree or disagree with the proposal that Leicester should develop its role as the ‘central city’?

Respondent Comments	Partner Responses
<p>EMPLOYMENT</p> <ul style="list-style-type: none"> Leicester needs to build on its size and develop its importance to compete economically with other major cities; therefore a central business hub is needed in order for the county to develop to its full potential. Shifting employment opportunities out of the County into the City will have a negative impact on rural communities. People will drive wherever the work is so there is no point building houses and employment sites together. Much better to centralise jobs and create strong transport links. Plan does not suggest the creation of employment zones along the A46 Corridor, reinforcing the notion that it will just be a dormitory for people willing to commute by car into Leicester city centre. More emphasis should be placed within the Strategic Growth Plan on shorter term requirements, to ensure that the immediate housing and employment needs of the area are addressed within the short – medium term. The re-opening of the Burton-Leicester railway to passenger services equally should be explored. This would provide the opportunity for additional sustainable city jobs for county residents. <p>TOWN CENTRE AND RETAIL</p> <ul style="list-style-type: none"> The city centre requires retail development, which can only come by reducing rents, or it will be charity shops only. Leicester has shortfall of leisure and entertainment facilities despite having a significant population. Leisure, arts, culture and entertainment facilities must also be provided locally in surrounding market towns, for example, in Loughborough. Make market towns a destination and cultural centres. 	<ul style="list-style-type: none"> The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans, and gives us the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth should be located. The text of the Strategic Growth Plan has been amended to outline the current position with regards to the Leicester to Burton railway line and rail services to and from Melton Mowbray. Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations. The Strategic Growth Plan will enhance the role of Leicester with more jobs, leisure, arts, culture and entertainment

<ul style="list-style-type: none"> The City provides a diverse range of employment, leisure and shopping facilities and its continued growth and regeneration is essential to sustain these services and to boost the local economy. 	<p>facilities provided within the City Centre, supporting the market towns and rural areas around it.</p> <ul style="list-style-type: none"> Leicester City Council's adopted Core Strategy sets out the policies and proposals for addressing local land use, whilst the recently launched Business Improvement District includes proposals to create a safe, clean and attractive environment. The Council is in the early stages of preparing a new local plan for the City that may include revised or new proposals for the town centre. The desire for leisure, arts, culture and entertainment facilities to be located in the market towns in addition to the City is noted by partners. To enable the greatest number of people to access such facilities, Leicester City Centre is considered to be the most appropriate location, with complimentary facilities sought in the market towns.
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<p>Q7. To what extent do you agree or disagree with the two gateways identified?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>EMPLOYMENT</p>	<ul style="list-style-type: none"> Explanation as to why the Leicester-

- Support any opportunity to improve jobs and infrastructure in North West Leicestershire, such as a new railway station.
- The Northern Gateway will provide a crucial entry point to the rest of Leicester and drastically improve the housing and job opportunities provided in that area.
- Agreement with Northern Gateway as higher unemployment and need for regeneration.
- Little unemployment around MIRA and Hinckley therefore Southern Gateway is not required.
- Need to ensure that smaller businesses are also able to develop and grow in other parts of the County. These provide local employment and reduce the need for many journeys.
- Need higher skilled jobs to stop commuting to Leicester and out commuting to the gateways.
- Gateways should be located near the two enterprise zones, instead they are proposed to be located close to areas of mainly low-skilled jobs which reinforces the area’s reputation as one characterised by low skills and low wage employment.
- Can see benefits associated with encouraging growth along the two gateways identified and sees the potential for existing employment sites located in these broad locations/along the corridors to offer the potential for growth.
- Alongside the identification of the Northern and Southern Gateways therefore, opportunities should be sort out to deliver housing and employment land within and adjoining the Principal Area of Leicester, within the short to medium term. Housing development in such locations will continue to support local employment opportunities.
- Do not need more industry in Blaby.

Burton Railway line is not a proposal within the Strategic Growth Plan has been included.

- Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations.
- Within the Strategic Growth Plan, high levels of commuting are identified as one of our weaknesses. Our strategy proposes to build more development in major strategic locations and to reduce the amount that takes place in existing towns, villages and rural areas. This will allow us to plan for new housing and employment together.
- Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. A single gateway, referred to as ‘The Leicestershire International Gateway’, is proposed. The details of potential strategic sites or new settlements are welcomed. These potential strategic

	<p>sites or new settlements will be considered through the preparation of the future Local Plan within which the site is located.</p>
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Q8. To what extent do you agree or disagree with these two settlements (Lutterworth and Melton Mowbray) being identified as key centres?

Respondent Comments	Partner Responses
<p>LUTTERWORTH</p> <ul style="list-style-type: none"> Lutterworth is poorly connected - there are no rail links to the town to support either the movement of goods or commuting. There is very little unemployment in and near Lutterworth and there is a reliance on in-commuting to existing low paid, temporary logistics jobs. Workers could not afford the house prices in the area, workers cannot be forced to buy property in the area they work, developers cannot be told how many houses to build out even if permission is granted and to be forced to build cheap houses. Therefore the proposed concept is without merit, unrealistic and not sustainable in the long term. Lutterworth's recent growth has been mainly in low skilled, low wage jobs in warehousing and distribution logistics. It is not a key centre for anything else, other than some light industry linked to the above. <p>MELTON</p> <ul style="list-style-type: none"> Melton Mowbray has difficulty competing with the surrounding centres of Grantham and 	<ul style="list-style-type: none"> The Strategic Growth Plan has been amended so that Lutterworth is now an area of managed growth in local plans and not a key centre. In Melton, recent economic growth has been constrained by lack of sites and poor connectivity but there is evidence that local firms are looking to expand and new businesses wish to move in. The recent approval for the Melton Mowbray Relief Road provides the catalyst for change: it will remove congestion in the town centre and open up land for development to the north and east of the town. Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations. The Strategic Growth Plan acknowledges that highly skilled employees and graduates moving away is one of our

<p>Loughborough for non-rural industry and food jobs.</p> <ul style="list-style-type: none"> • Melton has the potential for further growth in jobs centred on the food and drinks sector, and agricultural industries. • Melton has the potential for further growth in jobs centred on food, drink and agriculture. <p>GENERAL POINTS</p> <ul style="list-style-type: none"> • Jobs should be provided in Leicester as much as possible with homes in New Towns encircling it to create a conurbation that can compete with the rest of the country. • Would prefer to see more focus on employment prospects for graduate class people as in most cases graduates have to seek employment out of the county. • Already an identified shortfall in employment land within North West Leicestershire District, so encourage the Strategic Growth Plan to consider the identification of wider range of settlements throughout the area, specifically Carnival Way in Castle Donington. • Ensure that the sensitivities, challenges and opportunities for small businesses are captured in any town centre and tourism strategy area of the corporate plan. • Recognise that retailers are a major contributor to the local economy. Provide business support programmes or schemes specifically for retail and leisure operators. 	<p>weaknesses.</p> <ul style="list-style-type: none"> • More new jobs are expected in the LLEP’s priority sectors of life sciences (medical technologies); advanced manufacturing and engineering; advanced logistics; space and digital technologies; and textiles. These reflect the priorities of the Midlands Engine Strategy and the growth of the national economy. • The details of potential strategic sites or new settlements are noted. These potential strategic sites or new settlements will be considered through the preparation of the future Local Plan within which the site is located. • Individual authorities are focusing on tourism, leisure, health and wellbeing and supporting the rural economy. The Strategic Growth Plan provides a spatial framework within which this investment and growth can occur.
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<p>Q9. To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have ‘managed growth’ only?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>

CONCERNS

- There are not enough leisure provisions in Market Harborough to prevent out commuting and the job market is not plentiful and varied.
- Each of these towns has seen significant growth in housing, but without a corresponding increase in new employment opportunities. This has led to Coalville, Hinckley and Loughborough becoming dormitory towns for the major cities, with people attracted to their new estates solely because they are relatively cheap places in which to live.
- Hinckley has enough warehousing already. This does not greatly benefit the local area, it simply brings in more lorries and a rail-freight depot will make things worse.

SUGGESTIONS

- More jobs are needed in Hinckley to prevent so much commuting out of the town around the Midlands.
- There are opportunities to the South and West of Hinckley, off the A5, for further housing and employment growth.
- Hinckley is ideally situated located on the M69 for a distribution hub for the UK.
- Coalville and Hinckley would benefit from further investment and growth, providing better job opportunities.

There are opportunities for limited growth on the edge of Loughborough given the town's proximity to the new HS2 station at Toton.

GENERAL COMMENTS

- Market Harborough's growth is linked to commuting on the Midland mainline to London, with relatively affluent people choosing to live there but work elsewhere. Harborough's town centre meets local needs and has not suffered the same decline as seen in the centres of Coalville, Hinckley and Loughborough.

- Proposals for the distribution of local leisure and employment provision is a matter dealt with within Local Plans.
- Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that the strategy makes provision for more growth to be provided in strategic locations.
- The Strategic Growth Plan provides a long term strategy and a framework for our Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located.

Q10. To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> No Local Plans place any significant employment sites/opportunities in rural areas, often citing unsustainable travel. Strongly disagree with the proposal to grow the Southern Gateway to service out commuting from Leicester for low skilled freight hub jobs. Need to contain development and local jobs suited to the area's needs. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> Having stagnated areas is not economically or socially healthy. Development opportunities exist in these areas and should be brought forward to improve local employment and economies. A change in housing policy to accommodate for the lower wages is essential for growth in the region. 	<ul style="list-style-type: none"> The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located. Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations.

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Q11. Do you have any other comments on the draft strategic growth plan?

Respondent Comments	Partner Responses
<p>EMPLOYMENT</p> <ul style="list-style-type: none"> Would question the necessity of additional commercial units with the expansion of Magna Park. 	<ul style="list-style-type: none"> Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining

- There is no evidence that housing numbers and employment allocations have been independently assessed and scrutinised.
- The requirement set out in the logistic and employment chart in the consultation appears to be based on developers' demand rather than independently assessed, sustainable need.
- Must be more ambitious for the lives of our young people and work to create high value skilled employment with properly serviced housing areas that have the proper infrastructure (including services, facilities and amenities).
- Growth by building more warehouses is not the solution - they occupy vast amount of land, profit only their owners (who are not local anyway), draw in more heavy vehicles increasing congestion and will employ relatively few as they are highly automated.
- Although both the Northern and Southern Gateways will increase the number of jobs within the local area these are mainly warehouses and the majority of these jobs will be low paid menial work.
- The plan does not address the disproportion of employment prospects between the West of the City and the East.
- Development of infrastructure should provide the best growth opportunities to the county as a whole not just be added as an alternative outer ring road just outside of the city boundaries. It should be positioned to provide growth and employment to the least accessible areas of the county.
- Plan is not generating small business growth in the towns or creating local jobs. People still need to commute to their place of work.
- To provide a future for the area there must be manufacturing with engineering being the most important, without skills in these areas there is no future for the economy. At some point in the future the logistics industry will change.
- It is assumed that if the Strategic Opportunity Assessment Zone (SOAZ) were to be developed at Six Hills, other than on site employment opportunities, residents would commute to Leicester. This would not be the case; residents would use the A6006 to commute to Nottingham, Derby and Burton on Trent.

- that the strategy makes provision for more growth to be provided in strategic locations.
- The details of potential strategic sites or new settlements are noted. These will be considered through the preparation of the Local Plan within which the site is located.
 - More new jobs are expected in the LLEP's priority sectors of life sciences (medical technologies); advanced manufacturing and engineering; advanced logistics; space and digital technologies; and textiles. These reflect the priorities of the Midlands Engine Strategy and the growth of the national economy.
 - The details of potential strategic sites or new settlements are noted. These potential strategic sites or new settlements will be considered through the preparation of the future Local Plan within which the site is located.
 - Whatever the impacts of technological changes will be on sectors like retailing, the plan is for town centres to remain at the heart of local communities by adapting to change. It is for local plans and business communities to identify what is needed in

- Castle Donington should be given further weight as a Key Centre for employment growth. This would build upon the existing employment offering at Carnival Way, Castle Donington.
- Promotion of the Swains Park site near Swadlincote with the potential to develop a further 7 hectares of land to provide employment facilities for a range of B1, B2 and B8 uses. Additional jobs would be created for local residents, to balance the number of houses (and therefore local workforce) in the housing developments now being undertaken in the area.
- Building more houses will simply allow employers to pay lower wages due to competition in the labour market.
- The Strategic Growth Plan is a well thought out document which we hope will support the 99% of businesses in Leicester & Leicestershire which have fewer than 50 staff. These businesses are the backbone to the local economy, providing jobs, innovation and investment into their economies and communities.
- Should encourage jobs in the fields of science, technology and engineering that would be able to ensure growth and develop technologies for the future that would really put the area on the map, rather than relying to industries which will become outdated or obsolete entirely before the 2050, maybe even as early as 2030.
- The aim of the Strategic Growth Plan appears to be to turn South East Leicestershire into a huge logistics park. All the pain of the development is being made by a small part of the country namely Blaby and Hinckley. These are not areas in need of extra employment.
- The role of a major employment centre should be given further weight through the Strategic Growth Plan, through the identification of Castle Donington as a Key Centre for employment growth.
- There is a lack of ambition to create a knowledge based industry and prevent out commuting.
- Robotics will dramatically change the shape of the workplace in the plan period which will leave a large unskilled workforce.

each centre.

TOWN CENTRE AND RETAIL

- Predicting beyond 10 years is unrealistic – shops in centres may die due to internet shopping.

Chapter 6b

Employment Land, Town Centre, Retail and Digital – Non-Survey Responses

Respondent Comments	Partner Responses
<p>EMPLOYMENT</p> <ul style="list-style-type: none"> • Does not agree that new homes and employment land can be met through existing and emerging local plans with permissions up to 2031. • Does not feel there is a need to increase the number of designated employment areas as Blaby village already has two. • Employment sites to meet demands for technology, science and renewable energy would be welcomed, as well as employment sites in larger villages. • Housing and employment developments should be equally distributed not concentrated in one area. • Support the approach to identify strategic locations that also link with major infrastructure investment to help meet future needs for employment uses. • More recognition should be given in the description of the ‘Northern Gateway’ to the contribution that the East Midlands Airport area can make to delivering future economic growth by providing the potential for future expansion of Class B employment uses. • Need for a bus service to be introduced from Ashby de la Zouch in North West Leicestershire to East Midlands Airport and the adjacent Business Park to provide essential employment opportunities from areas of high unemployment. • Lutterworth should not be a key centre for more warehousing and cannot be regarded as the region’s Southern Gateway. 	<ul style="list-style-type: none"> • Further text has been included elaborating the importance of significant investment in infrastructure and services, and explaining that our strategy makes provision for more growth to be provided in strategic locations. • The details of potential strategic sites or new settlements are noted. These will be considered through the preparation of the Local Plan within which the site is located. • Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. A single gateway, referred to as ‘The Leicestershire International Gateway’, is proposed, focused around the northern parts of the A42 and M1 where there are major employment opportunities notably East Midlands Airport, East Midlands Gateway (strategic rail freight

- Reliance on demand-led evidence for large industrial and logistics sites without an overall assessment of need across the West and East Midlands, which could inform genuine requirement.
- Need to prioritise businesses that are sustainable and pay good wages.
- Need to confirm the amount of B8 land required and where employment growth is going to be distributed.
- Acknowledgement of greater market variability in employment land, but needs are evident over shorter to medium term and this needs acknowledging. This will enable flexibility but still recognise the importance of B8 employment.
- The 555ha identified for strategic distribution uses already established does not identify which sites contribute to this supply or types of markets and occupiers.
- Welcome new employment land being monitored and reviewed on regular basis.
- Needs to be further investment in training and skills.
- Concern employment requirements less detailed and sophisticated, little detail in Strategic Growth Plan on sectors likely to drive local economy in the future.
- Support for strategies of transportation corridors close to employment centres.
- Proposed strategic rail freight interchange at Hinckley – heart of golden triangle fits with study need to identify and allocate new land at commercially attractive sites to maintain and enhance the competitive cluster and the Hinckley-Felixstowe railway will do this.
- Wrong focus on logistics – need higher skilled workforce to reduce low skilled poor paid jobs.
- No mention of supporting grass root small enterprises.
- Plan should be more imaginative in referencing population policy, the forthcoming impact of artificial intelligence and

terminal) and HS2 station at Toton nearby.

- The adopted Blaby Core Strategy and the Blaby Town Centre Master Plan indicate the local policies and proposals for the town centre and these will be readdressed in any future Local Plans.
- Proposals for the distribution of local leisure and employment provision within Charnwood is a matter for Charnwood Borough Council through its adopted Core Strategy and emerging Local Plan, the latter at an early stage of preparation. The Strategic Growth Plan provides a spatial framework within which local investment and growth can occur.
- The Strategic Growth Plan provides a framework for growth. The Strategic Growth Plan is worded sufficiently flexibly to accommodate some degree of step change development, and can be revisited in due course through plan review.
- The Strategic Growth Plan will provide a framework for growth from which local

the type of economic growth we seek later.

TOWN CENTRE AND RETAIL

- Blaby Town Centre is at risk of no longer being an independent and characterful market town.
- Shepshed is the 2nd largest town in Charnwood yet does not have any formal indoor leisure facilities or adequate employment.
- The City of Leicester is congested and dirty. The Clock Tower area, Granby Street and Gallowtree Gate are a mess with poor quality shops and cafes and pubs.
- The plan is an extrapolation of the current situation and as such, may constrain 'step change' development. Suggestion for new centres of excellence and business offers, such as a Freeport at the Northern Gateway around East Midlands Airport.
- Lutterworth is endangered by uncontrolled and badly planned growth.
- Plan does not look at technological changes and their impacts on retail.
- Need a higher density population to revive the retail and culture of Leicester.
- Want more information on how existing business will be affected.

DIGITAL

- Agree with the text in the Strategic Growth Plan that digital connectivity is a major issue for many in rural areas, especially farmers who depend increasingly on the internet and mobile connectivity for information.
- Pleased to see that the need for quality internet access has been identified.

development plans can provide more detailed planning proposals setting out where new development is planned to take place, the infrastructure needed to support that development and the measures to maximise local benefits and mitigate any harmful impacts. A revision to the Strategic Growth Plan has been made to recognise that further development at Lutterworth should support local growth. As such, it will be identified as an area for 'managed growth' in Local Plans.

- Whatever the impacts of technological changes will be on sectors like retailing, the plan is for town centres to remain at the heart of local communities by adapting to change. It is for local plans and business communities to identify what is needed in each centre.
- Whatever the impacts of technological changes will be on specific employment sectors, the plan is for town centres to remain at the heart of local communities by adapting to change. It is for local plans and business communities to

<ul style="list-style-type: none">• Growth needs to be accompanied by community infrastructure, including digital connectivity.	<p>identify what is needed in each centre.</p> <ul style="list-style-type: none">• The Strategic Growth Plan acknowledges digital connectivity as an essential part of the infrastructure planning process.
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Chapter 7a

Process and Consultation – Survey Responses

Respondent Comments	Partner Responses
<p>EVIDENCE</p> <ul style="list-style-type: none"> • You highlight three Universities in the City/County - they have skills in predictive analysis - why don't you use them? • There is a lack of available evidence to assess the impact of these proposals on local roads, congestion and sustainable / alternative transport choices. • How can comments be invited when the transport and environmental reports have not been published? When transport is so central to the scheme surely the Transport Report should have been a prerequisite? • Although a transport impact assessment is now available, it was not available for the first eleven weeks of the original twelve-week consultation (now extended) and those members of the public and local councils who have already responded, have done so without the benefit of this information and are now precluded from making any further comment under the one response rule. • The plan is not based on a firm evidence base to support estimated levels of growth and future housing forecasts. There are too many variables that could affect this in future e.g. Brexit. Planning 10 years ahead is difficult, 30 years ahead is guesswork. • Housing targets offered as part of the evidence base seem over-inflated and not justified for the massive expansion predicted. 	<ul style="list-style-type: none"> • Evidence was commissioned through local authority open and competitive procurement processes. • Evidence and assessments undertaken in preparation of the Plan are available on the website http://www.llestrategicgrowthplan.org.uk/the-plan/stage-two/developing-the-evidence-base. A number of these address the concerns raised by respondents. • The consultation period was extended to allow consideration of the Strategic Assessment of Transport Impact report. • Further comments could be made via email through the SGP website or by post to the Strategic Business Intelligence Team at Leicestershire County Council. • The Housing and Economic Development Needs Assessment (HEDNA) study provides evidence of Leicestershire’s identified housing requirement to 2036 using the methodology set out in policy guidance at that time. • Beyond 2036 there is no reliable estimate of population growth, household change or economic forecasts, therefore an estimate of housing need from 2031-50 (‘notional’ need) has been calculated by projecting forward the annual figures within HEDNA. It is accepted that changes will occur throughout the Plan period and that the Strategic Growth Plan will be reviewed as

- Lutterworth is recognised as a location for warehousing and distribution, both low employment creators. What evidence is there that new residents will be able to work close to their homes?
- What do existing surveys show about people’s places of employment, in relation to their homes.....? I disagree with the statement "more homes would allow employees to live closer to their places of work etc".
- Was a needs analysis done first to find out the problems faced by residents and workers in these areas?
- Lack of evidence on impacts or assessment of alternative options or what benefits there will be for existing residents. Ignores evidence from Western by-pass which has not been successful in its aims of reducing congestion.
- A sustainability appraisal is required at each assessment and decision making stage in the plan making process.
- There is a failure to provide any assessment of the impact of this plan on Leicestershire rural communities.
- The A46 gateway states capacity for 40,000 homes. There is no explanation of how the number was derived.

CONSULTATION PROCESS

- Further consultation is required to determine the environmental impacts on the local area including air pollution, flood risks, wildlife and farming.
- This plan should not have been put out for consultation until a firm housing requirement was established using the government’s latest recommended

- appropriate.
- It is considered that the spatial distribution of new employment will need to reflect the overall strategy of the Plan, enable homes and jobs to be located in close proximity, The SGP seeks to deliver jobs and homes together to ensure sustainability.
 - The Leicester Travel to Work Area, as defined by the Office for National Statistics (ONS) and based on 2011 Census data, extends across much of Leicestershire and includes all of the main towns within the County, supporting the definition of common housing and functional economic market areas. Around 78% of commuting flows are contained within the Leicester and Leicestershire authorities.
 - Strategic Growth Plan partners assess the needs of businesses and residents through the Leicester and Leicestershire Business Survey and local resident surveys as well as through other forums for businesses and communities. These are reflected within local authority strategic, economic and community plans which have been a reference source for the development of the Strategic Growth Plan.
 - A sustainability appraisal has been undertaken at each decision making stage in the plan making process.
 - The strategy makes provision for more growth to be provided in strategic locations thereby reducing pressure in villages and rural areas.
 - The 40,000 new homes is an estimate partners made based on their collective knowledge.
 - Local Plans will consider the potential impacts on air quality, businesses and the economy, including any impacts to farming which is an important sector

<p>methodology.</p> <ul style="list-style-type: none"> • Southern Gateway, rail freight and A46 expressway has been planned with no community involvement. • There is no transparency and consultation on the proposed locations of Junction 20a. • Other statutory service providers, Police, Fire, NHS need to have been consulted before this stage to determine other important data which is currently available and would assist in planning assumptions. • Question if the Plan has been drawn up in consultation with other public bodies e.g. Defra and Environment Agency. • Question 4 is misleading as it is difficult to agree with the priorities, but it is how they are delivered that is the issue. • Question 5 assumes that respondents accept the premise of a new expressway and is therefore leading. • Question 7 - the A5 is in need of upgrade but not part of the A46 growth corridor, this question is misleading. • Question 9. Surely any growth, be that in towns or elsewhere, needs to be "managed" - what is the true intention of this very leading question? • This consultation only talks about housing development but in the documents App A page 21 it refers to employment land and logistics. This is misleading and has not been independently assessed. • The way this questionnaire has been laid out makes it difficult to answer the 	<p>within many rural areas of Leicestershire.</p> <ul style="list-style-type: none"> • Protecting our environmental, historic and other assets forms the fifth building block of the Strategic Growth Plan. A diagram showing environmental assets in Leicester and Leicestershire and further text regarding the importance of locally important assets have been added to the Strategic Growth Plan. • Comments on the Southern Gateway and A46 expressway were invited in this consultation. Following further consideration the Southern Gateway has been removed from the Strategic Growth Plan. • As a high level plan the Strategic Growth Plan identifies strategic road and rail infrastructure enhancements to support proposed growth up to 2050; the detail of where growth will be located as well as the specific transport implications and requirements arising from this will continue to be provided through Local Plans, together with the highway development management process and wider transport strategies and studies. • Consultation with statutory service providers took place in 2016 on the Strategic Growth Statement, this included the data / evidence base to be used for underpinning the Strategic Growth Plan. Statutory service providers have also been invited to respond to this consultation. • The questions set out in the consultation were devised to seek responses on key elements of the plan/strategy. • The proposed consultation process was set out in the Statement of Strategic Involvement (August 2016). This formed part of the consultation on the Strategic Growth Statement undertaken at that time. • The Strategic Growth Plan provides a long term strategy and a framework for
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<p>questions per se. Some of the questions are interrelated and therefore the answers overlap.</p> <ul style="list-style-type: none"> • We need an extra consultation step once details are known otherwise this consultation is a procedural step only without any ability for changes to be adopted. • Concern over lack of publicity. It has also been very poorly advertised to local communities. • There is a lack of detail throughout this process and this is something that members of the public have consistently commented upon and in our view renders this consultation flawed. • A second much more detailed consultation is required to provide detail on strategic site locations, land requirements, housing developments, public transport options, expressway route and junctions, secondary road upgrade plans to allow informed decisions to be made. • There needs to be 4 stages of consultation 1) consult on the vision - this stage 2) consult on the detail once known - this needs adding 3) Submission of proposals to independent public examination 4) incorporation into local plans. • Need a public examination on these proposals. • A range of proposals / options could have been put forward for genuine public involvement and consultation. There was no opportunity to comment on alternative strategies. • How have businesses been consulted? • If I agree on any level with this my response will be statistically twisted and made to look like I support this. I feel like this is not so much a democratic opportunity 	<p>Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located and will be subject to full consultation.</p> <ul style="list-style-type: none"> • The consultation overview report sets out how the consultation was promoted. Partners consider the publicity about the Strategic Growth Plan was both adequate and proportionate. • Local Plans will provide the detail of where growth will be located and the type of development, taking into account environmental constraints, local services, public transport, walking and cycling links, up to date evidence and national policy, considering accompanying green infrastructure and mitigations. • The decision was taken in 2015 to prepare a non-statutory Strategic Growth Plan which would be delivered through statutory Local Plans. • The Strategic Growth Statement (August 2016) identified a number of generic options which would be considered. These are assessed in the Sustainability Appraisal. • Businesses have been invited to respond to both the Strategic Growth Statement consultation in 2016 and this consultation. The Strategic Growth Plan recognises the importance of local businesses. Detailed matters will be managed through Local Plans and in collaboration with the Leicester and Leicestershire Enterprise Partnership. • Government advice requires local planning authorities to agree housing numbers across different geographies. The type of joint working undertaken in Leicester and Leicestershire is encouraged by Government.
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<p>to voice my opinion but an exercise in getting people to respond and then interpreting the data in a biased manner.</p> <ul style="list-style-type: none"> • It would appear that the councils have carved up the development before presenting to the public; a public consultation should have some teeth and not just be a costly presentation. • A more visual illustration would have helped if you are expecting a normal person like me to understand the documents you have provided. • Meetings should be at a sensible time of day so working residents can attend. • Why are you asking for my colour, sexual assignment etc? What does a planning vision have to do with this? • There is still a percentage of people across Leicestershire with no access to the computers. Concern regarding the on-line focus which denies access to the computer illiterate (of which I number myself). • There is no way for you to acknowledge this response - how do I know you have received it and are, therefore, able to take it into consideration as part of your consultation? • Concern that the plan does not show an actual route, the housing calculation is inaccurate and most certainly premature with the new standards. Therefore the consultation cannot be accurate due to a number of things such as lack of information e.g. there is no transport assessment. The questionnaire was also of poor quality. • Question the openness of the consultation with the public, there needs to be more consultation in the future on the detail in particular for rural communities and specifically on housing development and the route of the proposed A46 	<ul style="list-style-type: none"> • Conveying a strategic spatial strategy is a difficult task but we have tried to produce a short document with a limited number of plans and diagrams that balances a clear description of the strategy with technical requirement. • We do try to schedule meetings at a range of times to accommodate different working patterns, but the comment is noted. • It is standard procedure in consultations to ask for information relating to the protected characteristics set out in the Equalities Act 2010. For analysis purposes, responses to these questions are extremely valuable as it is the only way we can check to see whether we have consulted people from a wide section of the population (or not) and how representative respondents are compared to the population as a whole. The answers to these questions will also help us to understand whether the proposals would adversely affect certain sections of the community more than others and how we may be able to mitigate negative impacts. • We are aware that some people may find these questions intrusive, which is why we stress that answering these questions is voluntary. However, overwhelmingly, a very low proportion of people choose not to answer these questions. • Partners did endeavour to make sure that there was access to hard copy consultation documents in libraries and council buildings. Computers for public use are also available within libraries. A number of hand written responses were received and accepted. • On-line submissions should have received an automatic and instant acknowledgement on screen that the response has been submitted. Unfortunately due to the volume of responses we are not able to directly
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Expressway and associated environmental impacts.

- In 2011 the government enacted the Localism Act. The aim of the Act was to facilitate the devolution of decision-making powers from central government control to individuals and communities. This process appears to pay scant regard to that aim.
- Like many other communities in Harborough District, Hungarton has developed a Neighbourhood Plan. This is based on fully consulted evidence of local need (letters to stakeholders, 2 weekend events, a questionnaire, Regulation 14 and 16 consultations and a referendum with a high turnout). This is in stark contrast with the way the Strategic Growth Plan has been developed.

MORE INFORMATION/DETAIL

- There is insufficient information about rail improvements, including passenger travel and freight.
- No information on impact of additional development on congestion and how existing (secondary) roads would be improved. There is a total lack of information on the construction of, and improvement to, secondary roads.
- Further detailed analysis, modelling and consultation required on specific routes and options for the A46 expressway and other proposed routes.
- Details (including maps) of where strategic sites and appropriate infrastructure will be delivered are urgently required, especially those affected directly by the new road route and the areas for planned new housing.
- Further information required on major plans for developing land to the east of Leicester to provide major work opportunities and the infrastructure for public transport, schools and health care.

respond to each one.

- The precise route of the expressway is still to be determined and will be the subject of consultation at various stages in its development.
- Further information on developing land within the Strategic Locations identified in the Strategic Growth Plan will be available through local plan processes, including the provision of employment land, infrastructure for public transport, schools and healthcare.
- Further detail will be shared when available and there will be opportunity to comment on these at various stages of the process throughout the Strategic Growth Plan implementation and local planning processes.
- Local communities are encouraged to develop Neighbourhood Plans as per the Localism Act and these will be considered at the relevant time in the planning process.
- The Leicester & Leicestershire Rail Strategy (March 2017) sets out the priority proposals for rail enhancements in the area. This will be reviewed as necessary and any additional priorities taken account of at that time.
- Revisions to the Strategic Growth Plan recognise that new development will need to be supported by investment in further, more local transport improvements over and above the strategic road and rail enhancements specifically identified within the Plan. The two local highway authorities will investigate the need for additional improvements not specifically identified in the Strategic Growth Plan and will liaise with the relevant bodies as necessary (including Highways England, Network Rail, other statutory bodies and service operators) to develop and secure the delivery of such measures.

- It appears that a lot of ambiguous language is being used in order to confuse the public as to what is hiding behind these plans.
- The plans need to be more clearly defined – with planned routes, purpose of roads, locations for housing and industrial development to allow meaningful consideration and comments.
- The proposals project too far ahead (30 years) to accurately understand what is needed.

GENERAL PROCESS

- Delivery rests with Local Planning Authorities who cannot rely on the Strategic Growth Plan in their plan-making; if they were to do so then their local plan making would also be procedurally unsound.
- Memorandum of Understanding to be published early 2018 - surely this should be seen and considered in tandem with and not following this report. Noted that Leicester City Council fall short of housing allocation for 2011 – 2031. When will they define what they mean by “published early 2018” – we have already got through the first quarter of the year.
- We are aware that the SGP process advocates that there will be an opportunity to comment on the detailed proposals once they are incorporated into local plans. We suggest that this is too late and that it will be extremely difficult, if not impossible, to bring about any meaningful changes at that stage, especially as the SGP is dependant for its success upon its uniform incorporation into all local plans and, its compatibility across all districts. This then brings into doubt the opportunity for any one district to effect any change that will prejudice this compatibility.

- The agreed distribution of growth will be set out in an agreed statement. In line with the needs of our Local Plans, this will cover the time periods to 2031 and 2036. The statement will be used with the Strategic Growth Plan as the basis for preparing or reviewing Local Plans.

- ❖ *The rail freight hub is not a proposal within the Strategic Growth Plan; it is being dealt with under the provisions for nationally significant infrastructure projects*

Chapter 7b

Process and Consultation – Non-Survey Responses

Respondent Comments	Partner Responses
<p>EVIDENCE</p> <ul style="list-style-type: none"> • No research conducted to assess impact on existing communities. • Reliance on evidence not subject to external scrutiny, such as Midlands Connect. • Housing forecasts are questioned as they appear to be substantially higher than national and European Union forecasts. • No evidence is provided that housing numbers and employment allocations have been independently assessed and scrutinised – housing numbers are too high. • Concern about the lack of detail on how the need for 40,000 dwellings has been calculated and where the new housing would be delivered. • The Strategic Growth Plan fails to demonstrate how total delivery for each district has been arrived at. • Concern over lack availability of the traffic impact assessment. <p>CONSULTATION PROCESS</p> <ul style="list-style-type: none"> • Cooperation is fundamental to the success of the Strategic Growth Plan. Parish Council’s should be treated as a statutory consultee. 	<ul style="list-style-type: none"> • Evidence and assessments undertaken in preparation of the Plan are available on the website http://www.l1strategicgrowthplan.org.uk/the-plan/stage-two/developing-the-evidence-base. A number of these address the concerns raised by respondents. • The Midlands Connect Strategy has been prepared jointly by the Midlands Connect Partnership and government agencies. It supports the Midlands Engine Strategy and sets out a series of long term transport investment priorities to help unlock jobs and growth. • The Housing and Economic Development Needs Assessment (HEDNA) study provides evidence of Leicestershire’s identified housing requirement to 2036 using the methodology set out in policy guidance at that time. • Beyond 2036 there is no reliable estimate of population growth, household change or economic forecasts, therefore an estimate of housing need from 2031-50 (‘notional’ need) has been calculated by projecting forward the annual figures within HEDNA. It is accepted that changes will occur throughout the Plan period and that the Strategic Growth Plan will be reviewed as appropriate. • Local Plans will provide the detail of where growth will be located and the type of development, taking into account environmental constraints, local services,

- Request for second consultation once detailed proposals are formulated.
- The number of houses in Harborough would almost double over the period up to 2050. This plan has not been subject to rigorous consultation or inspection.
- There has been a lack of local engagement on this consultation and a lack of public examination.
- Lack of involvement in preparation of plan and absence of options.

MORE INFORMATION/DETAIL

- Would like to see more detailed plans for proposals and scope of the public consultation widened.
- Concern that the lack of detail is not reassuring communities and is heightening anxiety especially villages on route of the A46.
- Request for more information on the proposed vision and how it will affect communities.
- Proposals lacking detail on where housing might be built and whether developers will build where local authorities want housing or where developers have land.
- The Plan needs much more detailed maps showing proposed development zones.
- Without detailed plans it is not possible to comment on the primary and secondary growth areas.
- Plan is badly presented and vague with a lack of evidence and detail.

- public transport, walking and cycling links, up to date evidence and national policy, considering accompanying green infrastructure and mitigations.
- The Strategic Assessment of Transport Impact Report is available on the website <http://www.llstrategicgrowthplan.org.uk/the-plan/stage-two/developing-the-evidence-base> and the consultation period was extended to allow time to consider this report and inform responses to the Consultation Draft SGP.
- All Parish Councils were invited to comment through the process but as this is a non-statutory plan the arrangements for consultation are different to those of a statutory Local Plan.
- The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will go and will be subject to full consultation.
- Details on publicity and consultation during this consultation is included in the Consultation Overview Report 2018. Partners view that this was adequate and proportionate.
- The Strategic Growth Statement (August 2016) identified a number of generic options which would be considered. These are assessed in the Sustainability Appraisal.
- It is accepted that changes will occur throughout the Plan period, the Strategic Growth Plan will be reviewed as appropriate.
- Housing figures will be compared against government methodology when

GENERAL PROCESS

- Concern that the Strategic Growth Plan is not being prepared as a statutory plan and that a stronger case is needed to progress on a non-statutory basis.
- Would welcome early informal consultation regarding potential growth areas or alternative site allocations should they come forward.
- Note positive steps in listening to residents at this early stage.
- Disagree with citing quotas for housing provision as these have already been exceeded by Blaby District Council.
- It is critical that the Strategic Growth Plan and Local Plans reflect the requirements of the National Planning Policy Framework.
- The Strategic Growth Plan and Local Plan Reviews must facilitate a continual supply of both market and affordable housing from a portfolio of deliverable development sites.
- Cannot gauge housing need so far in the future.
- The non-statutory nature of the Plan raises concerns about how infrastructure provision can be ensured prior to housing provision.
- Positive that all authorities are currently working together but concern that in the future the political will may break down.
- Suggested move to focussing on more strategic sites will require early identification through local plans in order to achieve the vision.

available.

- The revised National Planning Policy Framework (NPPF) published on 24 July 2018, provides partners with the opportunity to consider whether they wish to prepare a statutory plan for Leicester & Leicestershire in the future.
- Concern regarding the future political environment, whether local or national, cannot inhibit the development of local strategies.
- The agreed distribution of growth will be set out in an agreed statement. In line with the needs of our Local Plans, this will cover the time periods to 2031 and 2036. The statement will be used with the Strategic Growth Plan as the basis for preparing or reviewing Local Plans.

<ul style="list-style-type: none">• There is no review period for the policy.• Concern that the Government’s standard methodology will render SGP quickly out of date, so an early review of SGP necessary.• Proposed Memorandum of Understanding seems weak.• Vision is trying to speed up delivery with step changes in way growth is delivered but the detail seems to fall back heavily on the existing plan base which will not at current rates achieve the vision? Will simply maintain the status quo.	
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Chapter 8a
Additional Points – Survey Responses

Q4. To what extent do you agree or disagree with the four priorities identified in the draft plan? Why do you say this? Are there any other priorities you think should be included?

Respondent Comments	Partner Responses
<p>SUPPORT</p> <ul style="list-style-type: none"> • Agreement with the plan and draft plan priorities. • All the key issues have been well considered and priorities appear balanced. • Pleased to see future planning to ensure less reactive approaches. • Agreement that it is better to have a long-term plan than have piece meal development with no infrastructure. • Support the identified priority of achieving a step change in the way that growth is delivered, with a focus upon more development in strategic locations and less on non-strategic sites. • Pleased to see that all the main public authorities stated in the Draft are working together to strategically shape the future of Leicester and Leicestershire. • The Strategic Growth Plan will assist the relevant local authorities in seeking to fulfil the requirements of the National Planning Policy Framework to plan effectively. <p>CONCERNS</p> <ul style="list-style-type: none"> • The priorities are delivered in reverse. In reality, houses come first and infrastructure comes last. 	<ul style="list-style-type: none"> • The Strategic Growth Plan supports the early delivery of key infrastructure and funding applications for this. • The Strategic Growth Plan recognises the importance of local businesses to the economy and the infrastructure and new housing is included to support this. Detailed matters will be managed through Local Plans and in collaboration with the LLEP, and will attempt to keep any uncertainty to a minimum. • The Strategic Growth Plan seeks to provide growth in a sustainable way in developments that can provide their own infrastructure (e.g. schools, health, etc.) and not add pressure onto existing facilities. As a high level plan, further details will be available in

- Priorities appear more like worthy aspirations than clear priorities.
- Concerns around growth due to the effects of Brexit.
- Implausible to believe that this balance will be sought.
- The priority should be to implement policies that improve current infrastructure, with less emphasis on growth.
- Seeking additional information on how existing business will be affected.
- Concern that the Strategic Growth Plan is strong on principles and generalisations yet lacking in detail or funding quotes.
- Concern that the world will be a very different place by 2031.
- The drive for investment and growth tends to be business and profit biased rather than people and well-being focused.
- The statement “Achieving a step change in the way growth is delivered” is unclear.

SUGGESTIONS

- Wishes to see that leisure facilities and playing fields are developed to cope with the increase in the population.
- A fifth priority should be given to the repair of the damage caused by ad-hoc developments of the past, which have not been supported by the appropriate infrastructure.
- Agreement with the approach as theoretically highly dependent on securing the infrastructure which at this time is not definite.
- Securing required infrastructure improvements should be a key priority.
- Provision of infrastructure should be clearly established as a pre-requisite to growth.

future local plans.

- The provisions of the Strategic Growth Plan will be monitored on a regular basis and reviewed as necessary.

Q5. To what extent do you agree or disagree with the proposed corridor of growth around south and east of Leicester linked to the construction of a new A46 expressway? Why do you say this?

Respondent Comments

SUPPORT

- The strategy must make provision for growth and this provision must include appropriate infrastructure.
- Support the approach of the Draft Strategy to "Shift the Focus of Development".

CONCERNS

- Proposals seem to make sense but it is difficult to come to a more definite view unless they become more specific.
- Concern over how this affects the local community.
- There are no details to suggest what existing residents can expect to see from growth in the area.
- There needs to be a reduction in building of any sort.
- Concern that the government have not committed any finances to the plans.
- Lack of thinking regarding technological impacts.
- The ageing population is not thought about in the proposals.

SUGGESTIONS

- Important that Leicestershire County Council continues to promote Leicestershire as the 'Heart of Rural England'.

Partner Responses

- The Strategic Growth Plan seeks to provide growth in a sustainable way in developments that can provide their own infrastructure (e.g. schools, health, etc.) and not add pressure onto existing facilities. As a high level plan, further details will be available in future local plans.
- It is recognised that new technology will continue to evolve. As technology advances the impact will be assessed and any necessary adjustments will be made in future Local Plans.
- The ageing population has been taken into account in the HEDNA, a key evidence base underpinning the Strategic Growth Plan. Detailed proposals to meet the needs of the ageing population will be taken into account in formulating future Local Plans.

Q6. To what extent do you agree or disagree with the proposal that Leicester should develop its role as the 'central city'?

Respondent Comments	Partner Responses
<p>SUPPORT</p> <ul style="list-style-type: none"> • Agreement that Leicester is the central city in the area and needs to develop the services and infrastructure expected of such a regional centre. • Belief that the City is already strong in this area with The Curve, Showcase and Odeon, LCFC and Leicester Tigers. • Leicester is used by many for work; leisure; shopping; sport; tourism and needs to compete with other major cities, both UK wide and within the East Midlands. • Agreement as the proposal offers a clear direction and strategy is always needed and Leicester has all the major pull factors. • It makes sense both socially and geographically to improve the city of Leicester as a business and tourist attraction. • The city centre has a fine historical core, with many great buildings, parks and museums and there is nowhere else in Leicestershire that even comes close to the offer of Leicester's central core although past planning mistakes have left some parts of the City in need of regeneration. • It is important to promote the role of the City as a hub for the region's growth. The City should be supported to attract more inward investment. • Leicester will continue to have a focal role at the heart of the County providing key commercial opportunities and higher order retail, cultural, leisure and entertainment services and facilities. <p>CONCERNS</p> <ul style="list-style-type: none"> • IT infrastructure means the historic notion of a hub city is unlikely to be sustainable in 50 years' time. 	<ul style="list-style-type: none"> • The City is at the heart of L&L and its future success affects the County area. The central city concept is considered the most appropriate concept for the next 30 years or so. Future strategic plans will consider whether this concept is still appropriate. • The Strategic Growth Plan will form a framework for other partners to prepare their own resource plans for the future. • The future of jobs and focus on certain employment sectors will be shaped by the emerging Leicester & Leicestershire Enterprise Partnership's (LEEP) Local Industrial Strategy. This in turn will reflect the Midlands Engine Strategy. • The provisions of the Strategic Growth Plan will be monitored on a regular basis and reviewed as necessary.

SUGGESTIONS

- Carry out an assessment of how best to combat crime and disorder, and how to resource policing requirements.
- Reducing the City's reliance on multinationals and big companies, while still remaining attractive, should be the priority of this part of the overall strategy.
- Assumptions should be adjusted for Brexit.
- Leicester has a dearth of cultural centres when compared to neighbouring cities and there should be an increase in the number of high quality arts centres in Leicester.

Q7. To what extent do you agree or disagree with the two gateways identified?

Respondent Comments

CONCERNS

- There is insufficient detail to make a final endorsement and further public consultation is required when detail is available. There is the need for detail to be mapped and timescales at each stage and implications for adjoining roads.
- The level of growth is unsustainable and there is a need to utilise brownfield and derelict sites within market towns and Leicester City.
- Growth benefits people on high incomes who can afford larger houses; it does not tackle existing issues such as child poverty and climate change.

Partner Responses

- The Strategic Growth Plan provides the long term strategy for the Leicester & Leicestershire area and provides each local authority with an overarching framework for their Local Plans. Each Local Plan will be subject to extensive public consultation and will provide a much greater level of detail.
- Local authorities seek to develop brownfield land in the 'right' locations prior to greenfield land. The Strategic Growth Plan and subsequent Local Plans will deliver larger scale sustainable growth that brings with it new facilities, such as schools, GP surgeries, shops and leisure facilities.
- The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located and what local infrastructure is required.

Q8. To what extent do you agree or disagree with these two settlements (Lutterworth and Melton Mowbray) being identified as key centres?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Concern that despite low unemployment in Lutterworth, there will be more growth in Logistics, resulting in more in-commuting due to people not being able to afford housing. • People choose to live in an area for a variety of reasons e.g. cheaper house prices but still work in London. • Belief that Melton is not linked into existing local and national infrastructure and so will have limited growth. • Concern that regeneration and economic growth seem to be happening at the expense of the environment. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • There is the need to focus on strengthening infrastructure in City and Market Towns as the plan is very unspecific on this. • Need a step change in the way we work, rather than working where required; we need to encourage home working to reduce traffic. • Need to ensure that the infrastructure provision is adequate and provision of new community facilities occurs within new developments. 	<ul style="list-style-type: none"> • The Strategic Growth Plan and subsequent Local Plans will deliver larger scale sustainable growth that brings with it new facilities, such as schools, GP surgeries, shops and leisure facilities. • The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located and what local infrastructure is required. Local plans will take account of commuting patterns and market conditions. • The Strategic Growth Plan proposes strategic road and rail infrastructure to relieve congestion of currently congested routes. • Protection of the environment and built heritage forms part of one of the priorities. • The Strategic Growth Plan reflects both road and rail infrastructure proposed in the Midlands Connect Strategy.

Q9. To what extent do you agree or disagree with the proposal that Coalville, Hinckley, Loughborough and Market Harborough should have 'managed growth' only?

Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Concern that there is not enough leisure provision in Market Harborough and the job market is not plentiful or varied, hence out commuting; if further growth is to occur here these issues need addressing. • Until doctor's facilities catch up, no more growth should take place in Market Harborough. • Concern that many developments make little or no contribution to infrastructure. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Suggestion that developments need to have space for multiple places of Worship to retain a sense of Community. 	<ul style="list-style-type: none"> • The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery. Local Plans will provide the detail of where this growth will be located and what local infrastructure is required.

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Q10. To what extent do you agree or disagree that growth in our villages and rural areas should be limited to providing for local needs?

Respondent Comments	Partner Responses
<p>CONCERNS</p>	<ul style="list-style-type: none"> • The Leicester and Leicestershire HEDNA evidences local need for both housing and employment to 2031 and 2036.

<ul style="list-style-type: none"> • Feel that the definition of local needs must be clearly stated. • Concern that credence is not being given to Neighbourhood Plans. • Local knowledge in Parish Councils has not been considered or utilised. • Disagreement with the term “limiting to provide for local needs” as local needs are already not being provided for, for example cuts to bus services. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • Towns of a certain size are better able to deal with development, with increases in demand for infrastructure. Any development in villages needs to have infrastructure improved first. • Development, transport, services and facilities need to go hand in hand. • The needs of ageing populations should be considered, to ensure growth meets needs, especially with smaller homes. 	<ul style="list-style-type: none"> • As part of any planning application that seeks housing growth, local agencies or authorities responsible for education and healthcare service would be consulted to ascertain whether the proposal has any detrimental impact on that service. If so, mitigation by way of physical and / or financial contribution would be sought from the applicant / developer. • The Strategic Growth Plan provides the long term strategy for Leicester & Leicestershire and provides each local authority with a framework for Local Plans. Each Local Plan will be subject to public consultation and will provide detail on proposed developments.
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<p>Q11. Do you have any other comments on the draft strategic growth plan?</p>	
<p>Respondent Comments</p>	<p>Partner Responses</p>
<p>CONCERNS</p> <ul style="list-style-type: none"> • There is no mention of improving tourism. • The amount of large B8 provision is understated but demand appears to be too high above Government Requirements. 	<ul style="list-style-type: none"> • For the levels of growth needed up to 2050, major new transport infrastructure is required. Upgrading existing routes would not be sufficient. • The Strategic Growth Plan provides a long term strategy and a framework for Local Plans, and gives the opportunity to identify strategic development locations and the infrastructure that is essential to their delivery.

- Questioning why the Environment Agency and DEFRA were not included in drawing up the report.
- There is no accommodation for technology in the plan, despite the fact that it will change the way we live, work, travel and socialise.
- Objection to the reliance on the logistics sector as it too environmentally damaging and there is a need to create high value skilled employment in manufacturing and engineering to ensure a sustainable economy.
- There is a lack of options appraisals and sustainability appraisals which make the document unsound.
- There is nothing on Broadband provision.
- Agri-food processing centre at Melton has been allocated on a map, but is not mentioned in the text. It is an important sector for the local economy creating jobs and for tourism and utilising specialist advice from the Universities.
- Existing infrastructure – roads, schools and doctors surgeries is not coping and this needs to be addressed, before any new plans are implemented.
- What will happen if funding is not secured.

SUGGESTIONS

- Locations within a growth area should be considered on their own merits; there should not be a blanket approach.
- Focus should be on city and county residents and their aspirations for a strong, vibrant and healthy community and economic growth should support these aspirations.
- Need to lobby for investment in NHS to cope with the number of houses/additional people.

Local Plans will provide the detail of where this growth will be located and what local infrastructure is required.

- Local authorities seek to develop brownfield land prior to greenfield land. The Strategic Growth Plan and subsequent Local Plans will deliver larger scale sustainable growth that brings with it new facilities, such as schools, GP surgeries, shops and leisure facilities.
- The Strategic Growth Plan provides the long term strategy for the Leicester and Leicestershire area and provides each local authority with an overarching framework for their Local Plans. Each of the authorities Local Plans will be subject to extensive public consultation, and will provide a much greater level of detail.
- The Strategic Growth Plan and subsequent Local Plans will deliver larger scale sustainable development growth that will comprise of needed education facilities, GP surgeries and other facilities relating to shopping and leisure.
- Each of the authorities Local Plans will be subject to extensive public consultation, and will identify site specific proposals.
- Local Authorities are required by government to assess local need. The Leicester and Leicestershire HEDNA robustly justifies and evidences local need for both housing and employment to 2031 and 2036.

- | | |
|--|--|
| <ul style="list-style-type: none">• The ageing population could be seen as a strength with the money they have, not a negative.• There should be a limit to the number of people able to enter the country to stem the need for houses. | |
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Chapter 8b
Additional Points – Non-Survey Responses

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Respondent Comments	Partner Responses
<p>CONCERNS</p> <ul style="list-style-type: none"> • Does not feel that this document is a vision for growth, but basically more of the same. • Any envisaged benefits will not balance out the negative impacts. • Plan is only benefiting developers. • There is little reference to the importance of tourism. • Concern that the appropriate amount funding from developer contributions towards new schools and new school places in existing schools will not be met. • Leicestershire is in danger of losing its heritage and identity. • Plan assumes that we will continue to work, live and travel in the same way rather than moving to sustainable living. <p>SUGGESTIONS</p> <ul style="list-style-type: none"> • ‘Strategic Growth’ needs defining in the context of the plan. • Specific examples of ‘historic and other assets’ should be named, such as the Great Central Railway and Bosworth Battlefield. • Plan should make reference to other strategies such as the Destination Management Plan. • Waterways should be referenced in terms of their benefit to tourism and as a catalyst for regeneration 	<ul style="list-style-type: none"> • Local Plans will contain policies and advice to support investment and delivery of identified needs for other development such as leisure and tourism.

and water related business.

- The Strategic Growth Plan should seek to influence local plans to ensure they are positively prepared for levels of infrastructure that will be needed.
- Preference for Leicestershire to be a tourism destination rather than a transport hub.
- Need to develop community infrastructure, including schools, doctors, dentists, public transport and digital connectivity.
- If immigration is brought under control then alleged housing need would be greatly reduced.

SUPPORT

- Support for the need to invest in infrastructure.
- Support for the four priorities of the Strategic Growth Plan.

STRATEGIC GROWTH PLAN

EQUALITY & HUMAN RIGHTS IMPACT ASSESSMENT (EHRIA)

Final Report

September 2018

Key Details	
Name of policy being assessed:	Leicester and Leicestershire Strategic Growth Plan
Date Started:	June 2016
Date Completed:	September 2018
Project Sponsor:	Strategic Director of Housing, Planning & Regeneration and Regulatory Services (Charnwood Borough Council)
Lead Officer:	Head of Planning and Regeneration (Charnwood Borough Council)
Team Members:	Principal Planning Officer (Charnwood Borough Council) Planning Policy Manager (Leicester City Council) Corporate Improvement & Policy Officer (Charnwood Borough Council) Policy Officer- Equalities (Leicestershire County Council)

1. Introduction

- 1.1 This is the Equality and Human Rights Impact Assessment (EHRIA) of the Leicester and Leicestershire Strategic Growth Plan.
- 1.2 All partner organisations involved in the development and implementation of the Strategic Growth Plan have a legal responsibility (as set out in the Equality Act 2010) to ensure that we can demonstrate having paid due regard to the need to (referred to as the 'General Public Sector Equality Duty'):
- Eliminate discrimination, harassment and victimisation and other conduct prohibited by the Act;
 - Advance equality of opportunity between people who share a protected characteristic and those who do not;
 - Foster good relations between people who share a protected characteristic and those who do not.
- 1.3 There are certain characteristics protected by equalities legislation. These 'protected characteristics' are:
1. Age
 2. Disability
 3. Gender Re-assignment
 4. Marriage & Civil Partnership
 5. Pregnancy & Maternity
 6. Race
 7. Religion or Belief
 8. Sex
 9. Sexual Orientation
- 1.4 Such equalities legislation does not allow the following:
- Direct discrimination, including by association and perception
 - Indirect discrimination
 - Pregnancy & maternity discrimination
 - Harassment
 - Third party harassment
 - Discrimination arising from disability
- 1.5 Such equalities legislation allows the following:
- Duty to make reasonable adjustments
- 1.6 Additionally, all partner organisations involved in the development and implementation of the Strategic Growth Plan understand the importance of

valuing human rights and are committed to ensuring that the human rights of individuals are maintained and respected. It is for this reason that we have chosen to additionally assess any human rights implications of the Strategic Growth Plan and also consider opportunities to promote or protect any of the relevant human rights within the EHRIA process. These include:

HUMAN RIGHTS ACT PART 1: The Convention – Rights and Freedoms

Article 2: Right to life

Article 3: Prohibition of torture, inhuman or degrading treatment

Article 4: Prohibition of slavery/ forced labour

Article 5: Right to liberty and security of person

Article 6: Right to a fair trial (applies to criminal and civil issues)

Article 7: No punishment without law

Article 8: Right to respect for private and family life

Article 9: Freedom of thought, conscience and religion

Article 10: Freedom of expression

Article 11: Freedom of Assembly and Association

Article 12: Right to Marry

Article 14: Prohibition of Discrimination (linked to a convention right i.e. equal access to convention rights)

HUMAN RIGHTS ACT PART 2: The First Protocol

Article 1: Protection of property/ peaceful enjoyment

Article 2: Right to education

Article 3: Right to free elections

- 1.7 This document explains what steps have been taken to understand the likely implications of the Strategic Growth Plan upon the specific individuals and community groups protected by the Equality Act 2010 and Human Rights Act 1998, including what steps/ mitigation has been taken in order to address any differential impacts, and draws upon any recommendations and conclusions.

2. The Strategic Growth Plan

- 2.1 The Strategic Growth Plan is a new plan that sets the vision and strategy for future growth in Leicester and Leicestershire. Its main purpose is to distribute housing and jobs and support strategic infrastructure within the Housing Market Area between 2011 and 2050. The Strategic Growth Plan will be a locus for agreement between Local Authorities concerned demonstrating the 'Duty to Cooperate' as well as setting the strategic policy framework for partner authorities to prepare their individual Local Plans. These individual

local plans will each have their own Equality and Human Rights Impact Assessment as part of the process to prepare them.

- 2.2 The Strategic Growth Plan will provide a framework for delivering growth and infrastructure and it will therefore affect the whole community. It is intended to deliver the right growth, at the right time, in the right locations, creating successful residential and business communities that are well-served by essential infrastructure and services, in a landscape where environmental resources are protected and enhanced.

3. The process followed

- 3.1 The EHRIA has followed a process that mirrors the key stage gates of the Strategic Growth Plan during its preparation. The relationship between the two processes is:

Stage	Date	EHRIA	SGP
Stage 1	July 2016	Baseline evidence and appraisal matrices	Strategic Growth Statement
Stage 2	September 2017	Draft Equality and Human Rights Impact Assessment	Draft Strategic Growth Plan
Stage 3	September 2018	Final Equality and Human Rights Impact Assessment	Final Strategic Growth Plan

4. Consultation

- 4.1 Public consultation has been carried out at stages 1 and 2 detailed above. A Strategic Growth Statement sought views on the scope of the Growth Plan and its key objectives. This was followed by consultation on a draft Strategic Growth Plan published in January 2018 which ran until May 2018, along with the supporting Draft Equality and Human Rights Impact Assessment.
- 4.2 The draft plan followed the testing of 7 alternative options through the EHRIA framework.
- 4.3 A number of responses to the draft Strategic Growth Plan have identified that housing stock should address the needs of an ageing population for smaller housing types close to services and facilities, thus reducing transport issues and releasing larger homes for families. The need for dwellings suitable for younger families was also highlighted along with the need to provide housing in rural settlements which allow younger households to remain in the communities in which they were raised. The Report of Consultation is

available detailing the comments raised and the partner authorities' response is available on the strategic growth plan website: [llstrategicgrowthplan.org.uk](http://strategicgrowthplan.org.uk)

5. Outcome of EHRIA assessment

5.1 The results of the Equality and Human Rights Impact Assessment are summarised below, the assessment framework itself is available in Appendix A.

Age - The Strategic Growth Plan is likely to impact negatively upon age in the scenario tested and it will be important to ensure that specific infrastructure and services are planned effectively to ensure they are appropriate for the age demographic of the community (i.e. specific to older people, young people etc.) - this is likely to be an issue for subsequent local plans.

Disability - The Strategic Growth Plan is likely to impact positively upon disability in this scenario. The strategy is likely to focus development in areas that favour disabled people by virtue of access to jobs, services and facilities where their needs can be met. It will be important to recognise that wherever new development is focused barriers may be faced by this community group if effective due consideration is not given in the planning and consultation stages of local plans.

Gender Reassignment - The effects upon the protected characteristic of gender reassignment are not considered likely to have an impact.

Marriage and Civil Partnership - The effects upon the protected characteristic of marriage and civil partnership are not considered likely to have an impact.

Pregnancy and Maternity - The likely impacts upon the protected characteristic of pregnancy and maternity are neutral.

Race - The Strategic Growth Plan is likely to positively impact upon race provided consideration is given to the specific infrastructure and services required to create mixed and balanced communities. It will be necessary to plan effectively in local plans to ensure new developments have appropriate community infrastructure for the demographic of the community (i.e. BME Residents; the gypsy and traveller community).

Religion or Belief - The assessment presents a neutral outcome for this characteristic. It reflects the reality that areas of higher population are more likely to be able to support a wider range of faith communities and buildings compared to lower populated areas. Specific infrastructure and services will need to be planned effectively to ensure that the needs of faith groups are addressed in local plans.

Sex - The assessment records that the impact upon the protected characteristic of sex for the strategy is neutral.

Other Groups (e.g. rural isolation, deprivation, health inequality, carers, asylum seeker and refugee communities, looked after children, deprived or disadvantaged communities, community cohesion) - The assessment records that the impact upon the protected characteristic of other groups for the strategy is neutral.

6. Human Rights

- 6.1 Based on the evidence and findings, the final Strategic Growth Plan is likely to have an impact on some of the Articles in the Human Rights Act in the following ways. There may be a positive effect on the right to respect for private and family life, particularly in relation to the gypsy and traveller communities as new development ensures needs are met. There will be a neutral impact upon the right to a fair trial and the right to freedom of expression as the plan has been produced in consultation with the public and stakeholders.
- 6.2 There is considered to be no impact upon the other Articles in the Human Rights Act. A full assessment of the impacts is provided in Appendix A. It should be noted that the preparation of subsequent local plans must be transparent, carried out in an equitable way and subject to Examination in Public to ensure that impacts are properly assessed and negative impacts restricted.

7. Mitigation of impacts

- 7.1 The Strategic Growth Plan is likely to impact negatively upon age in most of the scenarios tested and it will therefore be important to make certain that specific infrastructure and services are planned effectively to ensure they are appropriate for the age demographic of the community (i.e. specific to older people, young people etc.). This will be a key issue for subsequent local plans and the use of robust evidence identifying an appropriate mix of types, tenures and size of homes to meet the identified housing need will be vital for their preparation.
- 7.2 The Strategic Growth Plan's impact on disability is likely to be positive, by concentrating growth close to employment areas. This will provide the opportunity to live closer to work, so improving access to jobs along with services and facilities. However, it has been noted that there will be no improvement for those who cannot work, or ability to work is restricted. The type of housing provided through the local plan will have an important impact

and should be addressed by building homes to meet the identified need, including those with disabilities.

- 7.3 In terms of pregnancy and maternity the Strategic Growth Plan is likely to have a neutral impact overall. The growth areas will provide opportunity to improve services and facilities for those with good access to these locations. However, rural areas are unlikely to benefit from this positive impact. The impact on the existing urban areas, notably those managed areas of growth, at Leicester City, Loughborough, Coalville, Lutterworth, Hinckley and Market Harborough is likely to remain unchanged. In terms of rural areas it may be possible to improve access through local plans by ensuring all settlements can access larger centres which can provide relevant services and facilities.
- 7.4 The Strategic Growth Plan is likely to impact positively upon race. The plan provides an opportunity for the creation of mixed and balanced communities with the necessary infrastructure, cultural facilities and services being delivered to ensure that there are no barriers facing specific community groups. Local plans should plan effectively to ensure new developments have appropriate community infrastructure for the demographic of the community (i.e. BME residents; the gypsy and traveller community).
- 7.5 The assessment of the Strategic Growth Plan presents a mixed outcome for religion and belief. It reflects the reality that areas of higher population are more likely to be able to support a wider range of faith communities and buildings compared to lower populated areas. Specific infrastructure and services will need to be planned for effectively in local plans to ensure that the needs of faith groups are addressed.
- 7.6 There is considered to be no likely impact upon gender reassignment, sex, sexual orientation and a neutral impact on other groups.
- 7.7 In terms of Human Rights, the Strategic Growth Plan has been produced in consultation with both stakeholders and the public. The resultant local plans will be produced through a transparent and equitable plan-making process involving further consultation and Examination in Public. This will ensure that where effects occur any resultant impact is likely to be positive or neutral and provides the opportunity to mitigate against any potential negative impacts which are identified.

8. Monitoring and Review

- 8.1 The findings of this EHRIA will be reviewed by the Strategic Planning Group and MAG and thereafter the individual governance structures of each partner authority in considering the proposal to take forward and endorse the Strategic Growth Plan. It is expected that the approved plan will be addressed

in relevant local plans and monitored by the relevant local authority through their Annual Monitoring Report. Should any negative impacts upon the protected characteristics or Human Rights be identified and attributed to the Strategic Growth Plan these can be reported back to the relevant local authority and the necessary action taken to address the issue, as appropriate.

9. Recommendations

- 9.1 All local planning authorities should consider the potential for policies in local plans to adversely affect protected groups within equalities legislation and take account of their possible impacts upon Human Rights.

Strategic Growth Plan Equality & Human Rights Impact Assessment

Final Strategy

Emphasise development in two strategic growth areas (each associated with planned employment growth and infrastructure investment), the key centre of Melton Mowbray and managed growth in the City of Leicester and at Coalville, Loughborough, Lutterworth, Hinckley and Market Harborough; growth in other locations restricted to that justified to meet local need.

The Strategic Growth Plan enables a combination of the following growth options to be defined in local plans:

-) Urban intensification
-) Sustainable Urban Extensions
-) Concentration on key settlements
-) Growth 'corridors'
-) Employment-led growth
-) New freestanding settlements

It would require the provision of housing, potentially at increased density, on underused land, land currently in other uses and some undeveloped land within the urban area. The strategy would require Sustainable Urban Extensions (SUEs) and/or new freestanding settlements within the growth corridor fringing the existing southern and eastern edges of the main urban area and within the 'gateway' growth area. It would also support SUEs at Melton Mowbray.

The housing growth elsewhere would be less extensive than that planned for over the period 2011-2031. The amount of housing growth at other settlements and in the rural area would be carefully managed. The distribution of housing growth in and around Leicester and at the 'gateway' would be accompanied by employment growth in all these locations.

Broad assumptions:

-) Around 15% of homes provided within the main urban area including Leicester

-) Around 40% of homes provided in the growth corridor on the periphery of Leicester
-) Around 15% of homes provided within the 'gateway' area
-) Around 5% of homes provided at the key centre of Melton Mowbray
-) Up to 15% of homes provided in/adjacent to the other main market towns
-) Up to 10% of homes provided in smaller settlements

Age	Disability	Gender Reassignment	Pregnancy & Maternity	Race	Religion/Belief	Sex	Sexual Orientation	Other groups*
↓	↑	○	○	↑	○	○	○	○
<p>The strategy favours those of working age in linking new homes to areas of employment growth. Possibility that the needs of older people and their choices of location will be limited.</p> <p>There is likely to be an impact relating to age and the type of housing required; it is acknowledged this will be assessed through local plans</p>	<p>Concentrating growth in the proximity of employment areas provides the best opportunity to live close to jobs, which will provide additional advantage for some people. However, it is recognised the strategy works against a minority of those with a disability who cannot work or whose ability to work is limited.</p> <p>Much will depend on the type of housing provided through local plans</p>	No impact	<p>The strategy will provide greater opportunity to improve services and facilities and support networks in identified areas of growth although the level of access in rural areas are unlikely to gain such a positive impact. The impact on the city, Loughborough, Coalville, Hinckley, Lutterworth and Market Harborough is likely to remain neutral.</p>	<p>The strategy provides an opportunity for the creation of mixed and balanced communities with the necessary infrastructure, cultural facilities and services to ensure that there are no barriers facing specific community groups.</p>	<p>The strategy presents an opportunity to realise reasonable access to faith, community and related facilities for a wider sector of the population thus enabling greater access to the support networks within those communities.</p>	No Impact	No Impact	Neutral

Human Rights Act Assessment

Part 1: The Convention- Rights and Freedoms	
Article	Comment
Article 2: Right to life	No Impact
Article 3: Right not to be tortured or treated in an inhuman or degrading way	No Impact
Article 4: Right not to be subjected to slavery/ forced labour	No Impact
Article 5: Right to liberty and security	No Impact
Article 6: Right to a fair trial	Neutral impact - the plan-making process has been carried out in consultation with the public and stakeholders. It will be important to ensure that the subsequent local plans are prepared in a transparent and equitable way and are subject to Examination in Public.
Article 7: No punishment without law	No Impact
Article 8: Right to respect for private and family life	Positive effect – the strategy may potentially have a positive impact upon the human rights of individuals in terms of private and family life, particularly for Gypsy & Traveller communities.
Article 9: Right to freedom of thought, conscience and	No impact – However, it is acknowledged that further consultation will be required at the

religion	local plan stage.
Article 10: Right to freedom of expression	Neutral impact – the plan-making process has been carried out in consultation with the public and stakeholders. It will be important to ensure that the subsequent local plans are prepared in a transparent and equitable way and are subject to Examination in Public.
Article 11: Right to freedom of assembly and association	No Impact
Article 12: Right to marry	No Impact
Article 14: Right not to be discriminated against	No impact - The strategy is unlikely to have an impact upon the human rights of individuals. However, all individuals must have a right not to be discriminated against throughout the implementation of the Strategic Growth Plan.
Part 2: The First Protocol	
Article 1: Protection of property/peaceful enjoyment	Neutral impact - The strategy is likely to have a neutral impact upon the human rights of individuals when planning decisions are made in terms of this Article. New development will be determined in light of the development plan for that area, unless material considerations indicate otherwise. Therefore, a local authority preparing a local plan will need to ensure that policies do not interfere with peaceful enjoyment of property or possessions where possible.
Article 2: Right to education	No Impact

Article 3: Right to free elections	No Impact

Leicester and Leicestershire Strategic Growth Plan

Habitats Regulations Assessment

Leicester and Leicestershire Strategic Growth Plan
Strategic Planning Group

Project number: 60521564

September 2018

Quality information

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The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken between December 2017 and September 2018 and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

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1. Introduction

Background to the Project

- 1.1 AECOM was appointed by the Leicester and Leicestershire Spatial Growth Plan Strategic Planning Group to assist in undertaking a Habitats Regulations Assessment (HRA) of its Strategic Growth Plan (hereafter referred to as the 'Plan'). The objectives of this HRA were to:
- Identify any aspects of the Plan that would cause an adverse effect on the integrity of the Natura 2000 sites, otherwise known as European Sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a matter of Government policy, Ramsar sites), either in isolation or in combination with other plans and projects; and
 - Advise on appropriate policy mechanisms for delivering mitigation where such effects were identified.
- 1.2 AECOM previously assisted in undertaking an HRA of the Draft Strategic Growth Plan in February 2018. As such, this Report is based on the previous HRA Report¹, taking into account alterations to the Plan since the production of the Draft Strategic Growth Plan. In addition, this Report has been produced in reference to the *People Over Wind and Sweetman v Coillte Teoranta ECJ judgement* (hereafter referred to as the *People Over Wind judgement*)².

Legislation

- 1.3 The need for Appropriate Assessment is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats and Species Regulations 2017. The ultimate aim of the Directive is to *"maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest"* (Habitats Directive, Article 2(2)). This aim relates to habitats and species rather than the European sites themselves, although the sites have a significant role in delivering favourable conservation status.
- 1.4 The Habitats Directive applies the precautionary principle to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects with predicted adverse effects on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should proceed. In such cases, compensation would be necessary to ensure the overall integrity of the site network is not adversely affected.
- 1.5 In order to ascertain whether or not site integrity will be affected, a process of screening (using a Likely Significant Effects (LSE) test), followed (if necessary) by an Appropriate Assessment (AA), should be conducted for the plan or project in question:

¹ AECOM. (2018) Leicester and Leicestershire Strategic Growth Plan (Draft): Habitats Regulations Assessment. Rev. No. 1, February 2018.

² *People Over Wind and Sweetman v Coillte Teoranta* (C-323/17).

Box 1: The legislative basis for Appropriate Assessment.

Habitats Directive 1992

Article 6 (3) states that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.”

Conservation of Habitats and Species Regulations 2017

The Regulations state that:

“A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.

- 1.6 Over time the term Habitats Regulations Assessment has come into wide currency to describe the overall process set out in the Conservation of Habitats and Species Regulations 2017, from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an Appropriate Assessment. In this Report, the term Habitats Regulations Assessment refers to the overall process, whilst the use of the term Appropriate Assessment is restricted to the specific stage of that name.

Scope of the Project

- 1.7 There is no guidance that dictates the physical scope of an HRA of a Plan document. The physical scope of this assessment was guided primarily by the identified impact pathways (called the source-pathway-receptor model) rather than by 'arbitrary' zones. Current guidance suggests that the following European sites should be included in the scope of the assessment:
- All sites within the Leicestershire County boundary; and,
 - Other sites shown to be linked to development within the County boundary through a known 'pathway' (discussed below).
- 1.8 Briefly defined, pathways are routes by which a change in activity provided within a County Plan document can lead to an effect upon an internationally designated site. An example of this would be new residential development resulting in an increased population and thus increased recreational pressure, which could affect European sites through, for example, disturbance of wintering birds. Guidance from the former Department of Communities and Local Government (DCLG, now the Ministry of Housing, Communities and Local Government) states that the HRA should be '*proportionate to the geographical scope of the [plan policy]*' and that '*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*' (CLG, 2006, p.6). More recently, the Court of Appeal³ ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be '*achieved in practice*' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Core Strategy document)⁴. In this case, the High Court ruled that for '*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to*

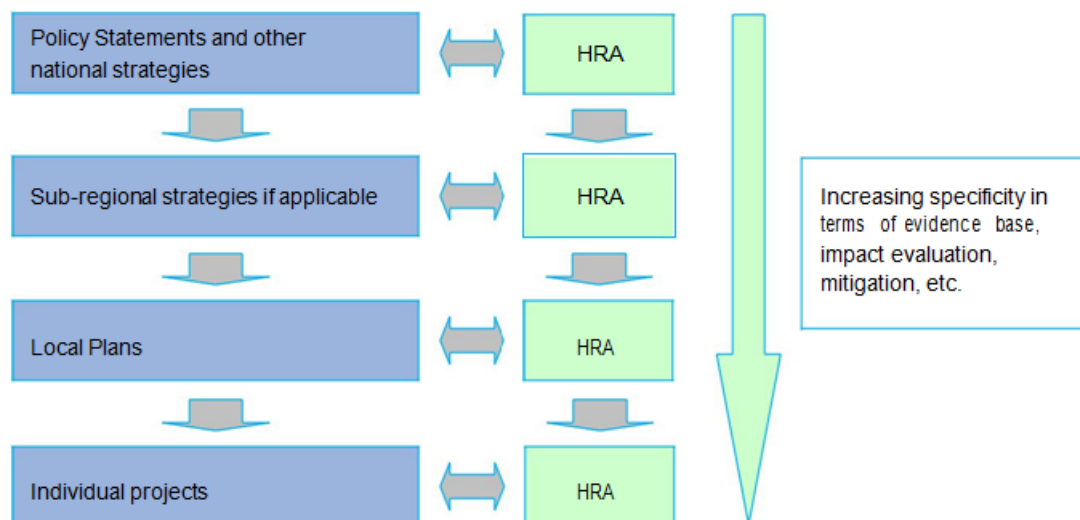
³ No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015.

⁴ High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28th July 2015.

be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations’.

- 1.9 This is in line with the former DCLG guidance that the level of detail of the assessment, whilst meeting the relevant requirements of the Habitats Regulations, should be ‘appropriate’ to the level of plan or project that it addresses. This ‘tiering’ of assessment is summarised in Figure 1.

Figure 1: Tiering in HRA of Land Use Plans.



- 1.10 One European site lies within the Leicestershire County boundary. The River Mease SAC is located within the west of the County, south of Ashby-de-la-Zouch. The river arises in Leicestershire and flows westwards into Staffordshire, where it joins the River Trent. Rutland Water SPA and Ramsar site, which is located 5.6km east of the County boundary at its closest point, is also considered in this HRA.
- 1.11 The following sites were considered for inclusion in the HRA, but dismissed from the analysis due to a combination of distance and the absence of impact pathways linking them to the County:
- Upper Nene Valley Gravel Pits SPA and Ramsar site is located 17.3km to the south east of Leicestershire. This site is vulnerable to recreational disturbance but studies undertaken for the North Northamptonshire Joint Core Strategy have identified that the core recreational catchment of the site is 3km, placing Leicestershire well outside the core catchment. The SPA and Ramsar site are also vulnerable to the loss of supporting habitat (i.e. arable fields used by the associated golden plover (*Pluvialis apricaria*) population), but again studies for the North Northamptonshire Joint Core Strategy have confirmed that the relevant fields are much closer to the site. Whilst local abstraction and runoff could affect the site, Leicestershire is too far away for there to be a realistic impact pathway.
 - Ensor’s Pool SAC is located 5km south west of the border of Leicestershire County. Ensor’s pool is an offline abandoned clay pit on the western edge of Nuneaton, north Warwickshire. The pool is 3.79ha in size, with an average depth of 8m, and is ground water-fed. The site is designated for a large population of white-clawed crayfish (*Austropotamobius pallipes*). Due to the distance from the County boundary and the pool not being surface water-fed, there are no linking impact pathways to growth within Leicestershire County.
 - Grimsthorpe SAC is designated for its calcareous grassland and early gentian (*Gentianella anglica*) population. However, recreational pressure is not identified as issue by the Site Improvement Plan and the SAC is located approximately 14km to the east of Melton Borough. As such, Leicester and Leicestershire are considered to lie well beyond any likely core recreational catchment for the site. For this reason the Melton Local Plan also concluded no adverse effect.

- 1.12 As such, these sites are not discussed further within this HRA. The reasons for designation of the River Mease SAC and Rutland Water SPA/Ramsar site, together with current trends in habitat quality and pressures on the sites, are detailed in Chapters 3 and 4.

2. Methodology

Introduction

- 2.1 The HRA has been carried out in the continuing absence of formal central Government guidance, although general EC guidance on HRA does exist⁵. The former DCLG released a consultation paper on the Appropriate Assessment of Plans in 2006⁶. As yet, no further formal guidance has emerged. However, Natural England has produced its own internal guidance⁷, as has the RSPB⁸. These have been referred to, alongside the guidance outlined in Section 1.3, in undertaking this HRA.
- 2.2 Figure 2 below outlines the stages of HRA according to current draft DCLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

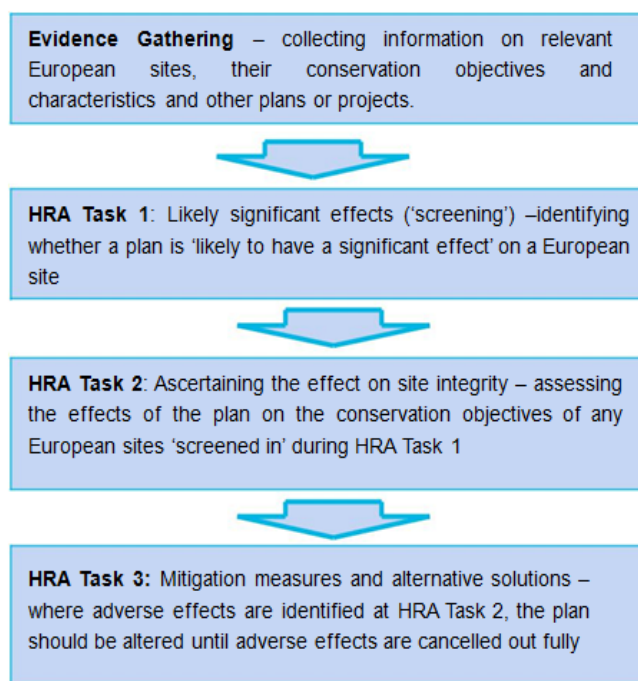


Figure 2: Four Stage Approach to Habitats Regulations Assessment. Source CLG, 2006.

HRA Task 1 – Likely Significant Effects

- 2.3 Following evidence gathering, the first stage of any HRA is a Likely Significant Effect (LSE) test. This is essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

⁵ European Commission. (2001) Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

⁶ CLG. (2006) Planning for the Protection of European Sites, Consultation Paper.

⁷ http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf

⁸ Dodd, A.M., Cleary, B.E., Dawkins, J.S., Byron, H.J., Palframan, L.J. & Williams, G.M. (2007) *The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it*. The RSPB, Sandy.

- 2.4 The objective is to ‘screen out’ those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapters 3 and 4 of this report.
- 2.5 In evaluating significance, AECOM has relied on our professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites.
- 2.6 The level of detail in land use plans concerning developments that will be permitted under the plans will never be sufficient to make a detailed quantification of adverse effects. Therefore, we have again taken a precautionary approach (in the absence of more precise data), assuming as the default position that if an adverse effect cannot be confidently ruled out, avoidance or mitigation measures must be provided. HRA Task 2 – Appropriate Assessment (AA)
- 2.7 Where it is determined that a conclusion of ‘no likely significant effect’ cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that ‘appropriate assessment’ is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to appropriate assessment.
- 2.8 By virtue of the fact that it follows Screening, there is a clear implication that the analysis will be more detailed than undertaken at the Screening stage and one of the key considerations during appropriate assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the appropriate assessment would take any policies or allocations that could not be dismissed following the high-level Screening analysis and analyse the potential for an effect in more detail, with a view to concluding whether there would actually be an adverse effect on integrity (in other words, disruption of the coherent structure and function of the European site(s)).
- 2.9 There has been a very recent decision by the European Court of Justice⁹, which concludes that measures intended to avoid or reduce the harmful effects of a proposed project on a European site, but which are not an integral part of the project or plan, may no longer be taken into account by competent authorities at the Likely Significant Effects or ‘screening’ stage of HRA. The implications of the ECJ ruling are structural, essentially meaning that the role of avoidance and measures should be discussed in the subsequent ‘appropriate assessment’ stage instead.
- 2.10 When discussing mitigation for a Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves, since the Plan document is a high-level policy document.

Principal Other Plans and Projects That May Act ‘In Combination’

- 2.11 In order to fully inform the HRA process, additional relevant plans have been consulted to determine whether any in-combination Likely Significant Effects that could arise from the Leicester and Leicestershire Strategic Growth Plan. These plans were selected because they are the main land use plans located within or adjacent to Leicestershire, and they may also interact with the European sites discussed in this Report. They are:
- North West Leicestershire Local Plan (adopted 2017);
 - Harborough Submitted Local Plan 2011-2031;
 - Nuneaton and Bedworth Submitted Borough Plan 2011-2031;
 - Leicester Core Strategy (adopted July 2014);
 - Rutland Local Plan Core Strategy (adopted 2011);

⁹ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

- South Derbyshire Local Plan Part 1 and Part 2 (adopted 2016 and 2017 respectively);
- Leicestershire Minerals and Waste Local Plan (Submission 2018);
- Derby and Derbyshire Minerals Local Plan (adopted 2000, amended 2002)¹⁰;
- Derby and Derbyshire Waste Local Plan (adopted 2005)⁷; and
- North Northamptonshire Joint Core Strategy (adopted 2016).

¹⁰ Derbyshire is currently producing new Waste and Minerals Local Plans which will supersede those adopted in 2000 and 2005 when complete.

3. Likely Significant Effects: River Mease SAC

Introduction

3.1 The River Mease is a relatively un-modified lowland river which contains a diverse range of physical in-channel features including riffles, pools, slacks, vegetated channel margins and bankside tree cover, providing the conditions necessary to sustain populations of spined loach (*Cobitis taenia*) and bullhead (*Cottus gobio*). The river is also considered to support a significant presence of water-crowfoot (*Ranunculus fluitans*) and water-starwort (*Callitriche* sp.).

Features of European Interest¹¹

3.2 The River Mease qualifies as an SAC due to its classification as a river with floating vegetation often dominated by water-crowfoot. The extensive beds of submerged and floating plants along its length together with sandy sediment provide good habitat opportunities for spined loach, for which the SAC is one of only four known outstanding localities. The site is also considered one of the best areas in the UK for bullhead, and it has a significant presence of both otter (*Lutra lutra*) and white-clawed crayfish.

Conservation Objectives¹²

3.3 The conservation objectives of the SAC are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the favourable conservation status of its qualifying features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and,
- The distributions of qualifying species within the site.

Principal Risks to Site Integrity¹³

3.4 Principal risks to the integrity of River Mease SAC include:

- Water pollution;
- Drainage discharges;
- Inappropriate weirs and dams and other structures within, and adjacent to, the river corridor, thus blocking movement of fish or otter;
- Invasive species;
- Siltation; and

¹¹ JNCC. (2015) Natura 2000 Standard Data Form: River Mease SAC
<http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0030258.pdf>

¹² Natural England Conservation Objectives for River Mease SAC
<http://publications.naturalengland.org.uk/publication/6217720043405312>

¹³ Natural England Site Improvement Plan: River Mease SAC
<http://publications.naturalengland.org.uk/publication/6640857448972288>

- Water abstraction.

Likely Significant Effects of the Plan

- 3.5 The Strategic Growth Plan sets out the total number of dwellings to be developed within the district of North West Leicestershire, through which the River Mease SAC flows. This amounts to 9,620 new dwellings within the period 2011-2031 and provision for these has been made within the current Local Plan and will thus have been considered in the HRA¹⁴ of that plan. From 2031 to 2050 the Strategic Growth Plan identifies that a further 'notional' 9,720 dwellings are likely to be required in that district.
- 3.6 The river is vulnerable to deterioration of water quality from agricultural runoff, direct pollution and discharge of treated sewage effluent. According to the Environment Agency, the current water quality status of the river is either poor or moderate with a target to be good by 2027¹⁵. The river is not currently achieving its target due to rural diffuse pollution and water company point source pollution. Like any river, it is also vulnerable to excessive abstraction for public water supply, particularly at inappropriate times of year.
- 3.7 The main impact pathways through which developments proposed in the Plan could affect the River Mease SAC are therefore water abstraction for public water supply and increased waste water pollution.
- 3.8 As water abstraction for public water supply and increased waste water pollution cannot be screened out at the LSE stage without taking mitigation into account, it is necessary to proceed to Appropriate Assessment to ascertain their potential effects on site integrity (see Section 5).

Likely Significant Effects of Other Plans and Projects

- 3.9 The North West Leicestershire District Local Plan has the potential to result in Likely Significant Effects on River Mease SAC. Appropriate Assessment is therefore required (see Section 5).
- 3.10 Two housing sites allocated in South Derbyshire District Local Plan¹⁶ have been identified as potentially having Likely Significant Effects on River Mease SAC, specifically through the discharge of wastewater. These sites are Acresford Road, Overseal (Policy 23E – 70 dwellings) and Valley Road, Overseal (Policy 23F – 64 dwellings). Appropriate Assessment is therefore required (see Section 5).
- 3.11 Lichfield District Adopted Local Plan Strategy¹⁷ highlights that there is a potential likely increase in pressure on River Mease SAC as a result of population growth within the District. Appropriate Assessment is therefore required (see Section 5). As such, it is not possible to screen out likely significant effects on the River Mease SAC 'in combination' with other plans and projects without taking into account mitigation measures. Therefore, appropriate assessment is required. This is the subject of Chapter 5.
- 3.12 There are no growth estimates for Derbyshire or Staffordshire for the period 2036 to 2050 so an in combination assessment cannot be undertaken except to note that additional housing growth will be required in both South Derbyshire and Lichfield District between 2036 and 2050 and this will put further pressure on water supply and wastewater treatment infrastructure.

¹⁴ https://www.nwleics.gov.uk/files/documents/habitats_regulations_assessment_of_proposed_publication_local_plan_june_2016/Habitat%20Regulations%20Assessment%20of%20proposed%20publication%20Local%20Plan.pdf [Accessed 18 September 2018]

¹⁵ <http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3303/Summary> [Accessed 17 September 2018]

¹⁷ <https://www.lichfielddc.gov.uk/Council/Planning/The-local-plan-and-planning-policy/Resource-centre/Local-Plan-documents/Downloads/Local-Plan-Strategy/Lichfield-District-Local-Plan-Strategy-2008-2029.pdf> [Accessed 07 February 2018]

4. Likely Significant Effects: Rutland Water SPA and Ramsar Site

Introduction

4.1 Rutland Water is a large eutrophic man-made pump storage reservoir created by the damming the Gwash Valley in 1975. The reservoir receives the majority of its water from the Nene (90%) and Welland (10%) Rivers. In general, the reservoir is drawn down in the summer and filled during the autumn and winter months when river levels are high. The lagoons are one of the most important areas for wintering and breeding wildfowl. The reservoir regularly supports internationally important numbers of gadwall (*Anas strepera*) and shoveler (*Anas clypeata*) and nationally important numbers of eight other species of wildfowl.

Features of European Interest¹⁸

4.2 Rutland Water qualifies as an SPA through its populations of wintering birds in general and gadwall and shoveler specifically. The waterfowl assemblage also includes populations of teal (*Anas crecca*), wigeon (*Anas penelope*), tufted duck (*Aythya fuligula*), goldeneye (*Bucephala clangula*), mute swan (*Cygnus olor*), coot (*Fulica atra*), goosander (*Mergus merganser*) and great crested grebe (*Podiceps cristatus*). It is designated as a Ramsar site for the same features, particularly its populations of gadwall, shoveler and mute swan.

Conservation Objectives¹⁹

4.3 The conservation objectives of the SPA are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Principal Risks to Site Integrity²⁰

- Public disturbance;
- Inappropriate water levels;
- Water pollution;
- Invasive species; and
- Fisheries management.

¹⁸ JNCC (2015) Natura 2000 Standard Data Form: Rutland Water SPA
<http://jncc.defra.gov.uk/pdf/SPA/UK9008051.pdf>

¹⁹ Natural England European Site Conservation Objectives for Rutland Water SPA
<http://publications.naturalengland.org.uk/publication/4978639963684864>

²⁰ Natural England Site Improvement Plan: Rutland Water SPA
<http://publications.naturalengland.org.uk/publication/5985520903520256>

Likely Significant Effects of the Plan

- 4.4 Rutland Water is located outside of the County of Leicestershire. The closest Leicestershire districts/boroughs are the District of Harborough and the Borough of Melton. Housing needs highlighted in the Strategic Growth Plan show 10,640 new dwellings are needed in Harborough between 2011 and 2031, and a 'notional' 15,930 between 2031 and 2050. In Melton, 3,720 new dwellings are needed between 2011 and 2031, and a 'notional' 5,320 between 2031 and 2050. Specific areas for this housing have not been allocated within this plan; however strategic areas have been put forward. Within the Borough of Melton, Melton Mowbray has been highlighted as a Key Centre for development. The growth within Market Harborough over the first part of the plan period has been managed within the Harborough Submitted Local Plan 2011-2031. Locations for growth from 2031 to 2050 have not been identified.
- 4.5 The main pathways, or impact mechanisms, through which development could affect Rutland Water are recreational pressure, draw down for public water supply and (possibly) air quality impacts on terrestrial parts of the SPA that provide feeding and roosting locations for SPA birds.
- 4.6 Rutland Water is too far from the main population centres for growth within the District of Harborough and Borough of Melton to affect recreational pressure on the SPA. Although Rutland Water is located 6km from the boundary of Leicestershire, the outskirts of the County are very rural, whereas the Plan sites the majority of housing allocations in more strategic locations, closer to proposed road and rail improvements. Any housing within close proximity of the Leicestershire boundary would therefore be in low quantities, to supply local needs only.
- 4.7 Surface water quality could be affected by development within close proximity of the SPA/Ramsar site. However, this will not apply to any development sites in Leicestershire. Whilst Rutland Water is a core part of the Anglian Water supply network, Anglian Water does not provide the majority of Public Water Supply to Harborough district²¹, which is instead supplied by Severn Trent Water. Anglian Water's Water Resource Management Plan underwent a HRA in 2015 based on a 25 year strategy (to 2040). Since that time a revised Water Resource Management Plan (2019) has been produced, which extends the period of coverage to 2045. Likely Significant Effects were assessed for Rutland Water SPA/Ramsar site as part of their water supply network; conclusions stated "*Water transfer from Wing which is fed by Rutland Water will be within existing consent limits. Furthermore mitigation measures have been carried out with the construction of new lagoons to avoid impacts from a further decrease in the reservoir water levels due to increased abstraction. Likely significant effects are not reasonably foreseeable*"²². It is therefore unlikely that any development within the catchment of Anglian Water will adversely affect Rutland Water SPA/Ramsar site to 2045. Since Anglian Water have not planned as far ahead as 2050 it is not possible to provide a definitive analysis for the period 2045 to 2050. However, since Anglian Water supplies only a small part of Harborough district it is likely that further growth will not place undue pressure on their supply network during this remaining 5 year period.
- 4.8 Areas of terrestrial habitat within the SPA boundary could be used by SPA waterfowl as feeding, roosting and loafing areas. These areas could theoretically be vulnerable to elevated nitrogen deposition from vehicular traffic on roads that lie within 200m of the SPA. This could in turn affect their habitat structure (and thus usability by SPA waterfowl) if there were no other major influences on that structure. However, the only such habitat that lies within 200m of a road is closely mown grassland (regular mowing will more than offset the relatively subtle influence of air quality on structure). Furthermore, the road in question (the A606 north of the SPA/Ramsar site to the west of Barnsdale Country Club) does not provide a realistic link between any of the population centres of the County and any likely major employment locations outside the district.

²¹ Water from Rutland Water is drawn off at the Raw Water Pumping Station which serves the existing Wing Water Treatment Works 8km away. From Wing about half the treated water flows by gravity to Peterborough and the remainder is pumped 15km to Beanfield Reservoir near Corby. A further pumping station at Beanfield transfers part of the inflow another 19km to Hannington Reservoir in Northampton serving the southern part of the supply zone.

²² http://www.anglianwater.co.uk/assets/media/2015_WRMP_HRA_Main_Report.pdf [Accessed 18th September 2018].

Likely Significant Effects of Other Plans and Projects

- 4.9 Analysis of other plans and projects becomes of particular relevance where impact pathways exist between development in a particular area and a European site, but the contribution of the Strategic Plan in that area is small. The Rutland District Core Strategy and Harborough Submitted Local Plan 2011-2031 (the closest Leicestershire District to the SPA) concluded that it would have no in combination LSE on Rutland Water SPA/Ramsar site. There are no local development plans that cover the period from 2036-2050 so further assessment for this period is not possible.
- 4.10 However, in the case of Harborough District, no realistic impact pathways have been identified to Rutland Water SPA/Ramsar site. It therefore follows that there would be no in combination adverse effect as a result of the Strategic Growth Plan. This European site does not therefore need further discussion in Chapter 5.

5. Appropriate Assessment of River Mease SAC

- 5.1 Examination in Section 3 indicated that developments proposed by the Strategic Growth Plan have the potential to result in Likely Significant Effects on River Mease SAC, both in isolation and in combination with developments proposed by the North West Leicestershire District Local Plan, the South Derbyshire District Local Plan and the Lichfield District Adopted Local Plan Strategy, and any further growth plans produced by those authorities covering the period 2036-2050. The impact pathways through which these developments could detrimentally affect River Mease SAC are water abstraction for public water supply and increased waste water pollution. These pathways are inherently 'in combination' given that multiple authorities are involved and therefore the following appropriate assessment focusses primarily on 'in combination' effects.
- 5.2 The Strategic Growth Plan is a high level document setting out large scale growth areas. This particularly applies to the period 2036-2050. Therefore, this analysis is similarly high-level; assessment of potential allocations would then need to be undertaken by each district council for their Local Plans. Likely Significant Effects could potentially occur due to increased levels of pollution from waste water treatments works (WwTW) due to increased levels of effluent being treated. Any development within the River Mease SAC catchment area would have to evidence that it will avoid adverse effects upon the integrity of the SAC.
- 5.3 Growth within North West Leicestershire District (within which the River Mease SAC sits) up to 2031 has been allocated and assessed within the North West Leicestershire District Local Plan and therefore has had a plan level HRA.
- 5.4 The Local Plan has a policy specific to retaining the integrity of the River Mease SAC. Local Plan Policy En2 – River Mease Special Area of Conservation²³ states:

“The Council will work with Natural England, the Environment Agency, Severn Trent Water, other local authorities and the development industry to improve the water quality of the river Mease Special Area of Conservation.

In order to achieve this, new development within the River Mease catchment will be allowed where:

(a) There is sufficient headroom capacity available at the Wastewater Treatment Works to which it is proposed that flows from the development will go; and

(b) The proposed development is in accordance with the provisions of the Water Quality Management Plan including, where appropriate, the provision of infrastructure or water quality improvements proposed in the Developer Contributions Scheme.

In the event that there is no headroom capacity available at the appropriate wastewater treatment works, or there is no capacity available within the Developer Contributions Scheme in operation at the time that an application is determined, or exceptionally where as part of the development it is proposed to use a non-mains drainage solution for the disposal of foul water and this is supported by the Environment Agency, development will only be allowed where it can be demonstrated that the proposed development, on its own and cumulatively with other development, will not have an adverse impact, directly or indirectly, upon the integrity of the river Mease Special Area of Conservation.”

- 5.5 Local Plan Policy En2 mentions a Restoration Plan and Water Quality Management Plan²⁴ which has been put in place by North West Leicestershire District Council and is supported by a

²³

https://www.nwleics.gov.uk/files/documents/adopted_local_plan_2011_20312/Adopted%20Written%20Statement.pdf [Accessed 24 January 2018].

Developer Contributions Strategy²⁵ which states that “*all new development with a net increase in wastewater to mains drainage will mitigate and compensate for nutrients entering the river, equivalent to the relative contributions of phosphate as a result of development and which will benefit the river as a whole*”. Together with the Policy En2, this means any development which could potentially have LSE on the SAC in terms of water quality would either not be granted or would be required to make a financial contribution towards measures to improve water quality. The plan only covers the period to 2031. In order to avoid adverse effects on the integrity of the SAC it would therefore be necessary for these protective policies to also be included in any Local Plans produced for North West Leicestershire District covering the period 2031 to 2050.

- 5.6 In addition to the existing initiatives that are underway to protect the water quality of the River Mease, at the strategic (county) level, the opportunity should also be taken in planning further growth to ensure through Local Plan policy and a Water Cycle Study (WCS), that development is directed to those areas with appropriate treatment capacity and facilities are provided before further growth within relevant WwTW catchments is actually committed.
- 5.7 Severn Trent Water has predicted a shortfall in water supply by the end of their Water Resource Management Plan (WRMP) period, which extends past the Leicester and Leicestershire Strategic Growth Plan period to 2045. A loss of 40Ml/d within the Strategic Grid zone would be expected in the absence of solutions, due to reductions in environmentally unsustainable abstraction in order to comply with the Habitats Directive. Severn Trent’s strategy to make up for this loss focuses on schemes including reducing leakage, improving aquifer storage and recovery, increasing Draycote reservoir capacity and implementing flow augmentation schemes. None of these schemes are understood to involve abstraction from the River Mease. As such, public water supply solutions will not have LSE on the River Mease SAC. Since Severn Trent Water have not planned as far ahead as 2050 it is not possible to provide a definitive analysis for the period 2045 to 2050. However, given the known constraints posed by the River Mease SAC it is unlikely that any further resources identified by Severn Trent Water for the period 2040-2045 would involve increased abstraction from the River Mease. This would need to be verified when the next review of the Water Resource Management Plan is produced and the outcome of that review taken into account when preparing Local Plans for the period 2045-2050.
- 5.8 Although specific housing allocations are not present within the Strategic Growth Plan it should be noted that an adverse impact could arise should a development be allocated inappropriately in relation to the River Mease SAC. For example, development located inappropriately close to the river could block passage of otter and therefore detrimentally affect the integrity of the SAC. Given the rural setting of the SAC, sites within 100m of the SAC should be avoided when allocating housing and employment sites (unless the latter are specifically river-dependent and appropriate for the setting). The exception would be within the existing settlement of Measham, which already has housing within 100m of the SAC. Given the rural nature of the SAC this restriction should not pose a significant constraint to housing and employment development in the District. This should be taken into account by the District councils when allocating their sites within the Local Plans.
- 5.9 With regard to authorities outside Leicestershire, South Derbyshire District Adopted Local Plan²⁶ has identified two housing sites which require developer contributions to be paid to mitigate impacts on the River Mease SAC. However, as contributions will be used to mitigate impacts on the SAC, the Plan concluded that development within South Derbyshire would not adversely impact the integrity of the River Mease SAC. The Local Plan has a specific policy relating to development which may affect the integrity of the SAC, Policy NR8: River Mease Special Area of Conservation, which states that:

²⁴ <http://www.rivermease.co.uk/wp-content/uploads/2015/04/River-Mease-WQMP.pdf> [Accessed 17 September 2018].

²⁵ https://www.nwleics.gov.uk/files/documents/river_mease_sac_developer_contribution_strategy1/River%20Mease%20DCS.pdf [Accessed 17 September 2018].

²⁶ <https://www.south-derbys.gov.uk/our-services/planning-and-building-control/planning/planning-policy/local-plan/adopted-local-plan> [Accessed 07 February 2018]

“Development will only be permitted where it can be demonstrated that it will not be likely to lead directly or indirectly to an adverse effect upon the integrity of the Mease Special Area of Conservation (SAC).

Development that falls within the water catchment of the Mease SAC will require an assessment under the Habitat Regulations. Ongoing work to outline the pressures on the SAC has identified damage is currently being caused by poor water quality, exacerbated by pollution, run-off, siltation, abstraction, invasive non-native species. Development especially that which increases the stress on sewage treatment works or increases the level of phosphate in the watercourse would make matters worse. Evidence has shown mitigation of effects is possible by investment in sewage treatment works, habitat management, access management, provision of sustainable drainage techniques, publicity, education and awareness raising.

The effective avoidance and/or mitigation of any identified adverse effects must be demonstrated and secured prior to approval of development and on-going monitoring of impact on the SAC will be required. Developments outside the water catchment may be required to demonstrate that they will have no adverse effect on the integrity of the SAC.”

- 5.10 Development of a Spatial Strategy within the South Derbyshire Local Plan has been under taken to minimise the amount of development affecting the SAC and further schemes will be developed during the life of the Local Plan to deliver an improvement to the condition of the SAC, which aligns with Core Policy 13: Our Natural Resources states that *“The District will seek to deliver an overall net gain or biodiversity within the Lichfield District... In circumstances where the effects upon biodiversity are not within a development site and there is potential to mitigate for the impacts arising from the development off-site, a financial contribution to deliver mitigation may be appropriate. This is particularly relevant to consideration of impacts upon the River Mease SAC and Cannock Chase SAC.*
- 5.11 All three local authorities (South Derbyshire, Lichfield and North West Leicestershire) have joined together with Natural England, the Environment Agency, Trent Rivers Trust and Severn Trent Water to create the River Mease Partnership²⁷. The partnerships’ main aim is to reduce the levels of phosphate within the River Mease SAC through positive action to enable the Conservation Objectives for the SAC to be met. With the Developer Contribution Scheme in place through the Local Plans, they have created the River Mease SSSI/SAC Restoration Plan²⁸ to put in place the mitigation and enhancements for which the developer contribution scheme pays.
- 5.12 As such, it is considered that provided the existing initiatives to protect water quality in the River Mease are continued, there is a sufficient policy mechanism in place to ensure that there would be no adverse effect on integrity of the SAC, either alone or in combination with other projects and plans.

²⁷ <http://www.rivermease.co.uk/about/> [Accessed 08 February 2018]

²⁸ <http://www.rivermease.co.uk/wp-content/uploads/2015/04/River-Mease-Restoration-Plan.pdf> [Accessed 08 February 2018]

6. Conclusions

- 6.1 The Strategic Growth Plan is a high level document setting out large scale growth areas rather than specific housing sites for which LSE and adverse effects on integrity can be assessed.
- 6.2 However, it can be concluded that no LSE will occur within the Rutland Water SPA/Ramsar site as strategic areas of growth are outside of the core catchment areas for recreational pressure on the SPA/Ramsar site. The concepts and growth areas set out within the Strategic Plan are to be put in place through the current and upcoming Local Plans. The Harborough Local Plan (closest Leicestershire District and growth area) has previously had a HRA and concluded no LSE on the SPA/Ramsar site. It has also been concluded within the Rutland District Core Strategy that there would be no LSE 'in combination'.
- 6.3 Likely Significant Effects could potentially occur within the River Mease SAC due to increased levels of pollution from waste water treatments works (WwTW) due to increased levels of effluent being treated and due to increased abstraction. This was therefore subject to appropriate assessment. Any development within the River Mease SAC catchment area would have to evidence that it will avoid adverse impacts upon the integrity of the SAC. The appropriate assessment concludes that there is currently a detailed multi-authority strategy underway to protect water quality of the River Mease and provided this continues no adverse effects on integrity are forecast. It is recommended that this strategy is continued into future Local Plan revisions for the three relevant authorities (North West Leicestershire, Lichfield and South Derbyshire). The North West Leicestershire Local Plan has a protective policy framework already in place. In order to avoid adverse effects on the integrity of the SAC it would be necessary for these protective policies to also be included in any Local Plans produced for North West Leicestershire District covering the period 2031 to 2050.
- 6.4 Severn Trent Water have not yet planned for the period 2045-2050 so that it is not possible to provide a definitive analysis of abstraction risk for that five year period. However, given the known constraints posed by the River Mease SAC it is unlikely that any further resources identified by Severn Trent Water for the period 2040-2045 would involve increased abstraction from the River Mease. This would need to be verified when the next review of the Water Resource Management Plan is produced and the outcome of that review taken into account when preparing Local Plans for the period 2045-2050.
- 6.5 A recommendation is made for caution in allocating new housing and employment development within proximity to the River Mease SAC and in general it is recommended that no new housing is allocated within 100m of that SAC as part of long-term growth plans for the county, unless it involves employment development that is both river dependent and appropriate, or is located within the existing settlement of Measham that is already situated within 100m of the River Mease.
- 6.6 It is further recommended that a Water Cycle Study (WCS) will inform the allocation of future development in Leicester and Leicestershire and in particular ensure that appropriate treatment capacity/facilities are provided before any growth allocated to relevant WwTW catchments is delivered.
- 6.7 In conclusion, provided these recommendations are taken into account it is considered that no adverse effects on integrity will arise on any European sites from the Strategic Growth Plan, either alone or in combination with other plans and projects.

Leicester and Leicestershire Strategic Growth Plan (Final Report)

Sustainability Appraisal Report

September, 2018

REVISION SCHEDULE

Rev	Date	Details	Prepared by	Reviewed by	Approved by
1	September 2017	Interim SA Report for Leicester and Leicestershire Strategic Planning Group (Alternatives assessment findings)	Ian McCluskey Principal Sustainability Consultant Matthew Stopforth Planning Consultant	Ian McCluskey Principal Sustainability Consultant	Alan Houghton Regional Director
2	January, 2018	Draft SA Report	Ian McCluskey Principal Sustainability Consultant	Mark Fessey Principal Consultant	Alan Houghton Regional Director
3	February 2 nd , 2018	Final SA Report	Ian McCluskey Principal Sustainability Consultant	Mark Fessey Principal Consultant	Alan Houghton Regional Director
4	September 12 th 2018	Updated SA Report for Strategic Planning Group review	Ian McCluskey Principal Sustainability Consultant	Ian McCluskey Principal Sustainability Consultant	Frank Hayes Associate Director
5	September 26 th	Final SA Report	Ian McCluskey Principal Sustainability Consultant	Ian McCluskey Principal Sustainability Consultant	Frank Hayes Associate Director

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Appendix A: Scoping Report



1 Introduction

1.1 Background

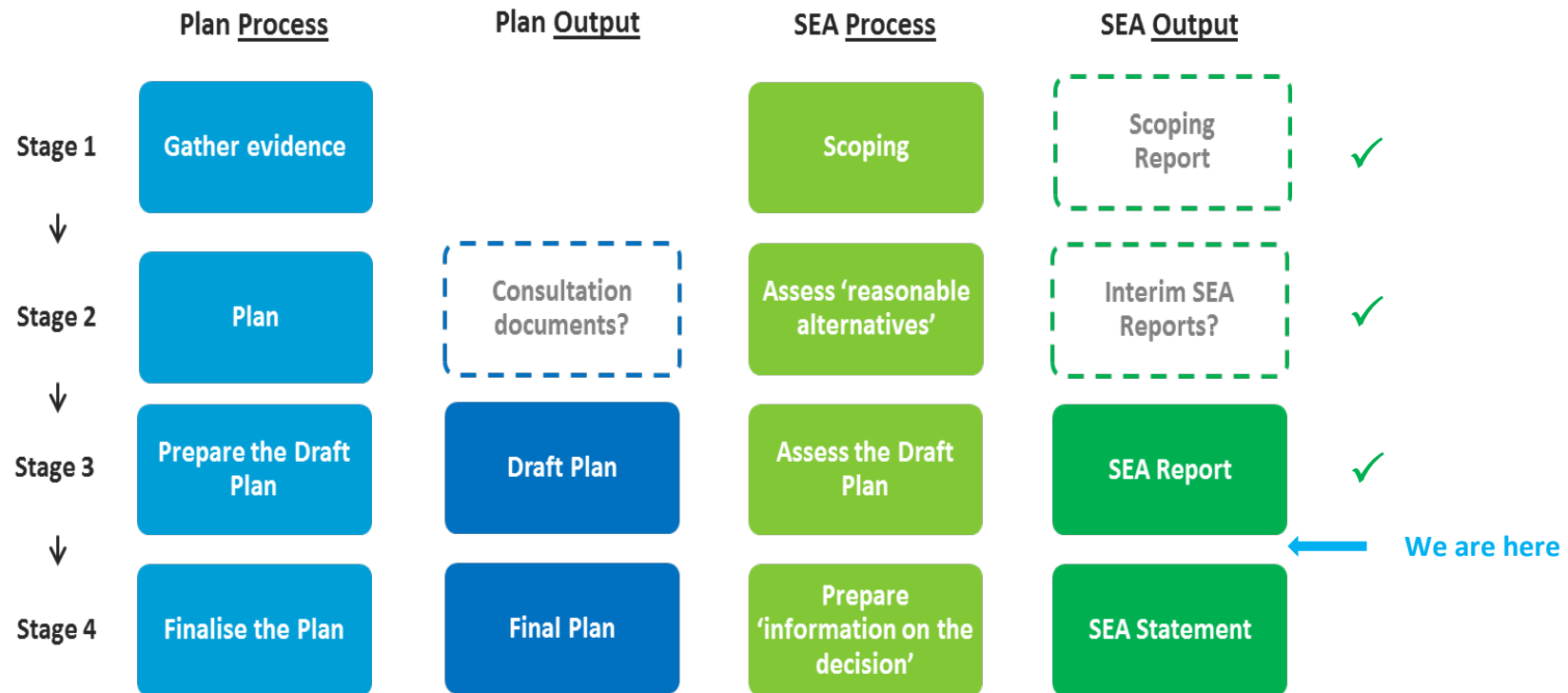
- 1.1.1 AECOM are independent consultants with specialisms in environmental and sustainability assessment. We have been commissioned by The Leicester and Leicestershire Councils and the Local Enterprise Partnership to prepare a Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) and Habitat Regulations Assessment (HRA) for the Leicester and Leicestershire Strategic Growth Plan.
- 1.1.2 The Strategic Growth Plan will set out a broad framework for development across the whole of the County of Leicestershire, and the City of Leicester, focusing on the period up to 2050. Local Plans will be the primary delivery mechanism for the Strategic Growth Plan ('the Plan'), and this is where the key decisions will be made about the specific development opportunities that will help to deliver the Plan.
- 1.1.3 The SA/SEA has addressed key elements of the Plan including:
- Scale of growth for housing and employment land;
 - Spatial distribution of growth;
 - Major infrastructure requirements; and
 - Environmental protection.
- 1.1.4 This document is an SA Report that describes the processes that have been undertaken as part of the SA/SEA Process.

1.2 Summary of the SEA/SA process

- 1.2.1 Strategic Environmental Assessment (SEA) is a statutory process that must be carried out when a plan, policy or programme is considered likely to have significant effects on the environment.
- 1.2.2 In the case of the Strategic Growth Plan (which sets the framework for future Local Plans) an SEA is determined to be necessary. However, to ensure that social and economic factors are also taken into consideration, it has been considered beneficial to undertake a sustainability appraisal (SA), which covers a wider range of factors including social and economic factors.
- 1.2.3 Sustainability Appraisal (SA) is a process for helping to ensure that plans, policies and programmes achieve an appropriate balance between environmental, economic and social objectives. The process that is followed incorporates the requirements of an SEA.

- 1.2.4 SA should help to identify the sustainability implications of different plan approaches and recommend ways to reduce any negative effects and to increase the positive outcomes.
- 1.2.5 SA is also a tool for communicating the likely effects of a Plan (and any reasonable alternatives), explaining the decisions taken with regards to the approach decided upon, and encouraging engagement from key stakeholders such as local communities, businesses and plan-makers.
- 1.2.6 Although SA can be applied flexibly, it contains legal requirements under the 'Environmental Assessment of Plans and Programmes Regulations 2004' (which were prepared in order to transpose into national law the EU Strategic Environmental Assessment (SEA) Directive).
- 1.2.7 The regulations set out prescribed processes that must be followed. In particular the Regulations require that a report is published for consultation alongside the draft plan that 'identifies, describes and evaluates' the likely significant effects of implementing 'the plan, and reasonable alternatives'. The SA/SEA report must then be taken into account, alongside consultation responses when finalising the plan.
- 1.2.8 Though the Strategic Growth Plan is not a statutory document, it has the potential to have significant effects upon the environment, communities and economy. Therefore, it is considered necessary and beneficial to undertake a sustainability appraisal that meets the requirements of the SEA Regulations.
- 1.2.9 SA/SEA can be viewed as a four-stage process that produces a number of statutory and non-statutory outputs. As illustrated in Figure 1.1 below, 'Scoping' is a mandatory process under the SEA Directive, but the publication of a scoping report is a voluntary (but useful) output.
- 1.2.10 Figure 1.1 shows that we are at the latter stages of the process. A final Plan has been prepared, and this SA Report, documents the process and findings of the SA. However, in the context of the SEA Regulations, the plan is only 'final' once it has been approved (or Adopted for statutory Local plans for example). At this stage, an SEA statement is prepared.

Figure 1.1: SA/SEA as a four stage process



1.3 Schedule of compliance

Schedule 2 requirements	Evidence
<p><i>An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.</i></p>	<p>Presented in full within the updated Scoping Report attached at Appendix A.</p> <p>Section 1.5 presents the Plan area.</p> <p>Section 7 outlines the main objectives and principles of the Plan.</p>
<p><i>The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.</i></p>	<p>Presented in full within the updated Scoping Report attached at Appendix A.</p> <p>Summarised within the appraisal tables throughout Section 6</p>
<p><i>The environmental characteristics of areas likely to be significantly affected.</i></p>	<p>Presented in full within the updated Scoping Report attached at Appendix A.</p> <p>Summarised within the appraisal tables throughout Section 6</p>
<p><i>Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds(a) and the Habitats Directive.</i></p>	<p>Presented in full within the updated Scoping Report attached at Appendix A.</p> <p>Summarised within the appraisal tables throughout Section 6</p>
<p><i>The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.</i></p>	<p>Presented in full within the updated Scoping Report attached at Appendix A.</p>

Schedule 2 requirements	Evidence
<p><i>The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects.</i></p>	<p>The effects associated with the reasonable alternatives are presented in section 6.</p> <p>The effects associated with the draft Plan are presented in Section 7, including cumulative effects.</p>
<p><i>The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.</i></p>	<p>Recommendations are presented for each sustainability topic within Section 7.</p>
<p><i>An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.</i></p>	<p>Section 3 sets out the rationale for selecting alternatives.</p> <p>Section 4 sets out the appraisal methodologies including difficulties.</p> <p>Section 6.4 presents the outline reasons for the selection of the draft spatial strategy in light of reasonable alternatives.</p> <p>Section 6.5 presents the outline reasons for the selection of the Final spatial strategy in light of reasonable alternatives.</p>
<p><i>A description of the measures envisaged concerning monitoring in accordance with regulation 17.</i></p>	<p>Table 7.2</p>
<p><i>A non-technical summary of the information provided under paragraphs 1 to 9.</i></p>	<p>Separate document prepared.</p>

1.4 Report structure

1.4.1 The report is structured as follows:

Section 2: Scoping

This part of the report sets out a summary of the scope of the SA, which is contained in detail in a separate Scoping Report.

Section 3: Description of the options

This part of the report sets out the options that have been established by the Strategic Planning Group as part of the early stages of plan-making. It describes the assumptions behind each option, and how this translates into growth across the HMA. Understanding the options is fundamental in being able to undertake a robust and meaningful sustainability appraisal.

Section 4: Methodology

This part of the report sets out the methodology to aid in the understanding of the appraisal process.

Section 5: Appraisal findings

This part of the report sets out the detailed appraisal tables for each of the sustainability topics.

Section 6 – Summary of appraisal findings

This part of the report sets out a summary of the options appraisal findings.

Section 7 – Appraisal of the Plan

This part of the report sets out an appraisal of the Plan ‘as a whole’, taking into account the spatial strategy and supporting measures.

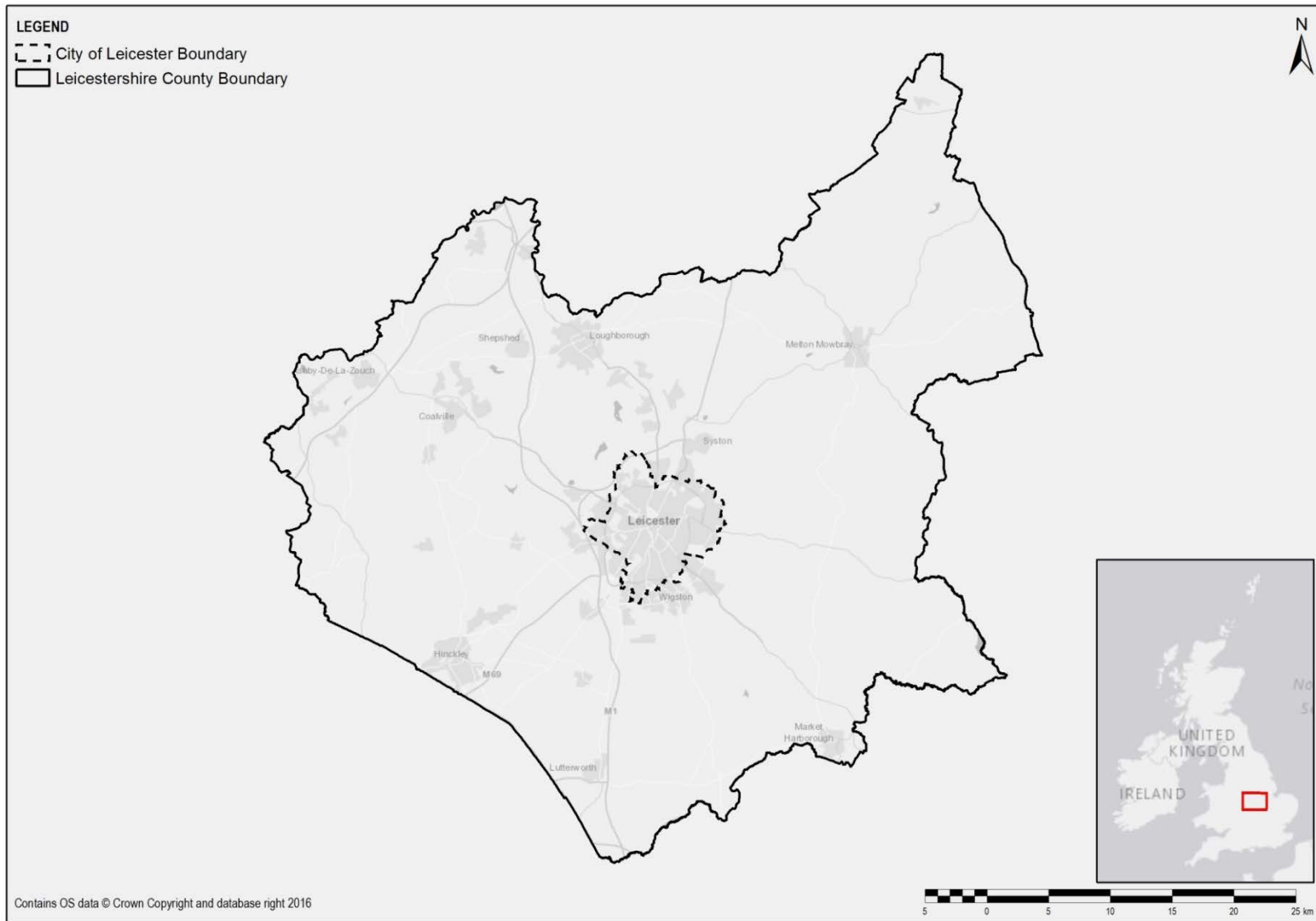
Section 8 – Next Steps

This last part of the report sets out how to make comments on the SA Report and what the key stages in the process will be going forward.

1.5 The Plan area

1.5.1 The Strategic Growth Plan covers the whole of the County of Leicestershire and the City of Leicester. This is shown in Figure 1.2.

Figure 1.2 : The Plan Area



2 Scoping

2.1 Background

- 2.1.1 The Scoping stage of the SA process is designed to establish the key issues that should be the focus of the appraisal, as well as proposing the assessment methodologies.
- 2.1.2 A Scoping Report was prepared and published for consultation with the three statutory bodies (Historic England, Environment Agency, Natural England) between August 25th, 2017 and September 29th, 2017. Following consideration of the comments received, the scope of the SA was 'determined' and has provided the baseline position against which appraisals have been undertaken.
- 2.1.3 It should be noted that the scope of the SA is fluid and has been updated throughout the plan making process in light of new evidence. The scope of the SA is presented in full within a separate scoping report (attached as **Appendix A**).
- 2.1.4 The scoping exercise involved gathering information about the baseline information relating to a range of sustainability factors. A review of relevant plans, policies and programmes was also undertaken in relation to each topic to identify key principles and sustainability objectives that ought to be taken into consideration in the SA process.
- 2.1.5 Drawing together all this information allowed a series of key issues to be identified, which formed the basis of the development of an SA Framework (a series of objectives and criteria for assessing the effects of the Strategic Growth Plan). The key issues and thirteen sustainability objectives are summarised in this section of the SA report. The full SA Framework can be found in the Scoping Report at **Appendix A**.
- 2.1.6 **Table 2.1** below sets out the sustainability topics that were identified within the scoping report, the associated key issues, and the corresponding sustainability objectives. Where a decision was made that topics could be 'scoped out' of the SA, no SA objectives were developed.

Table 2.1: Sustainability topics and corresponding SA Objectives

Key issues	SA Objective
<p>Biodiversity and geodiversity</p> <p>The County has a relatively low level of designated biodiversity sites. However, these are in a mostly favourable or recovering position.</p> <p>Opportunities to strengthen ecological networks should therefore be taken advantage of.</p> <p>The quality of water could affect a range of biodiversity habitats and species across the Plan area, making strategic river networks an important feature to protect, maintain and enhance.</p>	<p>1. Create new, protect, maintain and enhance habitats, species and ecological networks.</p>
<p>Health and wellbeing</p> <p>The population is aging, with impacts for the delivery of health services.</p> <p>Another key issue due to a rising ageing population is the provision of sufficient and appropriate housing within the HMA / districts.</p>	<p>2. Maintain and improve levels of health, whilst reducing health inequalities</p>
<p>Housing</p> <p>There is a need to meet needs for housing as identified in the HEDNA (2017). In some districts it may be difficult to meet full needs 'locally' (i.e. within the district it arises). This could necessitate housing needs for some districts being met in other parts of the HMA.</p> <p>Housing affordability is an issue across the HMA.</p> <p>There is an increasing need to provide housing suitable for an ageing population.</p>	<p>3. Secure the delivery of high quality, market and affordable homes, to meet Objectively Assessed Need.</p>

Key issues	SA Objective
<p>Employment and economy</p> <p>The County is well positioned for growth in the strategic distribution sector; though there is a need to identify the appropriate distribution of growth opportunities.</p> <p>Unemployment rates are falling across the HMA, though remain the highest within the city.</p>	<p>4. Support the continued growth and diversification of the economy.</p>
<p>Transport and travel</p> <p>Accessibility to services, facilities and jobs is poor in rural areas.</p> <p>Access to strategic employment sites by public transport is not ideal.</p> <p>There may be constraints to the amount of development that can be accommodated on the edge or near the Leicester urban area in light of congestion along parts of the orbital road network.</p>	<p>5. Improve accessibility to services, jobs and facilities by reducing the need to travel, promoting sustainable modes of transport and securing strategic infrastructure improvements.</p>
<p>Though generally good, air pollution presents an issue in some parts of the Plan area, typically within areas that suffer from higher levels of traffic and congestion.</p>	<p>6. Minimise exposure to poor air quality, whilst managing contributing sources.</p>
<p>Climate change</p> <p>There are opportunities to increase the amount of low carbon and renewable sources of energy above the relatively low baseline position.</p>	<p>7. Contribute to a reduction in greenhouse gas emissions and an increase in the use of low carbon energy.</p>

Key issues	SA Objective
<p>Landscape and land</p> <p>There are parcels of high quality agricultural land throughout the district that should be protected given the relatively low amount of Grade 1 and 2 lands present.</p> <p>No nationally designated landscapes are present, but there are a variety of important landscapes which are important to the character of the countryside, preventing urban sprawl and supporting the natural environment. Whilst these are in relatively good condition, there are increasing pressures from development that need to be managed.</p>	<p>8. Protect, maintain and enhance landscapes whilst promoting their value to sustainable growth.</p> <p>9. Protect high quality agricultural land from permanent development.</p>
<p>Cultural heritage</p> <p>There is a wealth and variety of heritage features, many of which are designated for their heritage value. It will be important to protect the condition and setting of these assets.</p> <p>There may be cross border heritage assets.</p> <p>Though the number of ‘at risk’ heritage assets has decreased slightly from 2015-2017, the majority of heritage assets that remain on the ‘at risk’ register are declining in condition.</p>	<p>10. Conserve and enhance the historic environment, heritage assets and their settings.</p>

Key issues	SA Objective
<p>Water</p> <p>The quality of many water resources across the Plan area is in need of improvement, yet could come under increased pressure from new development.</p> <p>SUDs should be encouraged to support the natural and sustainable management of water resources.</p> <p>There are locations across the Plan area sensitive to and at risk of flooding (which could be exacerbated by climate change). There is a need to ensure that future development does not put more people at risk of flooding whilst ensuring that overall levels of flooding do not increase. This could/should constrain development in some areas, such as the flood plains of the River Soar and watercourses leading to and through Leicester City.</p>	<p>11. Steer development away from the areas at the greatest risk of flooding, whilst supporting schemes that reduce the risk and impacts of flooding.</p> <p>12. Protect, maintain and enhance the quality of water resources.</p>
<p>Waste and minerals</p> <p>Levels of recycling, reuse and composting are relatively high, and rates continue to improve. There has also been a general decrease in the amount of waste per capita.</p> <p>Growth in housing and employment is likely to generate more waste in terms of the overall volume. However, improved efficiency and continued drives to reduce the amount of waste sent to landfill should help to reduce the amount of waste generated per capita.</p> <p>There are mineral resources across the County, some of which could be sterilised by development. It is important to protect such reserves from sterilisation.</p>	<p>Waste – Scoped out. The trends are generally positive, and the planning for growth ought to be managed through the Leicester and Leicestershire Waste Plans.</p> <p>13. Protect mineral resources from sterilisation, and support their sustainable extraction.</p>

3 Description of the options

3.1 Background

- 3.1.1 The growth and distribution of development is a central element to the Strategic Growth Plan. It is therefore important to identify how development can be delivered most appropriately to meet the aims and objectives of the Plan in a sustainable manner.
- 3.1.2 The Leicester and Leicestershire Strategic Planning Group (consisting of representatives from all authorities) established a range of options for the growth and distribution of housing, making use of emerging evidence and existing work on Local Plans as a starting point. These options were tested in the SA and consulted upon in an interim SA Report.

Amount of growth

- 3.1.3 The first reasonable alternative for housing quantum is based on an extrapolation of objectively assessed needs (OAN) for the period 2011-2036. This would equate to an indicative requirement for new homes over the period 2031-2050 of 4,764 dwellings per annum (approximately 90,500 homes).
- 3.1.4 A higher target (20% more than projected OAN) has also been established to account for greater flexibility in achieving housing delivery and to support greater economic growth aspirations.
- 3.1.5 A lower level of growth than the projected OAN is considered to be an unreasonable alternative by the Strategic Planning Group because Government policy is clear that the OAN for the HMA as a whole must be accommodated unless it has been demonstrated that is not possible. The Strategic Planning Group considered that, while there are constraints within and across the HMA, these were not of such scale and importance, either individually or collectively, to prevent the OAN from being accommodated in a sustainable way.
- 3.1.6 The Strategic Planning Group take the view that the relative volatility of economic forecasting makes it inappropriate to simply extrapolate to 2050 an estimate of employment land requirements based on those established to 2031 and 2036 by the currently available evidence. As such there is no fixed assumption about the amount of employment land that may be required over the 2031-2050 period. However, it is reasonable to assume that the distribution of employment growth will reflect the view taken on the 'central city' role of the City of Leicester, on the likely continued creation of job opportunities at key locations referenced in the Midlands Engine Strategy and on the influence of infrastructure-related economic generators as referenced in the Midlands Connect Strategy. This is reflected in the distribution options as outlined below.

Housing distribution

- 3.1.7 The Strategic Planning Group established a range of options for the distribution of development. This work has been influenced by a range of factors including emerging evidence on growth opportunities, progress on individual authorities' Local Plans to 2031 or 2036, and options explored and tested as part of the Local Plan processes for each authority.
- 3.1.8 Development has already started in key locations and it makes sense to complete these works.
- 3.1.9 Several of the key economic generators and academic institutions are in fixed locations and it may be desirable to co-locate new investment where they can build upon existing facilities. Therefore, these existing frameworks have formed the starting point so that the Strategic Growth Plan will be a natural evolution of current policies and proposals, amended, developed, enhanced and justified with reference to the emerging evidence base.
- 3.1.10 The spatial options focus on the possible locations for the delivery of strategic sites, whether in the form of Sustainable Urban Extensions (SUEs), expanded or new settlements. Eight broad strategies were identified as follows, with the expectation that the final strategy would involve a combination of these approaches:
1. Urban intensification
 2. Sustainable urban extensions
 3. Urban concentration
 4. Concentration on key settlements
 5. Dispersed growth
 6. New settlements
 7. Employment-led
 8. Growth corridors
- 3.1.11 Taking these broad spatial approaches into account, six options were established setting out the amount of growth that would be distributed to key locations across the Plan area. Each of the options involve differing levels of housing growth in each area to represent a greater or lesser focus on each of the broad strategies. Assumptions about the distribution of employment are identified for each of the options, with an emphasis on key strategic locations supported by the expansion of existing employment sites.
- 3.1.12 These options are considered to be reasonable because, without over-emphasis on any individual one, they incorporate a range of the available options and have regard to the policy objective of delivering an increased proportion of growth on strategic sites.

Option 1: Emphasise development in and immediately around the built framework of Leicester, with growth elsewhere constrained.

- 3.1.13 This alternative would involve a focus on the options of urban intensification and urban concentration; it would require the provision of housing on underused sites, but also on some sites currently in employment use and other sites that are undeveloped, including open spaces within the urban area.
- 3.1.14 There should be an assumption that the density of development will increase, both within but also adjacent to the built framework of the city. The option would look to expand existing Sustainable Urban Extensions (SUEs) and/or to introduce new SUEs on the edge of the built area.
- 3.1.15 Housing to be dispersed elsewhere would be numerically less than that planned for over the period 2011-2031. The amount of housing growth at the market towns, at other key settlements and in the rural area would be constrained.
- 3.1.16 The option of providing a new settlement would not be pursued. The emphasis on housing in and around Leicester would make it necessary to accommodate a greater proportion of employment growth in other locations, with the potential for job growth most likely to arise in the market towns or on new or expanded freestanding employment sites.

Option 2: Emphasise development in and immediately around the market towns of Coalville, Hinckley, Loughborough, Market Harborough and Melton Mowbray, with growth elsewhere constrained.

- 3.1.17 This alternative would involve a focus on the option of concentration on key settlements, namely the established market town settlements.
- 3.1.18 The availability of redevelopment sites within these towns is very unlikely to meet the level of growth required, although delivery on any sites identified should be assumed at an increased density (an element of urban intensification). The assumption must be that most development would be delivered via a number of SUEs around the market towns.
- 3.1.19 The housing growth within Leicester itself would proceed at a level beneath that currently identified as representing the likely development capacity. Housing growth beyond the built-up area of the city and in the rural areas would be limited. The option of providing a new settlement would not be pursued.
- 3.1.20 Under this alternative there would be scope to emphasise the employment-generating potential of Leicester, with the growth in jobs being significantly greater than that possible under alternative 1. The potential for job growth on new or expanded freestanding employment sites would remain.

Option 3: Emphasise development in the vicinity of known economic growth areas and associated infrastructure investment, with growth elsewhere constrained.

- 3.1.21 This alternative would involve a focus on the option of employment-led growth, linked to the option of growth corridors where there are employment areas that are well served by public transport. The acknowledged major economic generators include East Midlands Airport, the wider East Midlands Enterprise Gateway, Loughborough Science and Enterprise Park, Charnwood Bio Medical Campus, Leicester Science Park, Leicester city centre, and the MIRA Horiba Enterprise Zone.
- 3.1.22 Magna Park is an additional generator and may become more so assuming known plans for its expansion are realised prior to 2031. Given these growth locations, this alternative may include the option of providing one or more new settlements or the option of pursuing a growth corridor associated with major infrastructure investment.
- 3.1.23 The housing growth within Leicester should be assumed to proceed at the level currently identified as representing the likely development capacity. This would enable continued job growth within the city area. With the exceptions of Loughborough and Hinckley, both housing and job growth at the market towns would be constrained. Conversely, there could be significant housing growth at other key settlements that are closely associated with an economic growth point or in locations within a planned infrastructure investment corridor.

Option 4: Emphasise the option of growth being accommodated via new and expanded settlements, with constraints on growth in other key settlements and the urban area of Leicester.

- 3.1.24 This alternative would involve a focus on the option of delivering growth via the significant expansion of existing smaller scale settlements or the creation of entirely new settlements. For the purpose of assessing this alternative it should be assumed that four new or expanded settlements are to be brought forward, one each in the areas generally to the north, south, east and west of the City of Leicester. Each new settlement would make provision for job growth.
- 3.1.25 The housing growth within Leicester should be assumed to proceed at or below the level currently identified as representing the likely development capacity. This would enable continued job growth within the city area. Housing and job growth at the market towns and elsewhere across the rural areas would be more constrained.

Option 5: Dispersed growth

- 3.1.26 This alternative would involve a much less focused pattern of growth, involving in particular a higher proportion of development in the smaller settlements. A higher proportion of new homes would be provided on medium and small scale sites and many of the smaller settlements would be likely to grow at a rate in excess of that experienced historically.

3.1.27 There would be less likelihood that new homes and job opportunities would be created via mixed-use developments. A lower proportion of development is likely to be delivered on previously used land.

Option 6: Continuation of established trends

3.1.28 This alternative would involve a focus on the options of sustainable urban extensions (to both the main urban area of Leicester and the market towns), potentially with elements of urban intensification and more widely dispersed growth. It generally reflects the approach promoted by the RSS but subsequently influenced by speculative development proposals coming through the development management process.

3.1.29 Housing growth within Leicester should be assumed to proceed at the level currently identified as representing the likely development capacity, enabling continued job growth within the city. Housing growth would be accommodated in and adjacent to the established market towns, through limited urban intensification but more predominantly through SUEs.

3.1.30 A larger proportion of the housing growth would be accommodated within and around other key rural settlements and there would be some expansion on the periphery of the city. Job growth would also be more dispersed, although the likelihood of ongoing growth at and around the acknowledged major economic generators should be assumed.

3.2 Combining growth and distribution options

3.2.1 In order to give the appraisal greater context and meaning, the two housing growth scenarios were combined with each of the six spatial options. This allowed for a broad understanding of effects to be identified for each of the spatial options, and how these effects would differ should the level of growth be higher or lower.

3.2.2 This combination resulted in twelve discrete options (the reasonable alternatives) that have been tested in the SA (see tables 3.1 and 3.2 below). As outlined in both tables, each of the options involve different amounts of growth in the City, Leicester Urban Periphery, Market Towns, 'other settlements' and at new/expanded settlements.

3.2.3 The proportions identified for different areas under each option are based upon an understanding of theoretical land capacity and a greater or lesser focus on different strategic objectives.

3.2.4 The methodology for undertaking the appraisal is set out in section 4, with the appraisal findings set out in full in Section 5.

Table 3.1 Projected OAN from 2031-2050 (90,500)

	1a. Leicester urban periphery focus	2a. Market Towns focus	3a. Employment/ infrastructure led	4a. New/expanded settlements focus	5a. Dispersal	6a. Trend
<i>City</i>	20% 18,100	10% 9,050	10% 9,050	10% 9,050	10% 9,050	25% 22,625
<i>Urban periphery</i>	40% 36,200	15% 13,575	30% 27,150	15% 13,575	20% 18,100	25% 22,625
<i>Market towns</i>	20% 18,100	60% 54,300	45% 40,725	15% 13,575	30% 27,150	30% 27,150
<i>Other settlements</i>	20% 18,100	15% 13,575	15% 13,575	10% 9,050	40% 36,200	20% 18,100
<i>New/expanded settlements</i>	0%	0%	0%	50% 45,250	0%	0%

Table 3.2 Projected housing needs 2031-2050 including 20% flexibility (108,600)

	1a. Leicester urban periphery focus	2b. Market Towns focus	3b. Employment/ infrastructure led	4b. New/expanded settlements focus	5b. Dispersal	6b. Trend
<i>City</i>	20% 21,720	10% 10,860	10% 10,860	10% 10,860	10% 10,860	25% 22,625
<i>Urban periphery</i>	40% 43,440	15% 16,290	30% 32,580	15% 16,290	20% 21,720	25% 27,150
<i>Market towns</i>	20% 21,720	60% 65,160	45% 48,870	15% 16,290	30% 32,580	30% 32,580
<i>Other settlements</i>	20% 21,720	15% 16,290	15% 16,290	10% 10,860	40% 43,440	20% 21,720
<i>New/expanded settlements</i>	0%	0%	0%	50% 54,300	0%	0%

3.3 Hybrid Option

- 3.3.1 Following appraisal of the twelve options (the reasonable alternatives) an internal SA Report was sent to the Strategic Planning Group to assist them in the development of a preferred approach. Consequently, a 'hybrid option' was established that draws upon different elements of the original reasonable alternatives.
- 3.3.2 The approach developed is broadly the same as option 4b, which promotes 'new settlements'. However, the focus of the settlements is linked to employment and infrastructure, and much of the growth is within close proximity to Leicester City and its' urban periphery.
- 3.3.3 The hybrid approach is to plan for 90,600 homes (4,768 dpa) from 2031-2051.
- 3.3.4 In terms of distribution, the approach is built from several key elements including a focus on the A46 Growth Corridor mostly as 'new or expanded' settlements, but also linked to Leicester City and its' urban periphery.
- 3.3.5 There are also specified opportunities at key centres such as Lutterworth and Melton Mowbray.
- 3.3.6 There are secondary growth areas such as the Northern Gateway (10,000 homes) and the Southern Gateway (10,000 homes), which would involve a combination of 'new settlements' and extensions to the existing urban areas such as at Loughborough / Shepshed.
- 3.3.7 Growth would be at a more modest level at Market Towns of Coalville, Market Harborough, Loughborough and Hinckley, and limited growth would be distributed to the smaller 'other' settlements.
- 3.3.8 The growth associated with this hybrid option has been classified according to the same spatial building blocks used for the six original distribution options. However, these original typologies are not ideal categories for best describing the spread of development because a large element of the strategy involves growth along the A46 expressway. Whilst this would be more likely to be represented by 'new settlements' not immediately adjacent to the Leicester urban periphery, there are close links with the urban periphery and perhaps an element of overlap in these categories.
- 3.3.9 To ensure a consistent appraisal against the original twelve reasonable alternatives, the hybrid option has also been appraised using the same methodology and the findings are presented in the appraisal matrices in Section 6 of this report. Where there are connections between the different spatial areas / building blocks, these are discussed and conclusions are drawn on the overall effects.
- 3.3.10 Given that the hybrid approach was developed in response to the Strategic Planning Group's consideration of earlier assessment work, it was considered unnecessary to appraise the higher growth variant (as the Group had rejected the higher growth scenario).

Table 3.3: Housing distribution under the Hybrid Option

	Hybrid Option
<i>City</i>	12% (10,450)
<i>Urban periphery</i>	5% (4,500)
<i>Market towns</i>	20% (18,100)
<i>Other settlements</i>	10% (9,050)
<i>New/expanded settlements</i>	53% 28,000 (A46 corridor) 10,000 (Northern Gateway) 10,000 (Southern Gateway)

3.4 Reconsidering strategic options

- 3.4.1 Following consultation on the draft Plan and the interim SA Report (February 2018), the Strategic Planning Group took account of comments received and re-considered whether the reasonable alternatives to the proposed strategic approach remained appropriate.
- 3.4.2 The key issues raised with regards to the spatial options have been summarised below, followed by a discussion of whether suggested additional alternatives are considered to be reasonable or not.
- 3.4.3 Those options that have been determined to be reasonable have been appraised using the same methodology that was used at the previous options appraisal stage. Where options are considered to be unreasonable, outline reasons are provided by the Council to explain why.

Alternative approach A – A greater amount of growth should be focused into Leicester Urban Area:

- 3.4.4 The seven options tested consider a range of growth in Leicester City from 9050 to 22,625 dwellings. This provided an understanding of the implications of different levels of growth in the City. The highest growth scenario for Leicester (22,625 dwellings as part of Option 6) is predicated

on maximizing growth in the City (there is only 10,500). To deliver beyond this number would require the release of even further open space within the City, which could have significant implications with regards to health and wellbeing, urban biodiversity and access to green space.

- 3.4.5 This is considered to be unacceptable and would have detrimental effects on existing communities. Promoting increased densities by building taller buildings has already been factored into capacity calculations. Pushing densities further is considered to be unreasonable because it would have an impact on transport networks and other infrastructure (health, education and utilities), the historic character of the City and the residential amenity of existing communities.

Alternative Approach B - An option which includes an Eastern Gateway ought to be tested.

- 3.4.6 No specific opportunities have been identified that would support the growth of a standalone 'eastern gateway'. There is therefore a question mark about the deliverability of such an approach. Furthermore, the transport infrastructure and access to major employment opportunities are limited in the rural areas of Melton and Harborough to the east.

- 3.4.7 An appropriate location for an eastern gateway may be an opportunity for higher growth at Melton Mowbray. However, this possibility has already been tested through Option 2 (Market Town focus), and so the implications of this are understood.

- 3.4.8 Another possible location for an 'eastern gateway' would be along the A46 corridor. This is something that could be explored by Local Authorities through the preparation of Local Plans. However in the context of this SA, a range of options have already been tested that involve different levels of growth at the 'Leicester urban periphery' and 'new settlements'. This provides a strategic understanding of the potential effects of growth in these locations.

- 3.4.9 For these reasons, it is considered unnecessary (unreasonable) to test further spatial strategies through the SA.

Alternative Approach C – An approach that does not rely upon the A46 expressway should be tested:

- 3.4.10 Several of the strategic options involve a more dispersed approach to development that would be less reliant upon improvements to the A46 expressway. In particular this is Options 5 (Dispersal) and Option 6 (Trend). Therefore, it is considered unnecessary to test additional strategic approaches addressing this issue.

Alternative approach D – An alternative that relies on less strategic sites ought to be tested

- 3.4.11 As a strategic growth plan, there is a need to provide a broad strategy for growth and the distribution of development. Intrinsicly, this should involve the consideration of strategic sites that can be well-planned and help to achieve sustainable patterns of growth. For these reasons, the partnership group considers that strategic sites should be a key element of the growth Plan (as reflected in the Plans aims and objectives). Furthermore, the proposed strategy proposes 38% of growth non-strategic sites.

3.5 Comparison of the final Plan Strategy and the draft Plan

- 3.5.1 Following consultation on the draft Plan, the Strategic Planning Group has made minor amendments to the strategy. In the main, the strategy still focuses strongly on strategic developments in key locations including; the A46 corridor, a northern gateway (renamed the Leicestershire International Growth Area), an opportunity for growth and regeneration at Melton Mowbray, and more restrained growth in the rural areas.
- 3.5.2 A key change is the reframing of growth to the south of Leicester as the 'A5 Improvement Corridor' rather than the 'Southern Gateway' set out in the draft Plan. This clarifies the broader locations for growth along this corridor, but the overall distribution of housing between authorities would be expected to be similar. In addition, Lutterworth would no longer be a key location for growth.
- 3.5.3 With regards to the amount of housing proposed for each authority, there are no changes for Leicester, Blaby, Oadby and Wigston, Charnwood, and Hinckley and Bosworth. The key change is a decrease in the amount of growth proposed at Harborough (2000 dwellings) and a subsequent increase in Melton Mowbray (800 dwellings) and North West Leicestershire (1200 dwellings). Essentially, this reflects a slightly more ambitious plan for the Leicestershire International Growth Area, and greater growth at Melton Mowbray Market Town. The reduced growth in Harborough would be reflected in a reduction in the capacity of strategic developments along the A46 growth corridor.
- 3.5.4 Table 3.4 below demonstrates the differences between the draft Plan / Hybrid option and the final Plan with regards to housing distribution.

Table 3.4: Amendments to housing distribution between the draft Plan (Hybrid Option) and the final Plan

Authority	Proposed delivery: Hybrid Option	Proposed delivery: Final Plan	Change
Blaby DC	17,560	17,560	-
Charnwood BC	18,890	18,890	-
Harborough DC	17,930	15,930	-2000
Hinckley & Bosworth BC	10,090	10,090	-
Leicester City	10,450	10,450	-
Melton BC	4,520	5,320	+800
North West Leicestershire DC	8,520	9,720	+1200
Oadby & Wigston BC	2,640	2,640	-
Total (Leicester & Leicestershire)	90,600	90,600	-

- 3.5.5 It is evident from the table above that the strategy has been amended with regards to housing distribution between local authorities. However, this would not lead to a significant change to the overall strategic approach.
- 3.5.6 Therefore, with regards to testing reasonable alternatives, it is considered that the findings for the hybrid option remain relevant for the purposes of comparing the final Plan to alternative strategies.
- 3.5.7 The reconfiguration of housing growth from Harborough to Melton and North West Leicestershire does not drastically change the overall strategy, and therefore, the effects are likely to remain broadly the same. It is considered sufficient to address the impact of these changes through an updated appraisal of the final Plan (see Section 7).

4 Methodology for appraising strategic options

4.1.1 The appraisal has been undertaken and presented against each of the ten sustainability topics established through scoping. Each SA Topic includes one or more of the thirteen SA Objectives (see table 4.1 below), which have been taken into account as part of the appraisal for each topic. Where SA topics include more than one SA Objective, this is because there is a degree of overlap and close relationships between the objectives, and so the appraisal can be streamlined to avoid duplication. However, every SA Objective and the supporting criteria have been considered in the appraisal process, which is represented in the findings.

Table 4.1 SA topics and corresponding SA Objectives

SA Topic	SA Objective(s)
Biodiversity	1. Protect, maintain and enhance habitats, species and ecological networks.
Health and wellbeing	2. Maintain and improve levels of health, whilst reducing health inequalities 6. Minimise exposure to poor air quality, whilst managing contributing sources.
Housing	3. Secure the delivery of high quality, market and affordable homes, to meet Objectively Assessed Need.
Economy and employment	4. Support the continued growth and diversification of the economy.
Transport and travel	5. Improve accessibility to services, jobs and facilities by reducing the need to travel, promoting sustainable modes of transport and securing strategic infrastructure improvements.
Climate change	7. Contribute to a reduction in greenhouse gas emissions and an increase in the use of low carbon energy
Landscape and Land	8. Protect, maintain and enhance landscapes whilst promoting their value to sustainable growth. 9. Protect high quality agricultural land from permanent development.
Cultural Heritage	10. Protect, maintain and enhance the historic environment.
Water	11. Steer development away from the areas at the greatest risk of flooding, whilst supporting schemes that reduce the risk and impacts of flooding. 12. Protect, maintain and enhance the quality of water resources.
Minerals	13. Protect mineral resources from sterilisation, and support their sustainable extraction.

4.1.2 For each of the SA topics (see Appendix A for the full SA Framework within the scoping report) an appraisal table has been completed which discusses the likely effects for each option (at both growth projections).

4.1.3 An overall score for each option is derived from an appraisal and understanding of the effects across the Plan area in different spatial contexts. These 'building blocks' for each option are as follows (in-line with how the alternatives have been established):

- Effects on the City
- Effects on the Leicester Urban Periphery
- Effects on Market Towns
- Effects on 'other (rural) settlements'
- Effects at new settlements / expanded settlements.

4.1.4 These individual elements are then considered together (cumulatively) to establish an overall score for each option against the SA Objectives.

4.1.5 Where helpful, selected baseline information has been reproduced in the appraisal tables for reference and to aid in the identification of effects.

4.1.6 When determining the significance of any effects, a detailed appraisal of factors has been undertaken to take account of:

- the nature and magnitude of development;
- the sensitivity of receptors; and
- the likelihood of effects occurring.

4.1.7 Taking these factors into account allowed 'significance scores' to be established using the system outlined below.

Major positive	✓✓✓	Minor negative	×	Neutral / negligible effects	-
Moderate positive	✓✓	Moderate negative	××	Uncertain effects	?
Minor positive	✓	Major negative	×××		

4.1.8 The assessment has been undertaken making-use of baseline information presented in the scoping report and mapping data. Whilst it has not been possible to identify exact effects due to sites not being established at this stage, we have made assumptions on the potential locations of development by referring to SHLAA sites and potential opportunity areas identified by the Strategic Planning Group.

- 4.1.9 There is a focus on strategic impacts at a settlement-level and for the Plan area as a whole, rather than detailed local effects. Therefore, what might be 'significant' in the context of a particular settlement may not be significant when taken in the context of the entire Plan area.
- 4.1.10 Whilst every effort is made to make objective assessments, the findings are also based upon professional judgement and are therefore partly subjective.

5 Appraisal Findings

- 5.1.1 This section presents the appraisal findings for each of the ten sustainability topics.
- 5.1.2 For each topic a table is presented which discusses the effects at different spatial scales (City, Leicester Urban Periphery, Market Towns, Other Settlements, New / Expanded Settlements). The options are tested at two different levels of growth as illustrated in each table.
- 5.1.3 To introduce each topic and to provide context for the assessment of effect significance, baseline information has been summarised where appropriate.

5.2 Appraisal findings: Biodiversity

- 5.2.1 The findings relating to the Sustainability Topic 'Biodiversity' are presented in the following tables.

Biodiversity
<p><u>Discussion of effects</u></p> <p>City:</p> <ul style="list-style-type: none"> • Within the City of Leicester boundary there is 1 designated SSSI: Gypsy Lane Pit. Located approximately 2 miles to the north-west of the City centre, the SSSI was recorded as being in an 'unfavourable - declining' condition in 2016. There are also 7 LNR (Local Nature reserves) within the City of Leicester boundary, with the largest Aylestone Meadows located to the south of the city and Watermead Country Park on the northerly edge of the city boundary. • The quality of the River Soar and the Grand Union Canal was previously threatened, however in 2011, it was designated as a Biodiversity Enhancement Site (BES), which could help to protect and enhance quality. • Urban intensification would most likely require the loss of greenspace / parks and brownfield land, all of which can hold value for biodiversity as supporting or linking habitats. <p><i>GAN growth option:</i> Option 1 (20% - 18,100 homes) and to a greater extent option 6 (25% - 22,625 homes) could potentially put the most pressure upon biodiversity assets within the City in order to facilitate the required level of development. At these higher levels of growth a minor negative effect is predicted as it would be likely that green infrastructure in the City was affected negatively. Though the SSSI would be unlikely to be affected, effects on local wildlife and linkages could be generated.</p> <p>Options 2, 3, 4 & 5 all allocate 10% housing growth (9,050 homes) within the city boundary. Depending on the exact location of this development, it could still have an impact on the biodiversity assets due to an increase in the need for space for development and proximity to the SSSIs and LNRs (but to a much lesser degree). At this level of growth the effects are predicted to be neutral, as it is expected that growth could more readily avoid sensitive areas, and have lesser overall effects on green infrastructure in the City.</p>

Biodiversity

The hybrid option proposes a similar amount of growth as options 2, 3, 4 and 5; therefore the effects are also predicted to be **neutral**.

Higher growth projection: A further increase of 20% on top of the options above would only add to the risk of biodiversity assets being impacted upon by additional development. However, the overall increase in growth would not be enough to lead to a more significant effect upon the City's biodiversity resources for options 1, 2, 3, 4 or 5. The effects predicted for option 6 however are more substantial and constitute a **moderate negative effect**.

Urban Periphery

- The urban periphery of Leicester City accommodates numerous SSSI's, but the majority of these sites are situated to the north-west of the city. Groby Pool and Woods lies to the north-west and is made up of 6 units; Groby Grassland, Groby Wood, Slate Wood West and Slate wood East all in a 'favourable' condition, Groby Pool is in an 'unfavourable – no change condition' and Groby Tail Pool in an 'unfavourable – declining' condition. Sheet Hedges Wood is made up of 5 woodland units; 1 in a favourable condition, 3 in an 'unfavourable – recovering' condition, and 1 in an unfavourable – declining' condition. Bradgate Park and Cropston is made up of 5 units; 3 in an 'unfavourable – recovering' condition and 2 in an 'unfavourable – declining' condition.
- Two SSSI sites lie to the South West of the city. Enderby Warren Quarry is in a 'unfavourable no change' condition. Narborough Bog is split into 3 units; Willow Car in a 'favourable' condition, Fen (Swamp) in an 'unfavourable – recovering' position and the Meadow also in an unfavourable - recovering position. Most of the land directly to the north-west of the city of Leicester falls into SSSI impact risk zones due to the density of SSSIs in such close proximity to one another, which Leicester council seeks to maintain due to the region having a much lower biodiverse value than most other regions in England.
- There are also numerous local nature reserves that are within close proximity to the City boundary. Reedbed and Birstall lie to the north of the city, Scaptoft to the east and Lucas Marsh and Glen Hills to the south.
- Around the periphery of the City (to the north-west) there are also a number of small forest clusters that form part of the National Forest Strategy, which aim to seek an increase overall forest cover throughout the region.

OAN growth projection: Most sites identified in the SHLAA are to the north-east of the city where there are minimal designated biodiversity assets and to the south west where assets are slightly more prevalent. Potential opportunity areas for development beyond 2031 have also been identified to the east and south-east of the City, which are not characterised by sensitive / designated biodiversity assets.

At a lower scale of growth proposed under options 2 and 4 could probably accommodate growth in the less sensitive areas to the south-east, east and south-west, and thus the effects on designated sites could be less likely to occur. The scale of growth is also the lowest of all the options, and so the effects on green infrastructure and ecological networks (non-designated habitats for example) would be of a lesser magnitude. This is not to say that a focus of growth in these areas would not have a disruptive effect on habitats. However, growth at strategic urban extensions in these areas ought to be possible to incorporate strategic green infrastructure improvements. Therefore, the overall effects predicted for options 4 and 6 are **neutral**.

Option 1 has the potential to have the greatest impact on the biodiversity of the urban periphery by designating 40% (36,000) of the housing growth in this location. At this level of growth, it might be more likely that sites in the more sensitive areas would need to be considered and / or a more intensive loss of greenfield land around the urban periphery. Mitigation and enhancement ought to help ensure that the effects on biodiversity are not significant.

Biodiversity

However, a **moderate negative effect** is predicted due to the scale of growth and likely disruption to green infrastructure networks in the short and medium term. Option 3 (30%) could also have adverse effects on biodiversity habitats surrounding the city, but these would be at a lesser extent compared to the higher growth under option 1. Therefore a **minor negative effect** is identified. Options 5 & 6 provide a lesser amount of growth than options 1 and 3, but more than options 2 and 4. There would still be approximately 20,000 dwellings at the urban periphery under each of these approaches, which has the potential for pressure on greenfield land (and thus ecological networks). This scale of growth should give some flexibility in the choice of locations and / or intensity of growth, and therefore the effects ought to be manageable. At this stage an **uncertain negative effect** is predicted. The scale of development through any of the options, if directed to the north-west of the city's boundary, could have the greatest impact on the biodiversity of the area due to designated biodiversity assets being most prevalent in these locations.

For the hybrid option, the scale of growth immediately adjacent to the Leicester urban area is likely to be very low at only 4500 homes. This level of growth ought to be deliverable without having substantial permanent effects on biodiversity. Growth at the A46 corridor nearby could potentially have cumulative effects should growth at the urban periphery be within close proximity to 'new settlements' along this corridor. However, these effects are discussed under the 'new settlements' category. At the urban periphery, the effects are predicted to be **neutral** in terms of biodiversity.

Higher growth projection: At a higher scale of growth the effects of option 1 are predicted to be major, as it would require 43,440 dwellings focused around the Leicester urban area. The additional 7720 dwellings compared to the OAN projection for option 1 could necessitate further growth in sensitive areas, or more intense growth. Therefore a **significant negative effect** is predicted. For similar reasons the effects for option 3 are predicted to be **moderately negative** at this higher scale of growth. Likewise, the higher scale of growth for options 5 and 6 is predicted to be a **minor negative**, as it is more likely/certain that effects could occur. For options 2 and 4, the levels of growth are still fairly modest, and therefore **uncertain minor negative effects** are predicted.

Market Towns:

Hinckley

- Burbage Wood and Aston Firs SSSI is located 1.5 miles to the East of Hinckley Town centre. The SSSI is split up into 4 units, all of which are in an 'unfavourable – recovering' position. Burbage common and Woods (LNR) is also located 1.5miles to the east of Hinckley.

Coalville

- Coalville is surrounded by a number of SSSI's; Coalville Meadows SSSI located approx. 1.3miles north-east of the town in an 'unfavourable – recovering' condition, Bardon Hill Quarry approx. 1.7miles to east in a 'favourable' condition and Charnwood lodge SSSI 2.2miles to the south east. Parts of Charnwood lodge have also been designated as a National Nature reserve (NNR).
- There are small pockets of woodland included in the National Forest Inventory surrounding the market town.

Loughborough

- Small pockets of woodland included in the National Forest Inventory to the West of the town. There is a woodland SSSI to the south of the town, as well as the Charnwood Forest, and to the north-east there are two SSSIs. Development in these locations has the potential for disturbance and / or recreational pressure.

Melton Mowbray

- The River Eye runs through the town and is a designated SSSI. It is made up of six units, all of which are in an 'unfavourable – no change' condition.

Biodiversity

Market Harborough

- There is 1 small SSSI site that lies approx. 1.6 miles to the north of the town centre and is in a 'favourable' condition and not considered likely to be the subject of recreational pressure.

OAN growth projection: Overall, option 2, which aims to deliver 60% (10,860 per market town pro rata) of homes throughout all 5 market towns would have the potential to most adversely impact upon each town's biodiversity assets. Coalville in particular is surrounded by designated sites and a network of green infrastructure and could therefore be sensitive to development. Development in Loughborough at the scale proposed under option 2 could also put pressure on SSSI sites and other locally important ecological networks. The scale of growth might necessitate growth on multiple SUEs, which could have direct effects upon wildlife depending upon wildlife, or cumulative effects – for example increased recreational pressure. For Market Harborough the effects ought to be more manageable given that there are fewer designated habitats. However, the scale of growth could still affect ecology. For Hinckley, this scale of growth could possibly require growth in close proximity to the SSSI to the east, and / or the overall scale of growth could put recreational pressure on ecology. For Melton, there could be cumulative effects on the condition of the river SSSI. Overall, option 2 could lead to **significant negative effects** on one or several of the market towns due to direct disruption of designated habitats (or surrounding 'supporting' habitats) or due to increased recreational pressure. A major negative effect is therefore predicted.

Option 3 is predicted to have similar effects to option 2, but at a slightly lower scale of growth (8,145 of new homes within and around each of the market towns). This constitutes a **moderate negative effect**. Options 5 & 6 both aim to deliver 30% (5,430 per market town) of homes, which ought to be much more manageable in terms of locating development and also the overall effect of concentrated growth into these locations. Consequently, the effects on the market towns overall are predicted to be a **minor negative** for options 5 and 6.

Whilst options 1 & 4 aim to deliver the least number of homes to the market towns (2715-3,620 per market town), this level of development could still potentially impact upon biodiversity on dependant on the location of the selected housing sites (which are more likely to be greenfield in the longer term). However, this would be to a much lesser extent than the more concentrated delivery options, and it ought to be much easier to accommodate growth in the less sensitive locations. Consequently, a **neutral effect** is predicted for these two options.

The hybrid option seeks to achieve controlled growth at the market towns in-line with existing Local Plans. The overall growth at each market town has not been determined, but the overall amount of growth for each authority has been established (which takes account of other aspects of the growth strategy). The overall level of growth at the market towns will be approximately 18,100. This is similar to option 1, and thus a **neutral effect** is predicted.

Higher growth projection: At a higher level of growth, the effects would be increased for each option. For option 2, this would still constitute a **significant (major) negative effect**. For option 4, which delivers lower levels of growth, the effects would remain **neutral**, as the level of growth would still be lower than any of the other options even at the lower OAN growth projections. For option 1, the increased level of growth could start to make it more likely that effects would occur, and so an **uncertain negative effect** is predicted. For options 5 and 6, the growth level would not be significant enough to constitute moderate negative effects, and so whilst the effects would most likely to be more prominent, the effects are still recorded as **minor negative**.

Biodiversity

Other settlements:

oAN growth projection: Option 5 allocates 40% housing provision for 'other settlements' throughout the Plan area. 36,200 homes dispersed across these other settlements has the potential to adversely affect biodiversity in some locations. However this is very much dependent upon the precise location of development. Given the rural nature of many of the smaller settlements across the Plan area, there is potential for the loss of greenfield land that supports biodiversity. However, the effects on biodiversity in any one location are unlikely to be of the same magnitude compared to the options that focus growth. There should also be a greater choice of sites overall to choose from to avoid harm. Some settlements should be able to accommodate growth without significant effects on biodiversity, whilst others could have negative effects. On balance, a high level of dispersed growth ought to have the potential for only minor negative effects on nationally designated sites, but the loss of locally important wildlife habitat could be more substantial. The opportunities for enhancement may also be lower due to the less strategic nature of development. On balance an **uncertain minor negative effect** is predicted.

Options 1 & 6 aim to provide 20% of the housing delivery through other settlements which equates to the dispersal of 18,100 new homes. At this level of growth, the effects ought to be diluted compared to Option 5. A **neutral effect** is predicted, but there is still uncertainty.

Option 2, 3, 4 and the hybrid option have the least likelihood to impact on the small surrounding settlements due to the dispersal of between 9,050-13,575 homes across the whole Plan area. At this level it ought to be easier still to avoid pressure on sensitive sites both individually or cumulatively. Therefore, **neutral effects** are predicted with greater certainty.

Higher growth projection: At the higher growth projection, there would be a greater level of dispersed growth, which would lead to an overall greater loss of greenfield land as well as limiting the choice of sites more. Therefore, the potential for negative effects to be of greater significance are increased. On balance a **moderate negative effect** is predicted for Option 5. For options 1 and 6, a **minor negative effect** is predicted, whilst for options 2, 3, and 4, the effects are still **neutral** but with some greater uncertainty.

New / expanded settlements: *(the creation of new settlements at 'sustainable nodes' or locations promoted by developers)*

East Midlands Airport

- No strategic biodiversity, geodiversity or green infrastructure assets are located within the close vicinity of East-Midlands Airport.

Six Hills

- Adjacent to Twenty Acre Piece SSSI classified for its demonstration of acidic clay grassland that supports breeding birds and invertebrates.

East of Loughborough

- Land to the east of Loughborough falls within close proximity to two SSSIs, Loughborough Meadows SSSI, and Cotes Grassland SSSI.

Stoney Stanton

- There are no nationally designated sites adjacent to Stoney Stanton.

Biodiversity

Lutterworth

- There is a SSSI approx. 0.9 miles to the East of the village, Misterton Marshes. It is made up of 3 units all in an 'unfavourable- recovering' position. Small pockets of land forming the National Forest Inventory lies to the east of the village.

Ibstock

- There is 1 SSSI approx. 1.8 miles to the south west of the village - Newton Burgoland Marshes. The site is made up on 3 units, 2 in a 'favourable' condition and the third in a managed 'unfavourable – recovering' condition.

Kibworth

- Running along the westerly edge of the village is the Kilby - Foxton Canal, which is a designated SSSI. The site is made up on 15 units, all in an 'unfavourable – no change' condition.

OAN growth projection: Option 5 is the only option that suggests housing delivery throughout new settlements and expansion to some of the smaller settlements within the Plan area. Any effects on biodiversity and geodiversity would be dependent on the location and scale of growth in each of these locations. Broadly speaking, there are designated habitats nearby to each of the existing settlements, and the locations for new settlements (with the exception of the Airport and Stoney Stanton). The potential for disturbance to designated sites, and / or supporting habitats is possible at some of these locations due to the large scale of growth involved. However, it should be possible to secure mitigation measures to ensure that growth does not affect existing sites (for example enhancement of green infrastructure and open space to avoid increased recreational pressure). An **uncertain moderate negative effect** is predicted. The possibility of biodiversity being adversely affected exists, but mitigation ought to ensure major effects are avoided. Effects may also be lesser or greater depending on the settlements where growth occurs. Options 1, 2, 3, 4 and 6 would all have **neutral effects** as they do not involve any growth in these locations.

The hybrid option will involve substantial growth at new settlements, but these would not necessarily be the same as those identified for the six original spatial options. The focus of growth would be along the A46 expressway corridor, which brings in development opportunities at a short distance from the Leicester urban fringes to the north-east and arching round to the south / south-west where it meets the Southern Gateway. The level of growth in these locations would be in the region of 28,000 homes, and a further 10,000 at the southern gateway (which may involve Stoney Stanton for example) and the Northern Gateway (which covers the 'airport' opportunities described above).

In the main, the opportunities along the A46 corridor through to the Southern Gateway would avoid effects upon SSSIs, though there could be some pressure on the Kilby-Foxton Canal SSSI through increased recreational pressure and water quality changes. These ought to be manageable though. There are local wildlife sites and potentially protected species that may be affected by growth, but strategic opportunities ought to provide the potential for green infrastructure enhancement and to retain important habitats. It will be important to ensure that development along the A46 corridor does not sever green infrastructure links into/out of the City, particularly along the River Sence.

The Northern Gateway is not particularly constrained by sensitive habitats, and therefore associated development ought to be able to be accommodated without having significant effects. Though local wildlife sites and natural green space could be affected, the strategic nature of sites ought to allow for green infrastructure enhancement to be secured to protect and enhance wildlife.

Biodiversity

Overall **moderate negative effects** are predicted, mainly associated with the cumulative loss of open space across the A46 corridor. Whilst these areas are not particularly sensitive to development in the main, the effects in terms of habitat fragmentation ought to be acknowledged.

Higher growth projection: At a higher level of growth, the intensity of growth at new/expanded settlements would be greater, and thus a major negative effect is more likely. However, uncertainties still remain.

Overall effects

Leicestershire has a lower than average biodiversity value than the rest of the UK. Therefore, future development should try to minimise the impact on the existing assets and look to enhance ecological networks.

Option 1 is predicted to have a **minor negative effect** overall. Though there could be moderate negative effects at the urban periphery due to focused growth here, the effects at other parts of the Plan area would be minor or neutral. At the higher growth projection a **moderate negative effect** is predicted overall. The effects on the urban periphery would be more prominent, and the likelihood of there being minor negative effects in other parts of the Plan area would also increase.

Option 2 is predicted to have a moderate negative effect overall. Though there would likely be major negative effects at the market towns, the effects in the rest of the Plan area would be broadly neutral; which 'offsets' the effects in the market towns somewhat. At the higher growth projection, a **major negative effect** is predicted. The effects at the market towns would be further exacerbated, and could be more difficult to mitigate, there is also potential for negative effects to arise in the urban periphery and the other settlements (albeit only minor).

Option 3 is predicted to have a **minor negative effect** overall. Though a moderate negative effect could occur in the market towns, the effects are neutral for the City and other settlements, and only minor for the urban periphery. At the higher growth projection, a **moderate negative effect** is predicted as the effects are more pronounced (major) for the market towns, and moderate for the urban periphery.

Option 4 is predicted to have a **minor negative effect** overall. The effects are broadly minor for the majority of the Plan area. However there is the potential for moderate negative effects at new/extended settlements, which form a large proportion of the housing total.

Option 5 is predicted to have an **uncertain minor negative effect**. A neutral or minor effect is predicted for most of the Plan area and those effects at 'other settlements' are uncertain given the large amount of locations that growth could possibly be located. Broadly though, a dispersed approach avoids more significant negative effects, but is also the least likely to support strategic enhancements. At the higher growth projection, the effects are predicted to rise to an **uncertain moderate negative effect**.

Similar to option 5, option 6 is predicted to have mainly minor effects across the Plan area. Overall a **minor negative effect** is predicted, rising to a **moderate negative effect** at the higher growth projection.

Biodiversity

The hybrid option is predicted to have a mostly limited effect on biodiversity across the Plan area. Whilst moderate negative effects could be experienced in association with new settlements (particularly along the A46 corridor), these ought to be possible to mitigate through good planning and putting green infrastructure at the heart of the development opportunities. Overall, **minor negative effects** are predicted in the context of the entire Plan area.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	x	xx	-	?	-	x
	1b	x	xxx	?	x	-	xx
Option 2 <i>Market town focus</i>	2a	-	-	xxx	-	-	xx
	2b	-	?	xxx	?	-	xxx
Option 3 <i>Employment-led</i>	3a	-	x	xx	-	-	x
	3c	-	xx	xxx	?	-	xx
Option 4 <i>New settlements</i>	4a	-	-	-	-	xx [?]	x
	4b	-	?	-	?	xxx [?]	xx
Option 5 <i>Dispersal</i>	5a	-	?	x	x [?]	-	x [?]
	5b	-	x	x	xx [?]	-	xx [?]
Option 6 <i>Trends</i>	6a	x	?	x	?	-	x
	6b	xx	x	x	x	-	xx
Hybrid option <i>Emerging approach</i>	7a	-	-	-	-	xx	x

5.3 Appraisal findings: Health and Wellbeing

5.3.1 The findings relating to the Sustainability Topic 'Health and Wellbeing' are presented in the following tables.

Health and Wellbeing

Discussion of effects

City

According to the 2017 Public Health England Health Profile for the Leicester City area, the health of people in Leicester is varied compared with the England average.

Health in Summary

Leicester is one of the 20% most deprived districts/unitary authorities in England and about 29% (21,100) of children live in low income families. Life expectancy for both men and women is lower than the England average.

Health inequalities

Life expectancy is 8.2 years lower for men and 6.6 years lower for women in the most deprived areas of Leicester than in the least deprived areas.

Child health

In Year 6, 23.0% (947) of children are classified as obese, worse than the average for England. Levels of teenage pregnancy and GCSE attainment are worse than the England average. Levels of breastfeeding initiation are better than the England average.

Adult health

The rate of alcohol-related harm hospital stays is 753 per 100,000 population, worse than the average for England. This represents 2,145 stays per year. The rate of self-harm hospital stays is 151 per 100,000 population, better than the average for England. This represents 546 stays per year. The rate of smoking related deaths is 328 per 100,000 population, worse than the average for England. This represents 426 deaths per year. Estimated levels of adult physical activity are worse than the England average. The rate of TB is worse than average. Rates of sexually transmitted infections and people killed and seriously injured on roads are better than average. Rates of violent crime and early deaths from cardiovascular diseases are worse than average.

Local priorities

Priorities in Leicester include giving children the best start in life, reducing early deaths and health inequalities, improving mental health and well-being, and including health in all policies.

Increased levels of development in an already densely populated city could have a number of effects, with regards to air quality and pressure on valuable urban green spaces, which may have a negative effect on people's health and wellbeing.

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However, there is also increased opportunity for those living in the city to use sustainable and active travel routes to access employment, services and facilities. Access to health is mixed, with high reliance due to an ageing population. The main reliance is on Leicester hospital due to development being very close Leicester City; accessibility to health services could be relatively good, but could increase the pressure on the existing services. It is presumed that new / enhanced facilities would support new development. Increased housing provision in the City could have positive effects in respect to health by helping to provide for housing needs.

OAN growth projection : Option 1 (20% - 18,100 homes) and to a greater extent option 6 (25% - 22,625 homes) could potentially put the most pressure upon open space assets within and around the city and increase air quality issues, as these options aim to deliver the highest number of homes within the city boundary through urban intensification/ concentration. This is identified as a **minor negative effect** on health and wellbeing for some communities. However, these options should also reduce journey times and congestion when attempting to access services, facilities and jobs compared to a more dispersed pattern of growth across the Plan area as a whole. They would also provide the most housing in the City, which ought to help tackle affordability issues and potentially factors contributing to deprivation. Therefore there could also be a **moderate positive effect** for some communities. Overall, the effects are considered to be mixed for option 1 with regards to health and wellbeing.

Options 2, 3, 4 & 5 all allocate 10% housing growth (9,050 homes) within the City boundary, which would still contribute to pressure on health services, open space and air quality but at a lower level. This level of growth would also still provide benefits with regards to access to services and housing provision though. On balance a **minor positive effect** is predicted for options 2, 3, 4 and 5.

The hybrid option would have the same effects as options 2, 3, 4 and 5 given that it allocates a very similar amount of growth. A **minor positive effect** is predicted.

Higher growth projection: A further increase of 20% on top of the OAN options is predicted to have broadly the same effects for option 1 (mixed effects with a **moderate positive** and **minor negative effect**). The scale of growth under option 6 could be difficult to accommodate, and there would likely be increased effects on air quality and open spaces. However, these effects ought to be offset to an extent by the promotion and use of sustainable travel. Nevertheless, a **moderate negative effect** on health and wellbeing is predicted at this scale of growth (alongside a **moderate positive effect**). For options 2, 3, 4, and 5, the increased scale of growth is unlikely to lead to significant negative effects upon health and wellbeing in the City. It should still be possible to maintain open space, and effects on air quality would not be anticipated to be substantial. At a slightly higher level of growth, the benefits in terms of housing access and development investment are considered to be a **minor positive effect** for options 2, 3, 4 and 5.

Urban periphery:

OAN growth projection: Option 1, involves the greatest amount of housing within the urban periphery (36,200 homes). This level of housing development should have positive effects on health and wellbeing for some communities by providing affordable housing. However, there would be increased pressure on green spaces around the City, which could affect access to open space. Having said this, it is likely that growth at the urban periphery would be predominantly through sustainable urban extensions. These would be more than likely to include elements of green infrastructure enhancement, which ought to mitigate the loss of greenfield somewhat. There could also be an increased potential for negative effects on health (in the City and the urban periphery) due to air quality, as large amounts of growth around the City could contribute to increased car trips. Overall, the effects of option 1 are mixed, with a **major positive effect** predicted to reflect the benefits of housing provision and potential green infrastructure enhancement, but a **moderate negative effect** to reflect pressures on greenspace, health facilities and air quality. Option 3 (27,150 homes) is predicted to have similar effects to option 1, but the positive effects are predicted to be moderate.

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Other options that would be likely to have a **minor negative effect** as a result of pressure on green space along the urban periphery are option 5 (18,100) and 6 (22,625 homes). Benefits would still be generated at this level of growth though, so a **moderate positive effect** is predicted. The options with the least significant impact are considered to be options 2 and 4 (both 13,575 homes). At this scale of growth, it ought to be possible to avoid negative effects, but still generate some **minor positive effects** due to housing provision, green infrastructure enhancement and community infrastructure improvements.

The hybrid option would place little growth within the immediate urban periphery, though substantial growth would be supported nearby at 'new settlements' along the A46 corridor. The benefits of development in the urban periphery are likely to be limited as a result of direct growth here, which only amounts to 4500 homes. However, conversely, negative effects in terms of a loss of open space would be avoided. Growth along the A46 corridor could provide opportunities for communities in the urban periphery to seek housing nearby, which is positive. But the benefits in terms of new facilities, services and infrastructure would be less likely to be felt by communities in the Leicester urban periphery (for example, on site recreation, retail and public services would not be readily accessible by foot). An increase in growth could also lead to increased congestion in the City, affecting the quality of life (and perhaps air quality) along major routes into the City. This could have negative implications for communities in the urban periphery. On balance, mixed effects are predicted, both of a minor nature.

Higher growth projection: At a higher scale of growth the effects of option 1 are predicted to be a **major negative effect**, as it would require 43,440 dwellings focused around the Leicester urban area. The additional 7720 dwellings compared to the OAN projection for option 1 could increase negative air quality issues, pressures on open space and public services. The positive effects associated with housing, increased investment, infrastructure improvement and green infrastructure enhancement would still be generated though and ought to mitigate such negative effects somewhat. In reality, this option could have mixed effects for different communities, with some benefiting greatly, and others suffering from negative effects. At the level of growth under option 3, the positive effects ought to be enhanced, so a **major positive effect** is predicted, whilst the negative effects (though greater) are still considered to be **moderately negative**. For options 2 and 4, the levels of growth are still fairly modest, but a **minor negative effect** is predicted. The positive elements of this option would remain a **minor positive effect**.

Market Towns, Other Settlements and new or expanded settlements

For the wider Leicestershire area, a summary of the general health issues as per the 2017 Public Health England Health Profile for Leicestershire is provided as context to the assessment.

Health in summary

The health of people in Leicestershire is generally better than the England average. Leicestershire is one of the 20% least deprived counties/unitary authorities in England, however about 12% (14,100) of children live in low income families. Life expectancy for both men and women is higher than the England average.

Health inequalities

Life expectancy is 6.1 years lower for men and 4.8 years lower for women in the most deprived areas of Leicestershire than in the least deprived areas.

Child health

In Year 6, 16.5% (1,059) of children are classified as obese, better than the average for England. The rate of alcohol-specific hospital stays among those under 18 is 20*, better than the average for England. This represents 27 stays per year. Levels of teenage pregnancy are better than the England average.

Health and Wellbeing

Adult health

The rate of alcohol-related harm hospital stays is 592 per 100,000 population, better than the average for England. This represents 3,994 stays per year. The rate of self-harm hospital stays is 130 per 100,000 population, better than the average for England. This represents 882 stays per year. The rate of smoking related deaths is 239 per 100,000 population, better than the average for England. This represents 943 deaths per year. Estimated levels of adult smoking and physical activity are better than the England average. Rates of hip fractures, sexually transmitted infections, people killed and seriously injured on roads and TB are better than average. Rates of statutory homelessness, violent crime, long term unemployment, early deaths from cardiovascular diseases and early deaths from cancer are better than average.

Local priorities

The priorities in Leicestershire include enabling people to take control of their own health & wellbeing; reducing the gap between health outcomes for different people & places; ensuring children & young people are safely living in families where they can achieve their full potential with good health and wellbeing; ensuring people plan ahead to stay healthy & age well with a good quality of life; and ensuring people give equal priority to their mental health & wellbeing and can access the right support throughout their life course.

Market towns:

oAN growth projection : Overall, option 2 (54,300 homes) has the potential for a **major negative effect** on health and wellbeing, as there would be substantial development pressure with regards to green spaces and the contribution they make to people's health and wellbeing. The scale of development proposed in each market town (10,860 per market town pro rata) may also put pressure on public services and infrastructure and could add to air quality issues in Coalville and Loughborough in particular. Conversely, there would be a positive effect on health and wellbeing through the provision of housing and associated investment in infrastructure. Levels of deprivation in the market towns vary, but in some areas such as Coalville, there could be benefits in terms of regeneration. Though there would be a loss of green space, development in the market towns should encourage access to recreational opportunities and open space. For example, the National Forest is accessible to Coalville and Charnwood Forest is accessible to Loughborough. Overall, a **moderate positive effect** is also predicted for the market towns under option 2; and thus the effects are mixed.

Option 3 (40,725 homes) would also lead to substantial development in the market towns (8,145 homes) which is predicted to have similar effects to option 2 but at a lesser magnitude. In terms of significance, a **moderate negative effect** is predicted (as the extent of pressures ought to be more manageable compared to option 2), and a **moderate positive effect** is predicted (as the benefits generated ought to still be greater than minor).

Options 1 (18,100 homes) and 4 (13,575 homes) are predicted have the least significant effects on health and wellbeing, as the spread of development at each town ought to be accommodated easier by existing services, infrastructure and land capacity. The loss of greenspace would therefore be lesser, and pressure in terms of air quality would also be unlikely to be significant. Nevertheless, a **minor positive effect** could be generated as a result of improved housing choice, investment in services and infrastructure.

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Options 5 and 6 (both propose 27,150 homes across the market towns), which ought to generate a **minor to moderate positive effect**, but due to the increased scale of growth compared to options 1 and 4, a **minor negative effect** is generated.

The hybrid option seeks to achieve controlled growth at the market towns in-line with existing Local Plans. This should help to ensure steady growth in these locations that would be less likely to require major infrastructure investment. It ought to be possible to avoid major loss of open space, but development opportunities in the longer term may be more likely to encroach upon more sensitive / valued areas, therefore an uncertain negative effect exists. Nevertheless, a **minor positive effect** could be generated as a result of improved housing choice, and modest investment in health, education and other facilities and services (from development contributions).

Higher growth projection: At a higher level of growth, the effects could be increased for each option. For option 2, this would still constitute a **major negative effect**, but the positive effects ought to be even greater (i.e. a **major positive effect**). The level of growth for Option 3 would be similar to the level under option 2 (under the OAN projection), therefore the effects are similar (i.e. a **moderate positive effect** and **major negative effect**). Options 5 and 6 are predicted to have similar effects at this scale of growth, as the overall additional housing in each settlement is not vastly different (i.e. an additional c1000 dwellings per market town). Option 4 would still have a relatively low level of growth at the market towns, and thus a minor positive effect is predicted even at this slightly higher level of growth. However, option 1 is predicted to have a **minor negative effect**, as the additional growth could start to create more prominent issues with services, loss of open space and air quality.

Other settlements:

OAN growth projection: The most significant effect on the health and wellbeing objective would occur from option 5 (36,200 homes). This would place a large amount of housing in areas that are less well connected to public transport and services, and may not have good access to health facilities. Though facilities could be supported through development, it is possible that this scale of growth could have negative effects in some settlements. A dispersed settlement pattern can also reinforce social exclusion especially in the more rural parts of the HMA, affecting access to health facilities. Conversely, the provision of affordable housing in areas that are in need should help to contribute to improved health and wellbeing in these areas. Development may also support new open space and recreational facilities (though there may also be a small loss of greenfield land in the first place). Access to the countryside ought to be good. Overall the effects are mixed, with a **moderate negative effect** associated with poor accessibility and potential effects on services, but a **moderate positive effect** to reflect the delivery of housing and associated investment (which would be more likely to benefit rural areas too).

Options 1 and 6 (both propose 18,100 homes), the effects would be similar to option 5, but at a much lower level, and thus the effects are predicted to be minor, rather than moderate (for both the positive and negative elements).

Options 2, 3, 4 and 7 involve a low level of growth (9,050 – 13,575 homes), and it would be spread thinly across a number of smaller settlements. It is therefore considered to have a **neutral effect** overall for these options.

Higher growth projection: As with the OAN projections, option 5 and the dispersal of growth would have potential negative effects on health and wellbeing. However, the increased amount of growth would be more likely to have a **major negative effect**. The positive effects remain **moderately positive**, as the benefits on health obtained from housing and new facilities in smaller settlements are unlikely to be major in any one location.

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The increased pressure on land would also make it more difficult to ensure access to open space, and there may be a limit to how much facilities can be expanded / improved in smaller settlements.

Options 2 and 3 would involve similar levels of growth to options 1 and 6 at the OAN growth projections. Therefore, the effects are predicted to be similar (i.e. **minor negative effects** and **minor positive effects** together). The level of growth for Option 4 would remain low and is predicted to still have a **neutral effect**. Though the effects for options 1 and 6 would be intensified too, this would not constitute a significant change in effects. Therefore, a **minor negative effect** and **minor positive effect** is also predicted at this higher level of growth.

New / expanded settlements:

OAN growth projection: Option 5 is the only option that suggests housing provision through new settlements or through expansion to existing settlements such as Lutterworth. This option has the potential for **major positive effects** for new settlements through the creation of new sustainable communities with their own health facilities and recreational facilities. The benefits achieved however, would most likely be reliant on the successful implementation of substantial new infrastructure.

However, expansion of existing settlements could put pressure on existing facilities, open space and exacerbate existing problems. As an example, substantial further growth to Lutterworth could have negative effects on air quality. Consequently, a **major negative effect** is also predicted.

The hybrid option, like option 5, involves new / expanded settlements, but the focus is along the A46 corridor and the Northern/Southern Gateway. New settlements ought to have their own health facilities and recreational opportunities, but this would be dependent upon the scale of growth. Nevertheless positive effects would be anticipated. New settlements in close proximity to the Leicester urban periphery could also benefit communities in these areas (through access to affordable housing and new community facilities), though access to new facilities would be most likely by car. Overall, these amount to **significant positive effects**. Conversely, growth at existing settlements could put pressure on existing services, without creating the critical mass to deliver new facilities locally. There would also be a loss of open space, though green infrastructure could potentially be incorporated into new developments. Increased growth at the A46 corridor could also potentially increase traffic into the City, having negative implications for communities in these areas, particularly where air quality is an issue. Consequently, a **moderate negative effect** is also predicted.

Higher growth projection: At a higher level of growth, (54,300 homes) the intensity of growth at new/expanded settlements would be greater, and thus the effects would likely be similar. Major negative effects are still predicted due to the pressures described above. Though the positive effects are also predicted to be major, there is slightly more uncertainty, as the higher level of growth would necessitate increased support through infrastructure upgrades.

Overall effects

The overall effects for each of the options do not differ substantially. Each is predicted to have significant positive effects and significant negative effects. The main difference is how these effects would be felt across the Plan area. For option 1, the majority of the effects are focused upon the City, and urban periphery, with only minor effects elsewhere. This is beneficial with regards to tackling deprivation and focusing growth into accessible areas, but would mean that positive effects elsewhere across the County were limited, and there could be negative effects for some communities close to the City. Likewise, the effects for option 2 are focused most prominently on the market towns and for option 4 at new settlements. Whilst these approaches would have specific benefits in those locations, they miss an

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opportunity to deliver greater benefits around the City. The dispersed and trend approaches (5 and 6) have a more even spread of effects.

The positive effects are predicted to be major for options 1, 3 5 and 6, but only moderate for 2 and 6. For options 5 and 6, the effects are spread quite widely across the district, and so overall, the benefits accrued are not major in any one place. The overall negative effects are considered to be greatest for Options 1,2 3 and 4, as these focus growth most intensely in areas that may not be able to accommodate such growth without detrimental effects upon health and wellbeing. Ultimately, many of the negative effects could be mitigated through the delivery of infrastructure improvements (though this could be limited in some areas such as under a dispersed approach) but specific schemes have not been factored into the appraisal as it is uncertain what would be secured under each growth / distribution alternative.

The hybrid option is predicted to have mixed effects on health and wellbeing. Some communities could benefit from better access to affordable homes, jobs, facilities and services. This is the case in the City, the market towns and at the urban periphery. At new / expanded settlements, the effects are predicted to be significantly positive. Considered in combination **major positive effects** are predicted. Conversely, some communities could experience negative effects from growth due to increased traffic and congestion and / or a loss of pressure on existing services and a loss of open space. Consequently **moderate negative effects** are also predicted.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Urban periphery</i>	1a	✓✓xx	✓✓✓xx	✓	✓/x	-	✓✓✓xx
	1b	✓✓xx	✓✓✓xxx	✓	✓/x	-	✓✓✓xxx
Option 2 <i>Market town focus</i>	2a	✓	✓	✓✓xxx	-	-	✓✓xx
	2b	✓	✓/x	✓✓xxx	✓/x	-	✓✓xxx
Option 3 <i>Employment-led</i>	3a	✓	✓✓xx	✓✓xx	-	-	✓✓✓xx
	3c	✓	✓✓✓xx	✓✓xxx	✓/x	-	✓✓✓xxx
Option 4 <i>New settlements</i>	4a	✓	✓	✓	-	✓✓xxx	✓✓xx
	4b	✓	✓/x	✓/x	-	✓✓✓xxx	✓✓✓xxx
Option 5 <i>Dispersal</i>	5a	✓	✓✓x	✓✓?x	✓✓/xx	-	✓✓✓x
	5b	✓	✓✓xx	✓✓x	✓✓/xxx	-	✓✓✓xx
Option 6 <i>Trends</i>	6a	✓x	✓✓x	✓✓?x	✓/x	-	✓✓✓x
	6b	✓✓xx	✓✓xx	✓✓x	✓/x	-	✓✓✓xx
Hybrid Option <i>Emerging approach</i>	7a	✓	✓/x	✓	-	✓✓✓xx	✓✓✓/xx

5.4 Appraisal findings: Housing

5.4.1 The findings relating to the Sustainability Topic 'Housing' are presented in the following tables.

Housing

Discussion of effects

The whole of Leicester and Leicestershire has been defined a 'housing market area' (HMA), across which people travel to work and move house. Over the pre-recession period from 2000-2007, Leicester saw the greatest growth in median house prices in the county, which rose from £40,000 to £125,000 (+178%). During 2008 – 2012 there was a 4% fall in median house values in the City authority. Over the period of 2005 to 2015, house price increase in Leicester (189%) was higher than the regional (154%) and national (158%) rates of growth. Stronger rates of growth in overcrowded households during 2001 to 2011 would appear to be affected in part by the growth of the student population in the City. Across the HMA Leicester has the lowest cost semi-detached and terraced homes, and is notably more affordable than elsewhere in the County. As is the case in many areas, the proportion of older person headed households is expected to increase at least until 2033.

City:

OAN growth projection: Option 1 (20% - 18,100 homes) and to a greater extent option 6 (25% - 22,625 homes) would deliver the highest level of housing and therefore have a major positive effect on this objective. Delivery of this level of housing and to a lesser extent all other options is likely to require the provision of housing on underused sites but also on sites currently in employment use and other sites that are undeveloped, including open spaces. Options 2, 3, 4 & 5 all allocate 10% housing growth (9,050 homes) within the City boundary, and whilst the significance of the effects may be less than options 1 and 6, the effects remain as **minor positive**. The same is the case for the hybrid option, despite the allocation of slightly more homes (10, 450).

Higher growth projection: A further increase of 20% on top of the OAN options above would only add to the **major positive effects** as a result of options 1 and 6. Given that the higher growth projection only results in a modest increase of homes for the remaining options these stay as a **minor positive effect**.

Urban periphery:

OAN growth projection: Development within the urban periphery is likely to make a positive contribution to delivery and affordability in these areas, although would do little to address affordability in rural areas. In terms of the urban periphery, option 1 (40% - 36,200 homes) and to a lesser extent option 3 (30% - 27,150) would have a **major positive effect** on housing provision as they should contribute significantly towards the identified housing need for the HMA. There is likely to be sufficient land capacity to deliver all the options, but at higher levels of growth there could be particular needs for supporting infrastructure to make such growth deliverable. Due to these peripheral locations typically having higher house prices than the areas within the City itself, growth here could help to improve affordability. Options 6 (25% - 22,625 homes) and 5 (20% - 18,100 homes) are predicted to have a **moderate positive effect** on housing provision. At lower levels of growth (options 2 and 4) positive effects on housing would still be generated at the urban periphery, but these would be minor.

Housing

The hybrid option would provide opportunities for limited growth at the urban periphery, mainly to the west and south. This ought to provide homes in areas of need, particularly for those who wish to live within close proximity to Leicester, given that the ability to meet needs in the City is limited. Though the levels of growth in the Leicester urban periphery itself are low, there could be benefits for communities in these areas from housing growth along the A46 corridor (see 'new / expanded settlements'). However, given the low level of growth in the Leicester urban periphery itself, only **minor positive effects** are predicted.

Higher growth projection: At a higher scale of growth options 1 and 3 continue to have a **major positive effect**, whilst the higher scale of growth for option 6 sees the significance rise from a moderate to a **major positive effect**. Option 5 would continue to have a **moderate positive effect**. The effects for option 2 would rise from minor to a **moderate positive effect**, but the level of growth for option 4 would still be classed as a **minor positive effect**.

Market towns:

Development within the market towns is likely to make a positive contribution to delivery and affordability in these areas.

OAN growth projection: Focusing developments to the market towns could help deliver housing in areas that have generally good access to services and jobs. At higher levels of growth though, it may be necessary to secure improved transport infrastructure. The options with a **major positive effect** are options 2 (60% - 54,300 homes) and 3 (45% - 40,725 homes). Such a level of development would involve 8,145 - 10,860 per market town, which would make a significant contribution towards meeting identified housing need in each of the towns and as a whole across the HMA. However, it is unclear whether this level of growth could be accommodated in all of the market towns, and so there is some uncertainty associated with these options.

Options that would have a **moderate positive effect** upon housing are options 5 and 6 (30% - 27,150 homes). These levels of growth would still lead to fairly substantial growth at the market towns but it ought to be easier to identify sufficient available and deliverable land compared to options 2 and 3. Therefore, there is less uncertainty associated with these options.

Those options that would deliver the least level of housing are options 1 and 7 (20% - 18,100 homes) and option 4 (15% - 13,575 homes). Nevertheless, both options would have a **minor positive effect** on housing growth by supporting steady growth.

Higher growth projection: With regards to the increased level of development, options 5 and 6 increase from a moderate to a **major positive effect** on housing. Option 3 would still have a major positive effect, though the uncertainty of delivery increases. Option 2 is predicted to still have a **major positive effect**, but there is even more uncertainty about whether the level of growth proposed could be achieved in these locations. Option 1 increase so as to have a **moderate positive effect** compared to the OAN projections, whilst option 4 remains a **minor positive effect**.

Other settlements:

OAN growth projection: With regards to the 'other settlements' the option that has a **major positive effect** by proposing the highest proportion of housing is option 5 (40%-36,200 homes). This option also disperses growth the most and ought to benefit the most communities. The diverse range of sites could also help to create greater flexibility in delivery of the housing target.

Housing

Options 1 and 6, which both deliver 20% (18,100 homes), are predicted to generate **minor to moderate positive effects**. Options 2 and 3 (15% - 13,575 homes), 4 and 7 (10% - 12%) would deliver a smaller scale of housing and have **minor positive effects**.

Higher growth projection: The increased level of proposed growth does not change the **significant positive effects** in relation to option 5. However, both options 1 and 6 propose 21,720 homes, which results in a **moderate positive effect** due to the uplift compared to the OAN growth projections. Although options 2, 3, and 4 all propose an increase in proposed dwellings, they remain as having a **minor positive effect** on housing delivery, as the amounts delivered at any one settlement would continue to be relatively modest.

New / expanded settlements:

OAN growth projection: Option 5 involves housing provision through sites at new settlements and expansion to other settlements within the Plan area. This would contribute a significant amount of housing in these locations (45,250 homes), providing a mix of types that could generate more affordable housing compared to other 'sub' market areas with well-established values. Given the concentration of housing in a small amount of large developments, the delivery of growth may be slower, and reliant on infrastructure support, so there may be some uncertainty associated with this option. Nevertheless, a **significant positive effect** is predicted. For all other options a **neutral effect** is predicted as there would be no growth through new or expanded settlements.

The hybrid option seeks to provide much of the housing land at 'new settlements', though many of these would have close relations to the Leicester urban area along the A46 expressway corridor. The total number of houses provided for in these locations would be approximately 48,000, and would help to meet needs in close proximity to job opportunities in the City and the Northern and Southern Gateways. Although the delivery of some of the sites could take longer due to phasing and build out rates, a **significant positive effect** is still predicted.

Higher growth projection: At a higher level of growth, (54,300 homes) the intensity of growth at new/expanded settlements would be greater, and thus a **major positive effect** would remain.

Overall effects

The overall effects on housing are positive for each option. The differences lie in where the benefits would be most profound, and whether there are uncertainties about the delivery of housing, or the timing of delivery or requirements for supporting infrastructure. For option 1, the City and urban Periphery benefit from significant effects, but the positive effects generated elsewhere throughout the HMA are only minor. At the OAN growth scenario, effects are predicted to be moderate positive overall. At a higher level of growth to allow for flexibility, a major positive effect is predicted, as there would be greater choice in the market towns and other settlements too.

Option 2 presents the opportunity to generate major positive effects in the market towns, helping to spread the benefit somewhat. However, it is unclear whether there would be sufficient land available to allow for such a strategy to be delivered. There is therefore uncertainty associated with the magnitude of the positive effects. The effects in other parts of the HMA would only be minor, and in the case of the City/urban periphery, this approach would not best meet needs that arise in those areas 'close to source'. Overall a moderate positive effect is predicted for the OAN growth projection, as there is uncertainty about the deliverability of such high levels of growth in the market towns.

Housing

The situation would be similar for the higher growth projections, as the majority of growth under these options is directed to the market towns. The increase in the City / urban periphery and other settlements would therefore not be substantial.

Option 3 would have major positive effects associated with housing growth on the urban periphery, helping to meet needs where they arise and in locations close to employment opportunities. Additionally there ought to be positive effects for the market towns, but the certainty of such high levels of growth being delivered are uncertain. There would also be benefits for the City and other settlements, but at a lower level. Overall, the effects across the HMA are predicted to be major for both the OAN projection and the higher growth projection.

Option 4 much focuses to majority of development to new or expanded settlements. This approach has benefits in terms of creating new communities with affordable homes. However, it does not necessarily place housing close to areas with existing infrastructure, or where needs are most prominent. There are some uncertainties with this approach given that housing would be focused into a small number of locations which would require substantial infrastructure provision. The effects in the other parts of the HMA would mostly be minor, but nevertheless positive. Overall a moderate positive effect is predicted at both the OAN and higher growth scenarios.

Option 5 would disperse growth the most, but this would still generate positive effects at the urban periphery and market towns, and to a lesser extent at the City (though the capacity to absorb higher levels of growth could be difficult anyway). Under the dispersed approach, affordability in rural areas ought to be better tackled, and there ought to be a more diverse range of housing sites across the HMA. Therefore, this approach could have a major positive effect on housing provision across the HMA overall. The effects would be more positive at a higher growth projection, though this is still recorded as a **major positive effect**.

Option 6 would lead to major positive effects in the urban periphery and moderate positive effects for the market towns. However, it is unclear whether the levels proposed for the city could be accommodated. For the OAN level of growth a moderate positive effect is predicted overall, reflecting the major positives at the urban periphery, but more minor positive effects for the 'other settlements' and the city. At the higher level of growth the overall effects are predicted to be major positive, as the effects in the market towns and 'other settlements' should also increase.

The hybrid option is predicted to have a significant positive effect overall. This mostly relates to the benefits that would be generated by new settlements along the A46 corridor, which should also have knock on benefits for housing within the City and its' urban periphery. There would also be positive effects generated across the market towns and other settlements, though these would only be minor.

Housing							
		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	✓✓?	✓✓✓	✓	✓	-	✓✓
	1b	✓✓?	✓✓✓	✓✓	✓✓	-	✓✓✓
Option 2 <i>Market town focus</i>	2a	✓	✓	✓✓✓?	✓	-	✓✓
	2b	✓	✓	✓✓✓?	✓	-	✓✓
Option 3 <i>Employment-led</i>	3a	✓	✓✓✓	✓✓✓?	✓	-	✓✓✓
	3c	✓	✓✓✓	✓✓✓?	✓	-	✓✓✓
Option 4 <i>New settlements</i>	4a	✓	✓	✓	✓	✓✓✓?	✓✓
	4b	✓	✓	✓	✓	✓✓✓?	✓✓
Option 5 <i>Dispersal</i>	5a	✓	✓✓✓	✓✓	✓✓✓	-	✓✓✓
	5b	✓	✓✓✓	✓✓✓	✓✓✓	-	✓✓✓
Option 6 <i>Trends</i>	6a	✓✓?	✓✓✓	✓✓	✓	-	✓✓
	6b	✓✓?	✓✓✓	✓✓✓	✓✓	-	✓✓✓
Hybrid Option	7a	✓	✓	✓	✓	✓✓✓	✓✓✓

5.5 Appraisal findings: Employment and Economy

5.5.1 The findings relating to the Sustainability Topic 'Employment and Economy' are presented in the following tables.

Employment and Economy

Discussion of effects

City

AN growth projection: Option 1 (20% - 18,100 homes) and to a greater extent option 6 (25% - 22,625 homes) would be likely to have the greatest effect on the City's economy and employment. An increase in homes would help to provide accommodation for workers in the City, and matches job opportunities to homes very well. If housing is located in accessible locations, via the transport network, this could help support the expansion of economic/employment hubs. This could also aid the continuation of business growth over the coming years in line with recent trends, allowing the maintenance of Leicester being the strongest economy in the east midlands. There would also be job creation to construct homes in the City. It is difficult to predict whether areas with higher levels of deprivation would benefit, as this depends upon the location of sites and other factors. However, growth in the city ought to help contribute to improved choice, and could bring with it improvements in infrastructure (physical and social) that could benefit such communities. It is assumed that increased housing in the City would help meet housing needs, rather than put more people into the city and therefore increase competition for jobs. Overall, a **moderate positive effect** is predicted for these options.

Options 2, 3, 4 & 5 all propose 10% (9,050 homes) growth within the city boundary which could have a **minor positive effect** upon the economy and employment for the same reasons identified above. The same is the case for the hybrid option, despite the allocation of slightly more homes (10, 450).

Higher Growth projection: An increase in 20% could have the potential to exacerbate the effects from the OAN growth projection, especially for option 6 where housing numbers would increase by 5,000 (approx.) homes. This is predicted to have a **major positive effect** in terms of providing homes in accessible locations to employment opportunities. However, it could lead to further competition for jobs in the City (assuming an increased in-migration), which could be a negative factor in tackling unemployment across the city. The effects are not considered likely to be significant though, so an **uncertain negative** is predicted. Options 2, 3, 4 & 5 are predicted to have a **minor positive effect** still.

Urban periphery

OAN Growth projection: The delivery of homes to the Leicester urban periphery could help to provide homes that have good access to jobs in the City, and further afield should there be connections to the strategic road networks. However, access to a large proportion of these jobs outside of Leicester would be reliant on the private car, and so certain communities might not benefit. Provision of homes in the periphery could help to tackle deprivation in the City itself, should it help to provide accommodation for such communities. Growth in the urban periphery would also require construction workers, which again, ought to provide jobs to people in the City, as well as providing an economic boost. Housing provision close to the City and surrounding employment hubs (for example the Global Technologies Hub) could also help to improve graduate retention (access to higher quality jobs) and fill gaps in the market (leisure and creative industries), which is something that is currently lacking across the whole of the Plan area.

Employment and Economy

Option 1 (40% - 36,000 homes) is most likely to generate benefits, and thus a **major positive effect** is predicted. Option 3 (30% - 27,150 homes) is predicted to have **moderate positive effects**. At a lower scale of growth proposed under options 5 and 6, **minor positive effects** are predicted. Options 2 & 4 propose the lowest level of growth around the urban periphery at 15% (13,575 homes). This level of growth may not help to accommodate significant expansion of the economy, but may allow for some jobs to be taken by existing communities in the City. A **neutral effect** is therefore predicted.

The hybrid option directs only a small level of growth into the Leicester urban periphery, which is likely to have **neutral effects** in terms of the economy and employment in this area. However, there may be benefits accrued through growth along the A46 corridor that could filter through to Leicester City and its' urban periphery.

Higher Growth projection: The higher growth projection could help further expansion of key employment hubs. Option 1 would require 43,440 new homes to be delivered around the Leicester urban area, in turn increasing the working age population concentrated in this area. Therefore, **major positive effects** would still be predicted. However, enabling an increase in the population above projected levels of employment growth (for the HMA as a whole) could lead to increased competition for jobs. Given that option 1 would focus a large proportion of jobs to the periphery, an **uncertain negative effect** is associated with this option to reflect these issues. Option 3 could also generate **major positive effects** by increasing support for economic expansion. The effects for option 6 would rise from minor to **moderate positive effects**, whilst for option 5, the effect would remain minor. For options 2 and 4 the effects are increased from neutral to a **minor positive effect**.

Market towns:

Hinckley

- The M69 linking the M1 to the M6 intersects the market town of Hinckley. Also, the A5 runs along the southern border. These two key transport routes make economic development highly attractive. Due to the location of Hinckley being on the most south-westerly boarder of Leicestershire, there is the opportunity to develop cross-border relations with surrounding areas such as Coventry.

Coalville

- The A511 runs through Coalville, linking the M1 to the A42. The key employment locations across the North West Leicestershire authority are East Midlands Gateway and the general regeneration of Coalville Urban Area.

Loughborough

- Charnwood Borough Council has identified Loughborough Science and Enterprise Park as a key employment location within the borough.

Melton Mowbray

- Agri-food and drink processing at Melton Mowbray is a key employment location in the area.

Market Harborough

- Key employment locations, as highlighted in the SA scoping report are the town centre itself, Magna Park in Lutterworth and other strategic development areas.

Employment and Economy

OAN Growth projection: New development could help to provide accommodation for the working age population due to the delivery of a diverse range of housing to the area. More housing within and around these market towns could help sustain the key economic hubs nearby to the market towns, as well as the vitality and viability of the Market Towns themselves. Each of the market towns also has relatively good transport networks, and so it still ought to be possible to access jobs in Leicester. In terms of tackling regeneration issues, a focus on areas such as Coalville and Hinckley ought to be beneficial.

For growth at any of the market towns though there would be a need for supporting infrastructure to ensure that growth can be accommodated. At higher levels of growth, impacts on infrastructure (for example increased congestion) could potentially have negative implications for businesses (particularly those that rely upon efficient transport networks).

Option 2, aiming to deliver the highest growth throughout the market towns (10,860 per town) could have the potential to tackle issues regarding the lack of job opportunities, particularly for skilled workers. It would also support an increase in economic activity at market towns and could tackle deprivation in some locations. However, by directing 60% of the overall growth to market towns, this could put pressure on infrastructure, and may also lead to increased competition for jobs locally. This could result in an increase in outward commuting to larger centres. On balance, a **major positive effect** is predicted, but there may also be a **minor negative effect**.

Option 3 is predicted to have similar effects to option 2, but at a slightly lower scale of growth (8,145). At this level of growth, the pressure on infrastructure would be reduced slightly, and the likelihood of out-commuting may also be lower. On balance a **moderate positive effect** is predicted. Both options 5 & 6 aim to deliver 30% of homes, therefore **minor positive effects** are predicted. This level of growth ought to support economic activity in the market towns and provide housing to help support economic growth. There would be fewer effects on infrastructure and levels of commuting at this level of growth.

Options 1 & 4 would provide fewer homes to support economic expansion within and surrounding the market towns. This would reduce the benefits associated with growth and would not help to support economic expansion as well as the other options. Therefore, a **neutral effect** is predicted.

The hybrid option would support growth in-line with existing local plans, and would not lead to substantial development in the longer term. Consequently, the effects on the economy and employment opportunities at the market towns are likely to be limited. However, other elements of the spatial strategy could lead to benefits for the market towns, such as the A46 corridor bringing improved connectivity and opportunities to Hinckley, and the Northern Gateway providing a location for a growing workforce that could support people working in Coalville and Loughborough. Overall, effects for the market towns are a **minor positive effect**.

Higher Growth projection: Whilst further housing delivery is positive with regards to construction, tackling deprivation and supporting economic growth, a further 20% growth for options 2 and 3 (to a lesser extent) could result in putting too much pressure on the infrastructure at the market towns. This could affect the efficiency and attractiveness of these towns as business locations in the longer term. Therefore, whilst **major positive effects** could be generated on one hand, **moderate negative effects** could be generated in the longer-term for option 2 and **minor negative effects** for option 3.

Options 5 & 6 would have **moderate positive effects** due to an increased support for economic growth, and increased local spending.

At the higher growth projection, option 1 is predicted to have a **minor positive effect**, whilst option 4 would still have broadly **neutral effects**.

Employment and Economy

Other settlements

OAN Growth projection: Option 5 (40% -36,200) proposes the highest level of growth to other settlements across the Plan area. Whilst this could generate a **moderate positive effect** for quite a number of rural communities (i.e. local spending and construction), it would not place homes in areas that offer greatest potential for employment expansion. In general, the smaller towns and villages already struggle to provide local opportunities for skilled workers.

Therefore, large amounts of growth in these locations could exacerbate this problem, resulting in greater levels of commuting. Growth in the rural areas would also do little to address regeneration, as most of these locations are affluent. It would also draw investment away from more suitable locations for economic growth such as the market towns and the City. Therefore, a **moderate negative effect** is also predicted.

For options 1 and 6, the effects are predicted to be similar, but to a much lesser extent. Therefore a **minor positive effect** is predicted in terms of the benefits to communities, but only a **minor negative effect** is predicted. Options 2, 3, 4 and the hybrid option (9,050-13,575 homes) would be less likely to have significant effects, given that the scale of growth is lower and any benefits would be spread thinly. Therefore **neutral effects** are predicted. At this lower level of growth, negative effects are not likely to occur, given that it does not draw much growth away from other (more sustainable) locations.

Higher Growth projection: At the higher growth projection the level of growth proposed overall is greater than projected employment growth, and could (If increased housing provision encourages in-migration from outside the HMA) lead to increased competition for jobs. Conversely, it could drive/support further economic growth in the HMA. For option 5, the increase in growth would continue to have a **moderate positive effect** on the local economies of 'other settlements'. A **major negative effect** is also predicted. Although the proportion of growth drawn away from other parts of the Plan area remains the same, the overall increase in growth could potentially increase competition for jobs. For options 1 and 6, the benefits are increased, and so a **moderate positive effect** is predicted. Only a **minor negative effect** is predicted still. Options 2, 3 and 4, are predicted to have **minor positive effects** due to the higher level of growth.

New / expanded settlements:

Lutterworth

- Situated near the M1 and accessed directly off the A5, puts Lutterworth in a strong economic position for growth due to its locational appeal.
- Magna Park, near Lutterworth is a key employment location.

Ibstock

- High numbers of people commute to larger urban areas for work.

Kibworth

- Located just off the A6 with some potential to support economic growth.

Airport

- The area around the East Midlands Airport is particularly attractive to logistics operators, based upon findings from economic assessment for the area.

Employment and Economy

- Public transport links to these areas could improve with investment, but they are likely to remain car-dominated without substantial intervention and investment.

Six Hills

- Fairly isolated from the key employment centres and an increase in growth in this location could lead to a higher dependency on the private car. The local area would not have the capacity to support a growth in population without substantial improvements to infrastructure.

East of Loughborough

- Land to the east of Loughborough is well connected to major transport routes which add to its economic appeal. The expansion of Loughborough Science Park could be supported by housing growth to Loughborough.

Stoney Stanton

Could help promote growth corridors surrounding the M1, M69 and A5, all of which hold economic appeal. Housing could in turn increase the number and diversity of potential future employees to the area within a commutable distance.

OAN Growth projection: Option 4 (50% - 45,250) is the only option suggesting to direct growth towards new/expanded settlements. Growth at some of these areas could be attractive as it would provide homes in areas within close proximity to jobs and / or with good transport access to jobs (for example Lutterworth, Stoney Stanton) but in other areas would locate growth in areas that are less well related to employment opportunities (for example Ibstock and Six Hills). Growth at these new or expanded settlements would be unlikely to have significant effects on regeneration. On balance, this option is predicted to have a **moderate positive effect**. Though this option draws growth away from locations such as the City and the market towns, some of the new and expanded settlements could support strategic growth aspirations. Therefore, no negative effects are predicted for option 4. All other options are predicted to have **neutral effects** on the economy and employment for existing settlements as growth would be delivered elsewhere in the Plan area.

The hybrid option would provide a substantial amount of growth along the A46 expressway. This ought to provide opportunities for housing growth to support job opportunities in Leicester City, MIRA Technology Park and Loughborough and Leicester Enterprise Zone which have all been identified as key locations for economic growth in the Midlands Engine Strategy. Accessibility to these opportunities ought to be good, though this might be through a reliance on the private car in some locations. Though regeneration is not a priority along these corridors, there could be knock on benefits for nearby communities at Leicester City and its' urban periphery (for example employment in construction jobs, and provision of a workforce to support economic growth in the City).

Overall, a **major positive effect** is predicted.

Higher Growth projection: For the higher growth projection the effects on the employment and economy at the new settlements are predicted to be a **major positive effect**. However, there could be greater uncertainty about the delivery of supporting infrastructure. The overall increase in housing provision might also lead to greater competition for jobs, should there be increased in-migration. This is recorded as a potential minor negative effect.

Employment and Economy

Overall effects

Option 1 places the majority of growth into the City and the urban periphery. This ought to have major positive effects in terms of supporting economic growth in these areas and helping to tackle regeneration priorities. However, this would be at the expense of no positive effects occurring at the market towns. There would be some small benefits for rural communities in 'other settlements', but also potential minor negative effects due to the potential to increase commuting, and not tackle regeneration. On balance a **moderate positive effect** is predicted overall, reflecting the major positives at the City, but the lack of benefits in the market towns and potential negatives in the other settlements.

At the higher scale of growth, the positive effects are enhanced to a major positive effect, but there are potential negative effects in terms of increased competition for jobs and pressure on infrastructure (which could affect the attractiveness of locations in the longer term).

Option 2 places the majority of growth to the market towns, which is of major benefit for these locations and also places a large amount of growth in areas that are accessible to jobs. However, this approach would not have many benefits in other parts of the Plan area, and therefore only a **moderate positive effect** is predicted overall. A **minor negative effect** is also recorded at the market towns as there could be significant pressure on infrastructure, and increased competition for jobs in these locations. At the higher growth projection, the positive effects increase across the Plan area as a whole, but so too would the potential negative effects for the market towns (Which make up a large proportion of growth across the Plan area for this option).

Option 3 is predicted to have a **major positive effect** overall across the Plan area. There would be benefits generated for the City, urban periphery and the market towns, which are all strong areas for growth. However, the growth proposed in these locations ought to be accommodated by infrastructure. A neutral effect would be generated for the new/expanded settlements though, which could perhaps be a missed opportunity where there are specific economic growth hubs. At the higher growth projection, the effects are enhanced, and include positive effects at the 'other settlements' too. However, a **minor negative effect** is predicted.

Option 4 is predicted to have a **moderate positive effect** overall. The benefits would mostly be accrued at the new/expanded settlements, some of which are good locations for housing to be located to support economic growth. There would be minor benefits for the City, but only neutral effects in most of the other areas of the HMA. At the higher growth projection, the positive effects are more pronounced, but the potential for negative effects arise. Therefore, a **major positive effect** and **minor negative effect** is predicted.

Option 5 is predicted to have mixed effects. On one hand it would generate **moderate positive effects** across the Plan area and would have particular benefits for 'rural' settlements through support for their local economies. However, directing a large amount of growth to the smaller settlements would lead to increased commuting, would not tackle regeneration and draws growth away from more sustainable locations such as the City and market towns. Therefore, a **minor negative effect** is also predicted. At the higher growth projection, the positive effects would remain broadly the same for the City and urban periphery, but would increase slightly for the market towns. Overall, a **moderate positive effect** is still predicted. The potential negative effects are predicted to rise from minor to **moderate negative effects** overall.

Employment and Economy

Option 6 is predicted to have a **moderate positive effect** overall across the Plan area. Benefits would be generated in all parts of the Plan area, with the exception of ‘new/expanded settlements’; though these would be mostly minor in nature. Though a minor negative effect is predicted due to growth directed to ‘other settlements’, this is not significant at the HMA level. At the higher growth projection, the positive effects would be more pronounced, and thus a major positive effect is predicted.

The hybrid option is predicted to have a **significant positive effect** on the economy and employment overall. New homes are mostly focused at key locations for employment growth and infrastructure improvements; which should help to support economic growth in key industries and provide jobs in construction. Though the effects would only be minor for the market towns, there could be knock on benefits as a result of the northern gateway (for example at Coalville and Loughborough), and as a result of the Southern Gateway (For example at Hinckley). Melton Mowbray is also identified as a key centre for growth, which ought to have positive implications.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	✓✓	✓✓✓	-	✓/✗	-	✓✓
	1b	✓✓✓ / ?	✓✓✓ / ?	✓	✓✓/✗		✓✓✓/✗
Option 2 <i>Market town focus</i>	2a	✓	-	✓✓✓ / ✗	-	-	✓✓ / ✗
	2b	✓	✓	✓✓✓ / ✗✗	✓		✓✓✓/✗✗
Option 3 <i>Employment-led</i>	3a	✓	✓✓	✓✓	-	-	✓✓✓/✗
	3c	✓	✓✓✓	✓✓✓ / ✗	✓		✓✓✓
Option 4 <i>New settlements</i>	4a	✓	-	-	-	✓✓	✓✓
	4b	✓	✓	-	✓	✓✓✓/✗	✓✓✓/✗
Option 5 <i>Dispersal</i>	5a	✓	✓	✓	✓✓/✗✗	-	✓✓/✗
	5b	✓	✓	✓✓	✓✓/✗✗✗		✓✓/✗✗
Option 6 <i>Trends</i>	6a	✓✓	✓	✓	✓/✗	-	✓✓
	6b	✓✓✓ / ?	✓✓	✓✓	✓✓/✗		✓✓✓/✗
Hybrid Option	7a	✓	-	✓	✓	✓✓✓	✓✓✓

5.6 Appraisal findings: Transport and Travel

5.6.1 The findings relating to the Sustainability Topic 'Transport and Travel' are presented in the following tables.

Transport and Travel

Discussion of effects

City

According to the Leicester and Leicestershire Rail Strategy (2016), Leicester and Leicestershire have relatively poor rail connectivity compared with similar areas. Whilst the service to London is frequent from Leicester, the strategic connectivity to regional and national centres of economic activity is weak. Travelling from north to south is relatively easy, though congested at times, but links from east to west are slow and unreliable.

Within the city of Leicester, accessibility is good and is predicted to remain this way with the potential to further improve. 96% of the population within the city live within 400m of a bus stop. However, these public transport links quickly dissipate beyond the city centre boundary. Even though the public transport offer is fairly strong within the city, car use is still highly popular which in turn leads to congestion on the roads in the urban area and it is worse than most comparator cities in England.

GAN Growth Projection: Option 6 (25% - 22,625 homes) directs the most strategic growth to the City and option 1 (20%), to a slightly lesser extent. Development in the City ought to be accessible to services and employment by sustainable modes of travel, and therefore have a positive effect in terms of reducing the need to travel. Infrastructure improvements could also be secured to key junctions for example. Consequently, a **moderate positive effect** is predicted for options 1 and 6. Though increased housing in the centre could lead to increased car trips, it is less likely than would be the case for locations outside the City boundary. Therefore, negative effects are less likely to occur.

Options 2, 3, 4, & 5 all allocate 10% housing growth for the City, which should allow developments to contribute to strategic infrastructure improvements and place a proportion of the HMA housing in an accessible location that ought to reduce the need to travel. Consequently a **minor positive effect** is predicted for these options. The same is the case for the hybrid option, despite the allocation of slightly more homes (10, 450).

Higher Growth projection: The higher growth projection would lead to a greater number of people living in the City, though the proportion of new growth remains the same as for the OAN projection. The overall increased growth could put slightly greater pressure on infrastructure, which might be difficult to accommodate even with upgrades. Therefore a potential **minor negative effect** is predicted, but this is uncertain. A **moderate positive effect** would still remain, due to the sustainable location of the City for the most part.

Options 2, 3, 4, & 5 are still predicted to have a **minor positive effect**.

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Urban periphery

Several authorities (Harborough, Oadby and Wigston, Charnwood) have highlighted that there may be constraints to the amount of development that can be accommodated on the edge or near the Leicester urban area in light of a poor orbital road network in some locations at specific times. Growth could exacerbate congestion along A6 / A453 (Ring Road) for example.

OAN Growth Projection: Growth in the urban periphery could help to reduce the length of trips made into the city (compared to travel from more distant settlements), which ought to reduce the length of trips made to access jobs and services. The urban periphery and City itself are also the focus of several key economic growth areas, and so homes ought to be well located in relation to job opportunities. Conversely, promoting growth throughout areas surrounding the urban periphery may result in a heavier reliance on the private car. Though public transport from some parts of the periphery may support sustainable travel, many areas would be reliant on the private car without substantial upgrades to the public transport network. Consequently, further development in this location could have a negative effect on congestion, unless major investment can be generated to fund public transport improvements to the area and upgrades to the strategic road network. Option 1 has the potential to result in the highest amount of congestion by directing 40% (36,200 homes) of future growth to the city periphery. If future development sites are well integrated into and enhance Leicester's current transport network, this could have a positive effect on accessibility. However, it is uncertain whether such upgrades would be made at this stage. Option 1 is predicted to have mixed effects for transport and travel. A **moderate negative effect** reflects the potential for pressure on the road network, whilst a **moderate positive effect** is predicted to reflect the likely reduction in trip length and good access to jobs.

Option 3 & 6 would deliver around 25,000 homes to the city's periphery, and therefore still has the potential to put an increased amount of pressure on the road network surrounding the city. Therefore, it's predicted that **minor negative effects** would occur. A **minor positive effect** is predicted to account for reduced trips and good access to jobs.

Options 2, 4, and 5 would deliver lower amounts of growth to the City's periphery and would put the least amount of pressure on the current transport network, whilst also creating possible links to the public transport network that already exists within the City's boundaries. On balance a **neutral effect** is predicted, as these options would be easier to accommodate within existing infrastructure. The positive effects of reduced travel would be relatively modest.

The hybrid option allocates the least amount of growth to the Leicester urban periphery, which would result in very limited effects on transport and travel assuming that a variety of site options would come forward across these areas. However, the effects of growth along the A46 Corridor could extend into the urban periphery and the City itself (see new settlements).

Higher Growth projection: At the higher growth projection, option 1 is predicted to have a **major negative effect**, as the level of growth would be difficult to accommodate and it is uncertain whether suitable mitigation/infrastructure upgrades could be secured. A **moderate positive effect** is predicted. For options 3 and 6 a **moderate negative effect** is predicted, whilst a **minor positive effect** remains. For 2, 4 and 5 a **minor negative effect** is predicted.

Market towns

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OAN Growth Projection: Each of the Market Towns has its own specific transport issues, but town centre congestion at peak times is a common issue, which could be exacerbated by development. Accessibility in the market towns is generally good, but nevertheless, levels of car use are still high. Growth at the market towns would likely be at strategic development areas at the edge of the towns. With expansion of public transport networks, housing could be well positioned to access to services, jobs and facilities in the towns. However, commuting to other locations along the strategic route network would also be likely. Spreading growth to five market towns, should however, put less pressure on the City and urban periphery, whilst also allowing communities to access public transport to job opportunities in the City. Growth around the market towns could also involve employment expansion, which would support a reduction in travel itself. There is therefore potential for mixed effects with regards to transport and travel.

Option 2 is likely to have the greatest effects by directing 60% (10,860 homes) of the future housing in the Plan area to these locations. This could put pressure on the current road networks without prior investment in infrastructure. Town centre networks may also be unable to cope with such an increase in growth. This would lead to **major negative effects**. Conversely, a high level of growth at the market towns would place housing in areas that are relatively accessible to jobs and transport hubs. In particular, there are key economic growth areas at Hinckley, Melton and the East Midlands Gateway (located close to Coalville). Therefore, the length of car trips ought to be minimised, as well as ensuring new development has good accessibility. In this respect a **moderate positive effect** is predicted for option 2.

Option 3 (40%) would have similar effects but to a lesser magnitude and therefore **moderate negative effects** are predicted. **Moderate positive effects** are still likely to occur at this scale of growth. Options 5&6 (30%) are predicted to have **minor negative effects** relating to congestion and car travel. However **minor positive effects** are also predicted due to good accessibility. Options 1, 4 and the hybrid option (15-20%) would deliver the least growth and therefore have the potential to generate a practical amount of growth that ought to be easier to accommodate without major infrastructure enhancement. The positive effects of accessibility would still be achieved though and so a **minor positive effect** is predicted.

Higher Growth projection: At the higher growth projection the negative effects are likely to be exacerbated, and so a **major negative effect** is predicted. The positive effects are predicted to be the same for each option, as the proportion of growth in these areas remains the same across the Plan area. The effects for option 3 would rise to **major negative effects**. For options 5 and 6, a **moderate negative effect** is predicted, whilst for options 1 and 4 a **minor negative effect** may start to be generated

Other settlements

OAN Growth Projection: Directing growth to 'other settlements' is predicted to have broadly negative effects in terms of travel, as it would place homes in the most inaccessible locations, and the most distant (overall) from sources of employment. It would therefore encourage longer trips and greater amounts of car travel compared to more accessible locations such as the City and market towns. Dispersing growth however, could have some minor benefits (if growth is sufficient) in terms of supporting the viability of rural public transport services and could also contribute to improvements in local health/education. This could contribute to improved accessibility to services and facilities in some instances. Dispersed growth would also be less likely to focus congestion in any one particular location, though trips to the major employment locations would still contribute to overall levels of congestion in those areas.

For option 5 which proposes 40% growth in other settlements, a **major negative effect** is predicted due to new homes being located in the least accessible locations, and likely leading to increased and longer car trips. Conversely, a minor positive effect is predicted as new growth could help to support local service improvements

Transport and Travel

that could maintain or improve access for existing rural communities. The level of growth under option 5 could perhaps support a **minor positive effect** in this respect.

Options 1 & 6 (20%) are predicted to have a **moderate negative effect**, but the scale of growth would perhaps be too low to have a significant positive effect on rural public transport and other infrastructure. Therefore an **uncertain minor positive effect** is predicted.

Options 2, 3, 4 and the hybrid option (10-15%) are predicted likely to have a **minor negative effect**. No positive effects would be likely.

Higher Growth projection: At the higher growth projection the effects (both positive and negative) would be enhanced. Therefore, for option 1 a major negative effect remains. However, a **moderate positive effect** is predicted as the high scale of growth could support service improvements and access in rural areas. For Options 1 and 6 a **major negative effect** is predicted, but the positive effects are predicted to be minor. For options 2 and 3 **moderate negative effects** are predicted and an **uncertain positive effect**. For option 4, the effects remain the same (minor).

New / expanded settlements:

OAN Growth Projection: Growth at new or existing settlements is likely to have mixed effects on transport and travel depending upon the locations developed. For example, East of Loughborough, Lutterworth, and the East Midlands Airport are all in close proximity to areas of key economic activity/growth. Therefore, housing here ought to be in close proximity to job opportunities (though this is not to say that all residents would access these jobs). However, the likely mode of transport is car travel. For other nodes such as Six Hills and Ibstock, immediate links to the key employment centres are not as strong. Therefore, proposing growth in these locations could draw it away from areas that are more accessible and better connected. New settlements would also need supporting infrastructure, none of which would be likely to include rail travel though. In terms of congestion, major new settlements could put pressure on specific points in the road network, and these issues would need to be explored and mitigated. Due to the varied locations, and potential for both beneficial and adverse consequences, mixed effects are likely as a result of growth at new / expanded settlements.

Option 5 (50% - 45,250 homes) looks to expand growth in new/expanded settlement areas. This would involve a large proportion of the total growth. Given that some locations do not have the best accessibility by public transport, and will likely result in increased car trips, major negative effects are possible. However, other locations are better located in terms of access to jobs and employment (though this may be via car travel), and could help to improve local infrastructure and services. This mitigates the negative effects likely to be felt across the Plan area in terms of car travel and sustainable travel, and so overall a **moderate negative effect** is predicted. For the new communities, access to local services and employment ought to be good as it is assumed that such large scale growth would require a new district/local centre, health and education facilities, and may also involve retail/employment. A **minor positive effect** is predicted to account for this.

No growth is proposed for options 1,2,3,4 and 6. Therefore **neutral effects** are predicted.

New settlements are also promoted as a key element of the hybrid option, but some of these would differ to those discussed under option 5 above. The focus would be on new/expanded settlements along the A46 corridor through to the Southern Gateway and also at the Northern Gateway. Given that homes should be well related to economic growth, the need to travel long distances ought to be reduced. New settlements also offer the opportunity to create communities with good access to local services. **Moderate positive effects** are predicted to reflect these factors.

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However, given that growth is focused along major new road infrastructure, the dominant mode of travel is still likely to be by private car. Therefore, significant growth in close proximity to Leicester could generate increased trips and congestion into the urban area, which could have **moderate negative effects**.

Higher Growth projection: A 20% increase in growth would exacerbate the effects and therefore **major negative effects** are predicted for option 5. The positive effects would remain minor.

Overall effects

Option 1 is predicted to have mixed effects on transport across the Plan area. There is likely to be a major positive effect associated with good accessibility and reduced trip lengths associated with growth in the City, the urban periphery and the market towns. However, this is offset somewhat by a notable portion of growth being located in other settlements. There ought to also be some minor positive effects in terms of rural accessibility. Overall, a **moderate positive effect** is predicted. However, substantial growth in the urban periphery could lead to negative effects in terms of congestion. This equates to a **minor negative effect** in terms of the Plan area as a whole, as substantial congestion issues should be avoided elsewhere. At the higher growth projection the negative effects are predicted to be more prominent, though the positive effects would remain the same.

Option 2 is predicted to have mixed effects on travel and transport across the Plan area. The effects on the City and urban periphery ought to be mostly positive, and a large focus of growth to the market towns should also foster relatively good access to services and jobs. However, the level of growth at the market towns could contribute significantly to congestion in these areas. Overall, a **moderate positive effect** is predicted, along with a **moderate negative effect**. At the higher growth projection the negative effects, particularly at the market towns would be exacerbated, leading to a **major negative effect**. The positives would remain moderate.

Option 3 is predicted to have mixed effects on travel and transport across the Plan area. As would be expected, homes are in good proximity to key employment areas and ought to lead to shorter car trips. Growth in the City and to a lesser extent the market towns and periphery should also support sustainable modes of travel. A proportion of homes are in the other settlements though, which would have poor accessibility and encourage longer trips, which offsets some of these positive effects somewhat. The level of growth in the market towns and urban periphery could also contribute to congestion problems without sufficient infrastructure upgrades. Overall, a **moderate positive effect** is predicted, along with a **moderate negative effect**. At the higher growth projection, the negative effects at the urban periphery and the market towns would be exacerbated, and the overall increase in growth in other settlements would also be negative. Consequently, a **major negative effect** is predicted, but the positive effects would remain moderate.

Option 4 is predicted to have mixed effects on travel and transport across the Plan area. There would be mostly positive effects in the City and market towns due to a modest amount of growth in these locations. The lower levels of growth would also be less likely to generate negative effects in terms of congestion. However, at new / expanded settlements there would be potential for major negative effects due to some locations having poor accessibility and likely to encourage car travel. Overall a **moderate negative effect** is predicted along with **minor positive effect**. At the higher growth projection the negative effects would be increased across the Plan area, and so a **major negative effect** is predicted. The positive effects would remain minor.

Option 5 is predicted to have mixed effects on transport and travel across the Plan area. The effects on the City the urban periphery and the market towns would be relatively minor (but positive) or neutral. However, the large amount of growth in more rural areas is predicted to lead to substantial increases in car travel and more

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homes in areas with poor accessibility overall. Though growth would still contribute to congestion overall, this would be less concentrated in any one location, and so is positive in this respect. The high level of growth in rural areas may also be enough to contribute to the viability of services in rural areas, but these effects would be minor. On balance, a **major negative effect** is predicted, alongside a **minor positive effect**. At the higher growth projection the negative effects would be exaggerated, and so a **major negative effect** remains. However, even greater amounts of growth in the rural areas could perhaps help to improve the viability for new or expanded services in rural areas, helping to tackle current accessibility issues. Consequently, a **moderate positive effect** is predicted.

Option 6 is predicted to have mixed effects on transport and travel across the Plan area. A focus of growth into the city ought to be positive given that this has the greatest concentration of job opportunities and good transport links. Modest growth in the periphery and market towns should also be positive in this respect. However, a fairly high amount of growth in the other settlements could offset these effects somewhat by drawing a proportion of growth to areas with poor accessibility. There may also be minor effects in terms of congestion. Overall, a **minor positive effect** is predicted, alongside a **minor negative effect**. At the higher growth projection the positive effects are likely to remain the same given that the proportions of growth are similar. However, the negative effects could increase due to more car travel overall. Therefore a **moderate negative effect** is predicted alongside a **minor positive effect**.

The hybrid option is predicted to have mixed effects (**moderate positive** and **moderate negative** effects) on transport and travel across the Plan area. Though there would likely be minor positive effects at market towns, there could be minor negative effects by locating growth at smaller settlements with poorer accessibility. A large focus on new settlements along the A46 expressway ought to have significant benefits in terms of reducing trip lengths by placing new homes in areas of economic growth. However, this could also put pressure on routes into the City as the dominant mode of transport would likely be private car.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	✓✓	✓✓/xx	✓	✓ [?] /xx	-	✓✓/x
	1b	✓✓/x	✓✓/xxx	✓/x	✓/xxx	-	✓✓/xxx
Option 2 <i>Market town focus</i>	2a	✓	-	✓✓✓/xxx	x	-	✓✓/xx
	2b	✓	x	✓✓✓/xxx	✓ [?] /xx	-	✓✓/xxx
Option 3 <i>Employment-led</i>	3a	✓	✓/x	✓✓/xx	x	-	✓✓/xx
	3c	✓	✓/xx	✓✓/xxx	✓ [?] /xx	-	✓✓/xxx
Option 4 <i>New settlements</i>	4a	✓	-	✓	x	✓/xxx	✓/xx
	4b	✓	x	✓/x	x	✓/xxx	✓/xxx
Option 5 <i>Dispersal</i>	5a	✓	-	✓/x	✓/xxx	-	✓/xxx
	5b	✓	x	✓/xx	✓✓/xxx	-	✓✓/xxx
Option 6 <i>Trends</i>	6a	✓✓	✓/x	✓/x	✓ [?] /xx	-	✓/x
	6b	✓✓/x	✓/xx	✓/xx	✓/xxx	-	✓/xx
Hybrid Option		✓	-	✓	x	✓✓/xx	✓✓/xx

5.7 Appraisal findings: Climate Change

5.7.1 The findings relating to the Sustainability Topic 'Climate Change' are presented in the following tables.

Climate change

Discussion of effects

City

Within the City area, there is potential for reducing energy use through passive solar design and solar technologies. Due to the concentration of services, employment and housing there may also be good opportunities for district heat networks. This is supported by winning government funding (2016) for such measures. In terms of key issues and trends for the City area, in 2016 road emissions accounted for 18.4% of all emissions in the City, per capita CO² emissions reduced from 6.9t in 2005 to 4.7t in 2014.

oAN growth projection: Each of the options could have a positive effect as increased development within the City would likely be high density, and this could assist in mitigating climate change impacts. For example, high density development increases the viability of sustainable travel modes, and also would reduce the need to travel long distances to access employment, services, and other facilities, all of which would assist in reducing pollution and greenhouse gases. A densely developed area could also increase the viability and take up of district heat networks. These factors are likely to help reduce carbon emissions. At the highest level of growth in the City under option 6 (25% - 22,625 homes) and option 1 (20% - 18,100 homes) this could have **moderate positive effects** with regards to a reduction in greenhouse gases. Options 2, 3, 4 and 5 (10% - 9,050 homes) whilst still having benefits, would be to a lesser extent, and so only **minor positive effects** are predicted. The same is the case for the hybrid option, despite the allocation of slightly more homes (10, 450).

In terms of climate change resilience, a loss of open space, and increased development in the City could contribute to an urban heat island effect, which would be negative in terms of climate change resilience. The design of development could help to address such issues, but at higher levels of growth a negative effect on resilience is more likely. An **uncertain negative effect** is predicted for options 6 and option 1. **Neutral effects** are predicted for all other options, as it would be easier to avoid open space loss, and density could be lower.

Higher growth projection: With regards to the higher growth projection figures, options 1 and 6 remain as having a **moderate positive effect**. Although more growth would be directed to the City, which is accessible and ought to help reduce emissions, the amount of growth overall is higher, which would increase carbon emissions. Although there is a slight increase in proposed housing numbers in options 2, 3, 4 and 5 the effect remains as a **minor positive**. The overall levels of carbon emissions under this higher growth option would be likely to be higher. However, the effects are still predicted to be positive. Negative effects in terms of resilience to climate change could be exacerbated under options 1 and 6, and so **minor negative effects** are predicted (without the uncertainty).

Urban periphery

oAN growth projection: With regards to the urban periphery, option 1 (40% - 36,200 homes) and option 3 (30% - 27,150 homes) would have a **minor positive effect**. Developing the urban periphery retains some of the opportunities to increase sustainable travel options due to the proximity to the City and the potential for public

Climate change

transport improvements as part of large-scale strategic development areas.

Increased development in these areas may lessen the potential to cause conflict with renewable schemes that generally need a rural location, such as mid to large-scale wind energy. However, despite a large proportion of homes being located in the urban periphery for these two options, the effects are predicted only to be minor, given that a proportion of growth in these locations would be anticipated to be by car.

Other options that may also have a **minor positive effect** are options 6 (25% - 22,625 homes) and 5 (20% - 18,100 homes), but there is greater uncertainty. Those options with a **neutral effect** (although the level of development could still support the objective) are options 2 and 4 (15% - 13,575 homes). At the urban periphery, the effects in terms of resilience ought to be easier to manage, as there would be more space to incorporate green infrastructure into strategic developments, and perhaps improve links into the City.

The hybrid option would have limited effects on climate change as the level of growth involved is minor. Therefore **neutral effects** are predicted.

Higher growth projection: Again, as with the OAN projections, development in this area retains the opportunities to increase sustainable travel options, and therefore options 1 (43,440 homes) and option 3 (32,580 homes) continue to have positive effects in this respect. However, given the additional scale of development the overall level of emissions could be higher than for the OAN growth projection. Therefore a **minor positive effect** is predicted overall. Options 5 and 6 remain as having a **minor positive effect**, whilst options 2 and 4 would also have a **minor positive effect**.

Market towns

OAN growth projection: There is a train station with good links to Leicester and other major centres of employment and leisure from Market Harborough, Loughborough, Melton Mowbray and Hinckley. The exception is Coalville, which is more reliant on bus travel to access a train station with strong links. Bus travel from each of the market towns is relatively good, but trends suggest that levels of car usage in these areas are still high. It is likely that growth at the market towns would be on large urban extension sites. This might not fully support access to public transport close to their centres, but the opportunities to access jobs in the market towns or in other locations would be relatively good; helping to ensure that carbon emissions do not increase drastically as a result of commuting / access to recreation. Having said this, focusing the highest level of growth to the market towns (option 2 - 54,300 homes) diverts growth from the City/periphery somewhat, which might perhaps be better placed to help reduce carbon emissions. It is unclear whether there would be opportunities to establish district heating schemes at the market towns, but it is not thought likely if the focus is on housing growth only, and at distant locations from current centres. For option 2, which could result in 10,860 new homes in each of the five main market towns, carbon emissions from transport ought to be reduced slightly as these locations are generally accessible (though in the longer term, development opportunities may be more distant from central facilities and services). Therefore a **moderate positive effect** is predicted. The effects are similar for option 3 (45% - 40,725 homes). For options 5 and 6 (30% - 27,150 homes) a **minor positive effect** is predicted. At a strategic level, options 1 (18,100 homes) and option 4 (15% - 13,575 homes) are predicted to have a mostly **neutral effect**. Growth here would not be likely to generate significant levels of carbon emissions, nor would it encourage access to services, facilities and public transport links in these areas.

The hybrid option is likely to have **neutral effects**, as it would mostly be a continuation of current trends at the market towns. As accessible locations, growth here ought to encourage a reduction in emissions from travel. However, in the longer term, development opportunities are more likely to be distant from centres at or beyond the urban fringes.

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Higher growth projection: An increase across the options in housing numbers and the associated land required is likely to increase the level of carbon emissions overall across the Plan area. The proportion at the market towns would remain the same under each of the options, but the increased growth overall could offset any potential benefits generated through distribution. Therefore, for options 2 and 3, the effects are predicted to be **minor positive**, rather than moderate. The effects for options 5 and 6 are predicted to remain **minor positive**, whilst for options 1 and 4 the effects are predicted to be **neutral**.

Other settlements

OAN growth projection: Though access to services and facilities might be good in some locations, accessibility is broadly reliant upon increased amounts of and lengths of private car travel. Therefore, higher levels of growth in smaller and more rural settlements is likely to lead to an increase in emissions rather than a decrease. The likelihood of growth in these areas supporting district energy schemes is also lower given the less concentrated nature of services, leisure facilities, employment and other uses that are required to support such schemes. Furthermore, a dispersed approach could have greater potential to sterilise energy opportunities such as wind and / or large scale solar, as it would be assumed to require more rural land. Option 5 (40% - 36,200 homes) would lead to the highest levels of dispersed development, and is predicted to have a **moderate negative effect** in terms of climate change mitigation in these areas. Option 6 represents 'trends' (20% - 18,100 homes) and so it is reasonable to assume that this level of growth in other settlements may occur anyway; hence a **neutral effect** is predicted. The same level of growth is involved for option 1, and thus this is also predicted to have **neutral effects**. For alternatives 2 and 3 (15% - 13,575 homes) which would both lead to lower levels of growth than trends, then a **minor positive effect** ought to be generated, as the growth would be diverted away from rural areas, which are most likely to contribute to increases in greenhouse gas emissions and least likely to have the infrastructure already in place to support development. For option 4 and the hybrid option (9,050 – 10,450 homes), there would be approximately half as much growth directed to the rural / other settlements compared to current trends, which ought to have a **moderate positive effect** in terms of reducing car trips and associated greenhouse gases.

Higher growth projection: Option 5 increases growth overall and directs a large proportion to the other settlements, which is predicted to have a **major negative effect** on climate change mitigation. Options 1 and 6 would increase growth in rural / smaller settlements beyond current trends, and thus a **minor negative effect** is predicted at the higher level of growth. For options 2 and 3, the level of growth would be slightly lower than OAN trends even at the higher projected growth levels. Therefore, **neutral effects** are predicted. For option 4, there would still be a lower amount of growth in the rural areas compared to trends, and so a positive effect is still predicted, though this is minor rather than moderate.

New / expanded settlements

OAN growth projection: With a focus on new and expanded settlements, there would be substantial growth in 'sustainable nodes' or new settlements. Whilst some locations such as Lutterworth, Ibstock and Loughborough could help to support sustainable modes of travel (though to a lesser extent compared to the market towns), the new settlements (i.e. Stoney Stanton, Six Hills for example) would be distant from current services and transport nodes. Consequently, on balance, the overall effect on travel is likely to be an increase in car transport and associated emissions. A focus on new settlements in the locations identified is unlikely to support district energy networks unless the demand is created by the new development itself. Option 4 would deliver 50% (45,250 homes) to these locations, which could lead to a **minor negative effect** in terms of carbon emissions. One way that the effect could be lessened is if a new settlement with necessary infrastructure and services was developed which may reduce the need to travel and would offer an opportunity to increase adaptive measures (passive solar gain, green infrastructure etc.). Each of the other options do not involve growth at these settlements, and thus a **neutral effect** is recorded.

Climate change

The hybrid option directs substantial growth at new settlements along the A46 corridor, and at major employment areas near the East Midlands Gateway and Hinckley. Broadly speaking, this places homes in close proximity to employment opportunities and a wide range of other services in Leicester City. There may also be opportunities to expand sustainable modes of travel outwards into new residential areas. However, it is likely that car travel will continue to dominate given that the approach seeks to take advantage of the A46 expressway linkages. Consequently, the positive effects of locating growth close to jobs and services is offset somewhat, and a **neutral effect** is predicted with regards to emissions from transport. In terms of low carbon energy schemes, the location of new settlements do not present particular opportunities for the development of heat networks, though large scale mixed-use developments could create such opportunities themselves. At this stage, **neutral effects** are predicted in this respect also.

Higher growth projection: At a higher level of growth, a **moderate negative effect** is predicted, as the overall level of carbon emissions resulting from new settlements would likely be higher. Similar mitigation measures could be implemented as suggested against the OAN projections.

Overall effects

Option 1 is predicted to have mixed effects overall. The focus on the City and to a lesser extent the Leicester urban periphery is likely to promote sustainable access to services and less need to travel, which could lead to an overall reduction in carbon emissions across the Plan area, though these, would be fairly **minor positive effects**. The effects in other parts of the HMA (i.e. market towns and 'other settlements') are likely to be neutral on balance. Conversely, there is potential for a negative effect in terms of a potential contribution to the urban heat island effect in the city in particular. This is reflected by an **uncertain negative effect**.

Option 2 and 3 perform similarly, and are both predicted to have a **moderate positive effect** overall across the HMA. Growth in the City and Market towns should contribute to a reduction in carbon emissions across the HMA, particularly as this would draw development away from 'other settlements' and the urban periphery, which are not quite well connected in terms of access to public transport, local services and facilities. At a higher level of growth, the positive effects would be lessened due to the overall increase in growth, which would have the opposite effect (i.e. an increase in emissions) regardless of distribution.

Option 4 would have some minor positive effects due to focusing some growth in the City, but would generate some increases in emissions due to new/expanded settlements that are not all located in areas that would support carbon emission reductions. Conversely, this approach draws the most development away from other settlements, and so benefits would be generated by discouraging a dispersed approach. Overall, a **minor positive effect** is predicted. At the higher growth projection, the positive effects accrued would be offset somewhat by an overall increase in growth, and so the effects are recorded as **neutral**.

Option 5 could have some minor benefits through the location of a proportion of growth in accessible locations such as the City, urban periphery and market towns. However, a much higher proportion of growth would be dispersed, which is likely to lead to high levels of greenhouse gas emissions from transport. The opportunities for energy schemes may also be lower under such an approach. Taking into account the overall effects for the Plan area a **minor negative effect** is predicted. At the higher scale of growth, the effects would be magnified and thus a **moderate negative effect** is predicted.

Option 6 is predicted to have mixed effects. In the main, this approach ought to direct growth to areas that are well located to reduce carbon emissions. However, the high amount of growth in the City could perhaps have negative connotations for resilience in terms of an urban heat island effect.

Climate change

A **minor positive effect** and an **uncertain negative effect** are recorded.

At higher levels of growth, the positive effects would be dampened by an overall increase in emissions and hence a neutral effect is predicted with regards to greenhouse gases. In terms of resilience, the effects on the City (heat island) are more certain to occur and so a **minor negative effect** is predicted.

The hybrid option is predicted to have a **minor positive effect** overall, reflecting a potential reduction in emissions by directing growth away from rural areas, and a continued focus on accessible locations such as the City and market towns, and locating housing in close proximity to major economic growth opportunities. However, though trip lengths may be shortened, the private car would be likely to remain the dominant mode of travel, and so the benefits would be offset somewhat.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	✓✓/?	✓	-	-	-	✓/?
	1b	✓✓/x	✓	-	x	-	✓/x
Option 2 <i>Market town focus</i>	2a	✓	-	✓✓	✓	-	✓✓
	2b	✓	✓	✓	-	-	✓
Option 3 <i>Employment-led</i>	3a	✓	✓	✓✓	✓	-	✓✓
	3c	✓	✓	✓	-	-	✓
Option 4 <i>New settlements</i>	4a	✓	-	-	✓✓	x	✓
	4b	✓	✓	-	✓	xx	-
Option 5 <i>Dispersal</i>	5a	✓	✓	✓	xx	-	x
	5b	✓	✓	✓	xxx	-	xx
Option 6 <i>Trends</i>	6a	✓✓/?	✓	✓	-	-	✓/?
	6b	✓✓/x	✓	✓	x	-	-/x
Hybrid Option		✓	-	-	✓✓	-	✓

5.8 Appraisal findings: Landscape and land

5.8.1 The findings relating to the Sustainability Topic 'Landscape and Land' are presented in the following tables.

Landscape and Land

Discussion of effects

City:

The land within the City of Leicester is almost all classified as urban. There is a small amount of land to the north, north-west and east and the south-west of the City that falls into a grade 3 agricultural land classification. Urban intensification in the areas where the land classification is the highest quality is most likely to affect the status of this land. However, keeping development within the Leicester City urban periphery could help contain growth and restrict sprawl to ensure rural areas are safeguarded from dispersed development.

OAN Growth option: With regards to agricultural land, directing growth to the City is generally positive, as the majority of land is urban. Options 2, 3, 4, & 5 all allocate 10% housing delivery within the City boundary. This low level of growth is likely to have **neutral effects** on agricultural land as it ought to be possible to avoid the small areas of Grade 3 agricultural land. At a higher level of growth as per option 1 (20% - 18,100 homes) and option 6 (25% - 22,625 homes) pressure on agricultural land in the City could be higher, and thus an **uncertain minor negative effect** is predicted.

In terms of effects on landscape character and the countryside, growth in the City ought to have a positive effect by drawing growth away from the more rural areas within the Plan area. Intensification in the City and maximisation of brownfield land use could also be positive. For options 1 and 6, a **minor positive effect** is predicted, as these options would deliver at least 20% of the housing requirement in areas of relatively low sensitivity.

For options 2, 3, 4 and 5 a **neutral effect** is predicted, as the magnitude of growth is only small. The same is the case for the hybrid option, despite the allocation of slightly more homes (10, 450).

Higher growth projection: A further increase of 20% of housing delivery within the City could increase the pressures on agricultural land, especially for options 1 and 6. However, the effects are still predicted to be minor, as the amount of agricultural land in the City is limited. With regards to landscape, the proportion of development would remain the same across the Plan area, and so the effects are predicted to remain the same for each option.

Urban periphery:

Most of the land surrounding Leicester's urban periphery is classified as grade 3 agricultural land. However, to the south and south-east of the city boundary, there are small pockets of land that still fall into the urban land classification. Development at the majority of the urban periphery of Leicester has the potential to affect the rural character outside of the out of City boundary. Development would 'extend' the current urban area, which in turn could lead to a decrease in sustainable access to the countryside for residents in the City. However establishing green infrastructure links from new sites into the City and to the countryside could have the opposite effect.

Landscape and Land

In terms of landscape character and sensitivity, growth in some parts of the urban periphery could be seen to ‘close the gap’ between nearby smaller settlements, such as Thurmaston and Syston, Oadby and Great Glen, Birstall and Rothwell. This could have negative effects on landscape character.

OAN Growth projection: Potential opportunity areas for development up to and beyond 2031 have been identified in areas that correlate with land classified as urban or grade 3 agricultural lands. Option 1 (40% - 36,000) would propose the largest amount of growth to the urban periphery and would therefore be most likely to have negative effects upon landscape character, and a loss of grade 3 agricultural land. At this scale of growth, it would be more difficult to avoid the most sensitive locations, and thus a **moderate negative effect** is predicted to occur.

Option 3, could also have an adverse effect on the landscape and agricultural land surrounding the urban area but to a lesser extent than growth option 1. Therefore a **minor negative effect** is identified.

Options 5 & 6 provide a lesser amount of growth than options 1 and 3, but more than options 2 and 4. There would still be approximately 20,000 dwellings at the urban periphery under each of these approaches, which has the potential for pressure on agricultural land and sensitive landscapes. This scale of growth should give some flexibility in the choice of locations and / or intensity of growth though, and therefore the effects ought to be more manageable. At this stage an **uncertain negative effect** is predicted for these options.

For options 2 and 4, the effects are predicted to be **neutral**.

For the hybrid option, the effects are likely to be neutral as the level of growth in the Leicester urban periphery is very low. It therefore should be possible to avoid the more sensitive areas of open space and the overall feel of the urban fringe should be retained. However, nearby growth along the A46 at new settlements could in some locations affect the character of the urban periphery. Therefore, an **uncertain (minor) negative effect** is predicted.

Higher growth projection: A further 20% of growth to the urban periphery could exacerbate the effects felt on the land and landscape. At a higher scale of growth the effects of option 1 are predicted to be major, as it would require 43,440 dwellings focused around the Leicester urban area. The additional 7720 dwellings compared to the OAN projection for option 1 could necessitate further growth in more rural land areas, or more intense growth. Therefore a **major negative effect** is predicted in the urban periphery. For similar reasons the effects for option 3 are predicted to be **moderately negative** at this higher scale of growth. Likewise, the higher scale of growth for options 5 and 6 is predicted to be a **minor negative**, as it is more likely that effects could occur. For options 2 and 4, the levels of growth are still fairly modest, and therefore **uncertain minor negative effects** are predicted.

Market towns:

Hinckley

- Most of the land surrounding Hinckley is made up of grade 3 land classification.

Landscape and Land

Coalville

- Segments of the market town centre itself are classified as urban land whilst being surrounded by mainly grade 3 land with small pockets of grade 2 running through the town centre and to the south-west.

Loughborough

- Land that could potentially be developed is classified mainly as grade 3 agricultural land. The market town centre itself is classified as urban land. Landscape sensitivity varies, but is generally of medium sensitivity to the north and west, and low to medium sensitivity in the south. The extent and location of development would determine the effects.

Melton

- There are pockets of land surrounding Melton that could be developed that are classified as Grade 1-2 agricultural land.
- Further land surrounding the town is grade 3 agricultural land. It may be difficult to avoid the loss of best and most versatile agricultural land due to its extent around the market town. Much of the land identified as potential development areas (i.e. in the SHLAA) falls to the north and south of the town. The landscape here has been classified as a mix of highly sensitive, to moderately sensitive, with some lower sensitivity in small parcels (Melton Landscape Character Assessment Update, 2011). At higher levels of growth it is most likely that sensitive areas of land would need to be released.

Market Harborough

- Surrounded predominantly by grade 3 agricultural land. The sensitivity of the landscape to change differs around the town, but some areas identified as development opportunities have medium capacity or low capacity to change, which suggests negative effects would be possible in these areas.

OAN Growth projection: Option 2 which aims to deliver 60% of homes throughout the market towns would have the potential to most adversely affect the land and landscape of each of the towns. At this scale of growth it would be likely that there would be significant loss of grade 3 land across each of the market towns, and potential grade 2 land at Melton. The effects on landscape character are also likely to be significant, as it would likely be necessary to encroach upon the areas of higher sensitivity to change. In some areas, there may be potential coalescence with nearby smaller villages. Overall, option 2 could lead to major negative effects on one or several market towns. However, should green infrastructure enhancement be incorporated into development, these effects could be minimised. Growth in these areas should also ensure that communities have good access to the countryside. For example, Coalville could strengthen links to the National Forest, Loughborough to Charnwood Forest and Melton along the River Eye corridor. On balance a **moderate negative effect** is predicted.

Option 3 (45%- 8,145 per market town) could also affect the landscape and land of the market towns, but at a slightly lower scale. This would still constitute a **moderate negative effect** though.

Options 5 & 6 both aim to deliver 30% (5,430 per market town) of homes, which ought to be more manageable in terms of locating development and also the overall effect of concentrated growth into these locations. Consequently, the effects on the market towns overall are predicted to be a **minor negative** for options 5 and 6.

Landscape and Land

Whilst options 1 & 4 aim to deliver the least number of homes to the market towns (2715-3,620 per market town), this level of development could still potentially impact upon the land and landscape, dependant on the location of the selected housing sites. This is particularly the case given that development opportunities in the longer term could put pressure on the more sensitive areas. However, this would be to a much lesser extent than the more concentrated delivery options, and it ought to be much easier to accommodate growth in the least sensitive locations. Consequently, an **uncertain (minor) negative effect** is predicted for these two options.

The hybrid option is likely to have similar effects to option 1, which involves the same level of growth (**uncertain minor negative effect**).

Higher growth projection: At a higher level of growth, the effects would be more prominent. For option 2, this would constitute a **major negative effect**, but the effects would remain moderate for option 3. For option 4, which delivers lower levels of growth, the effects would remain as an uncertain negative as the level of growth would still be lower than any of the other options even at the lower OAN growth projections. For option 1, the increased level of growth could start to make it more likely that effects would occur, and so a **minor negative effect** is predicted.

For options 5 and 6, the growth level would not be significant enough to constitute moderate negative effects, and so whilst the effects would most likely to be more prominent, the effects are still recorded as **minor negative**.

Other settlements: There are numerous smaller settlements across the Plan area, some of which lie fairly close to market towns, whilst others are more rural in nature. The dispersed pattern of growth that would be involved at other settlements would mean that growth was 'spread more thinly', and therefore the effects on any one area ought to be of a lower magnitude. The small, rural nature of many settlements means they are vulnerable to change, and in the main are surrounded by agricultural land of mainly grade 3 classification.

OAN Growth projection: Option 5 (40%) aims to deliver to highest amount of growth to other settlements within the Leicestershire area. At this scale of growth, the total amount of agricultural land lost would likely be substantial. There would also be likely effects on individual settlements in terms of landscape character and the appearance and function of the countryside. The effects in any one settlement might not be major, but overall, the effects are predicted to be a **major significant effect**. Development might be likely to have good access to the countryside, but the ability to secure strategic improvements to green infrastructure would likely be lower with dispersed, smaller scale and piecemeal development.

Options 1 and 6 involve a lower scale of growth and are therefore predicted to have a **moderate negative effect**.

Options 2 and 3 would have lower growth still, and thus a **minor negative effect** is predicted. For options 4 and the hybrid option the level of growth is the lowest of all options, and could be spread fairly lightly across the Plan area, allowing for the most sensitive areas to be avoided. The overall loss of agricultural land in these locations would also be low. Consequently a **neutral effect** is predicted.

Higher growth projection: At a higher growth projection the effects of option 5 would remain a **major negative effect**. The effects of options 1 and 6 would increase, but would still represent a **moderate negative effect**. However, the effects for options 2 and 3 would rise to a **moderate negative effect**, and option 4 a **minor negative effect**.

Landscape and Land

New / expanded settlements:

Airport - All land is classified as grade 3 surrounding East midlands Airport. *Six Hills* - Most of the land surrounding six hills consists of grade 2 agricultural land and is rural in nature / open countryside. *East of Loughborough* - Small pockets of grade 2 land are present to the east of Loughborough outside of the urban area. The rest of the land to the east is grade 3 agricultural land. *Stoney Stanton* - Land covered by, and surrounded by entirely grade 3 land and is rural in nature. *Lutterworth* - Land east of the village falls within grade 2/3 agricultural land classification. To the west land is all grade 3 land. Sensitivity of landscape varies, but at higher levels of growth areas with low capacity to change could be affected. *Ibstock* - Land surrounding the settlement is made up of a mixture of grade 2 and 3 agricultural land. *Kibworth* - Land covered by, and surrounded by entirely grade 3 land classifications. Landscape sensitivity is mixed, to the north and north-east at potential SDA development sites, land is sensitive.

GAN Growth projection: Option 4 aims to deliver 50% of growth to new/expanded settlements and would therefore have the potential to impact on the land and landscape required to accommodate this level of development. The effects would be dependent upon the location and scale of growth at these different opportunity areas. However, it is clear that there would likely be a loss of agricultural land regardless of location. This could be grade 2 land, but more likely would be grade 3.

The rural nature of much of these development areas would also present the potential for negative effects on the nature of the countryside and upon landscape character. Overall, a major negative effect could be generated. Should large-scale growth at new settlements / expansions involve green infrastructure enhancement, these effects could be mitigated though. New settlements ought to also bring communities into close contact with the countryside. On balance a **moderate negative effect** is predicted. For all other options, there would be **neutral effects** as no growth is proposed.

The hybrid option involves growth at new settlements, most of which would be located along the A46 corridor. There are some landscapes that are sensitive to development in these locations including Areas of Separation at Thurnby, Bushby and Stoughton. These areas may not be directly affected but nearby development could alter the setting of the urban periphery of Leicester, as in some locations the 'gap' between the urban fringes and new settlements could be narrow.

Growth could potentially lead to coalescence (partially or fully) between settlements such as Thurmaston, Syston and Barkby, Oadby and Great Glen and around the settlement areas of Narborough, Blaby, Whetstone and Countesthorpe. The effects would be dependent upon site locations, layout and design, but it is likely they would alter the character of the rural area along the A46 corridor and towards the Southern Gateway. Effects on landscape at the Northern Gateway are also likely to be negative, as new settlements would likely be in rural / open areas. With HS2 already passing through this area, substantial housing growth has potential to further erode the rural nature of this area. At all the new settlements, there should be good opportunities for green infrastructure form a key principle of the developments. This would help to mitigate negative effects on landscape to an extent. However, the potential for major negative effects does exist.

With regards to agricultural land, the majority of land at the Northern and Southern Gateways and at the A46 corridor would mostly be Grade 3. It is unknown what proportion of this is best and most versatile land (3a), but much of the land does appear to be in use for agricultural purposes. Whilst negative effects would be generated, these would not be significant in the context of the overall amount of agricultural land still remaining and the avoidance of the most sensitive areas.

Landscape and Land

Overall, an uncertain **major negative effect** is predicted, taking into account the loss of agricultural land and potentially major changes to the rural nature of landscape.

Higher growth projection: At a higher growth projection, the effects associated with new settlements would be more pronounced; therefore a **major negative effect** would be much more likely / certain. The effects of all other options remain **neutral**.

Overall effects

Overall, the Plan area is covered by a large amount of agricultural land that could potentially be affected by growth to the area. The only area that is unlikely to have significant effects with regards to agricultural land in the City. Land associated with the other growth option locations is broadly agricultural in nature. However, it is not certain whether the land is best and most versatile grade 3a or grade 3b. With regards to landscape character, and the function and tranquillity of the countryside, there is potential for negative effects at the market towns, new settlements, urban periphery and other settlements. The extent of effects ultimately would depend on the precise location of development, the amount of growth and mitigation / enhancement measures secured.

Option 1 is predicted to have mixed effects. Focusing a large amount of growth to the City ought to be **positive** in terms of reducing the amount of growth required elsewhere on more sensitive land. However, there would still be **potentially negative effects** at other settlements and at the urban periphery. At this higher level of growth, there may also be effects on the small amounts of agricultural land within the city boundary.

The effects on market towns would be neutral, as the level of growth would be at a level that ought to be manageable in terms of landscape impacts. The overall effect on landscape and land is predicted to be a **minor negative effect**. For the higher growth projection the overall increase in growth intensifies the effects on landscape at the urban periphery and the market towns, and therefore the overall effect is predicted to be a **major negative effect**.

Option 2 is predicted to have a **minor negative effect** overall. There would be neutral effects for the City and the urban periphery, but more pronounced effects at the market towns. For the higher growth projection the overall increase in growth intensifies the effects on landscape at the market towns and other settlements in particular, and therefore the overall effect is predicted to be a **major negative effect**.

Option 3 is predicted to have a **moderate negative effect** overall as there could be effects on market towns, other settlements and the urban periphery due to a loss of agricultural land and landscape character. For the higher growth projection the overall increase in growth intensifies the effects on landscape at the market towns and other settlements in particular, and therefore the overall effect is predicted to be a **major negative effect**.

Option 4 would avoid effects for the most part of the Plan area, though could have moderate negative effects at certain settlements. Overall this is considered to be a **minor negative effect**. For the higher growth projection the overall increase in growth intensifies the effects on landscape at the market towns and other settlements in particular, and therefore the overall effect is predicted to be a **moderate negative effect**.

Option 5 is predicted to have a **major negative effect**, due mainly to the major effects at other settlements, but also negative effects at market towns and possibly the urban periphery. For the higher growth projection the overall increase in growth intensifies the effects on landscape at the market towns and other settlements in particular, and therefore the overall effect is still predicted to be a **major negative effect**.

Landscape and Land

Option 6 is predicted to have a **moderate negative effect**, due mainly due to negative effects occurring in all parts of the Plan area (to differing magnitudes). For the higher growth projection the overall increase in growth intensifies the effects on landscape at the market towns and other settlements in particular, and therefore the overall effect is predicted to be a **major negative effect**.

The hybrid option is predicted to have an uncertain **moderate negative effect** overall. Though there could be potentially major negative effects on landscape as a result of new settlements along the A46 corridor, Northern and Southern Gateways, it ought to be possible to secure mitigation. The location of sites is also not known at this stage, so there is uncertainty whether these effects would be major. There would be mostly neutral effects across the rest of the plan area, and the most sensitive areas ought to be avoided. Some uncertain negative effects are recorded in terms of the market towns and at the urban periphery, but these ought only to be minor in any event.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	✓ / ?	xx	?	xx	-	x
	1b	✓ / x	xxx	x	xx	-	xxx
Option 2 <i>Market town focus</i>	2a	-	-	xx	x	-	x
	2b	-	?	xxx	xx	-	xxx
Option 3 <i>Employment-led</i>	3a	-	x	xx	x	-	xx
	3c	-	xx	xx	xx	-	xxx
Option 4 <i>New settlements</i>	4a	-	-	?	-	xx	x
	4b	-	?	?	x	xxx	xx
Option 5 <i>Dispersal</i>	5a	-	?	x	xxx	-	xxx
	5b	-	x	x	xxx	-	xxx
Option 6 <i>Trends</i>	6a	✓ / ?	?	x	xx	-	xx
	6b	✓ / x	x	x	xx	-	xxx
Hybrid Option	7a	-	?	?	-	xxx [?]	xx [?]

5.9 Appraisal findings: Cultural Heritage

5.9.1 The findings relating to the Sustainability Topic 'Cultural Heritage' are presented in the following tables.

Cultural Heritage

Discussion of effects

City

- There are 24 Conservation Areas covering approximately 322 ha.
- Within the city boundary there are green wedges that are important for the protection of settlement character.
- 11 Scheduled Monuments reside within the city of Leicester boundary, along with 401 Listed Buildings, 6 Registered Historic Parks and Gardens (2017).
- Of these sites, 14 are at-risk sites (4 Conservation Areas, 4 POW, 2 Scheduled Monuments, 4 Listed Buildings). 5 of these are considered to be in a 'Very Bad' condition, 5 in a 'Fair' condition, and 3 in a 'Poor' condition (2017).
- Within the boundary of the city there is a clearly defined historic core to the city centre, which should be preserved.

Development has the potential to impact the cultural heritage of Leicester City due to the strong historic value the city holds. At higher levels of growth there may be greater loss of greenfield sites, which are important to character. Alternatively, growth would need to be higher density, which may also be inappropriate in some locations. Conversely, by focusing development within the built up urban areas, this could help to maintain the character and landscape of the more rural locations around the city boundary. Development within the City centre also has the potential to enhance the fabric, function and setting of historic assets by being sympathetic in design and particular in where the development involves derelict land or vacant buildings.

OGAN Growth projection: Option 6 which looks to deliver the highest level of growth within the City boundary (25% - 22,625 homes) would have the greatest potential to have effects upon the cultural assets within the City. Negative effects could occur on the setting of listed buildings, or more generally on the character of the City more generally due to a greater need for higher density or to consider greenfield sites. A **moderate negative effect** is predicted as most development ought to be on brownfield sites, and managed through the application of design policies. Conversely, increased growth ought to create opportunities to tackle dereliction, vacant buildings and to drive regeneration. This is predicted to have a **moderate positive effect**.

Option 1 would also deliver a similar number of homes to the city therefore the same effects are predicted as for option 6.

Options 2, 3, 4 & 5 aim to deliver 10% growth to the Leicester, which would affect the City's cultural heritage to a much lesser degree. Whilst there could be site specific effects due to development, it ought to be easier to avoid greenfield sites and design more appropriate schemes. Nevertheless, the potential for negative effects still remains and so **minor negative effects** are predicted. Likewise to options 1 and 6, the potential for enhancement in the City is likely to be greater than other areas in the HMA, and therefore a **minor positive effect** is predicted. The hybrid option is predicted to have the same effects despite a slightly higher level of growth (10,450).

Higher Growth projection: An additional 20% growth across all 6 options could put further pressures upon the cultural heritage throughout the City. For options 1 and 6,

Cultural Heritage

the increased scale of growth would be likely to have **major negative effects**, but could still have **moderate positive effects** in terms of regeneration.

For options 2, 3, 4 and 5, the effects would still be predicted to be **minor negative effects**, as the increase in growth would not be substantial.

Urban periphery

Oadby and Wigston (to the south and south-east of the urban periphery) – The urban fringe does not have any listed buildings to the south or east (though substantial development could affect Stoughton).

Harborough (to the east and south east of the urban periphery) – There are listed buildings at several parts of the urban fringe including in Scraftoft, Thurnby and Bushby and Stoughton.

Charnwood (to the north and north-east of the urban periphery) – Hamilton Medieval Village Scheduled Monument is located in the urban periphery to the north-east. There are also smaller villages in close proximity that could be affected by large scale development, for example Barkby and Beeby. North of the City, there are heritage assets to the fringe of Thurcaston, whilst assets further north at Rothley may also be affected depending upon the scale of growth.

Blaby (to the west, south and south-west of the urban periphery) - Development to the south between Glen Parva and Blaby could have an effect on the setting of designated heritage assets (Scheduled Monument at Glen Parva and Grand Union Canal Conservation Area). There are also designated assets including Scheduled Monuments to the west, including Kirby Muxloe Castle, Rabbit Warren (Lubbesthorpe) and the Lubbesthorpe Medieval Settlement and designated assets to the north at Glenfield.

Hinckley (to the north west of the urban periphery) – Development here could potentially affect the character of several settlements and / or the setting of designated assets. For example at Glenfield and Anstey (which is in Charnwood).

OAN Growth projection: Option 1 focuses the highest amount of growth to the urban periphery. As identified above, there are areas of greater sensitivity where it is likely that heritage assets could be negatively affected by development. In particular, to the north-west, north and north-east, and to the east of the urban periphery. There is perhaps greater scope for growth to the south and south-east. At this scale of growth, it is more likely that multiple locations along the periphery would need to be developed and / or larger scale extensions to particular areas. Therefore, it would be more difficult to avoid negative effects. Overall a **major negative effect** is predicted.

Option 3 would have similar effects but ought to allow for slightly greater flexibility. Therefore, a **moderate negative effect** is predicted.

Option 5 & 6 are predicted to have a **minor negative effect** as flexibility ought to be greater still.

Options 2, 4 and the hybrid option could still have negative effects depending upon the location of development, but it would be much less likely to occur. Therefore, **neutral effects** are predicted.

Cultural Heritage

Higher Growth projection: At a higher growth projection, the effects would be exacerbated. Therefore, a **major negative effect** would remain for option 1. For option 3 a **major negative effect** is predicted. Option 5 is still predicted to have a **minor negative effect**, whilst option 6 is predicted to have a **moderate negative effect**. Options 2 and 4 are predicted to have a **minor negative effect**.

Market towns

All development surrounding the urban fringes would have the potential to impact upon the character of the market towns due to urban expansion. Some specific features are present at each of the individual market towns.

Hinckley

- There are numerous listed buildings within the urban area of Hinckley. Designated heritage assets are only present in some locations around the urban fringe.

Coalville

There are numerous listed buildings within the urban areas of Coalville. Designated heritage assets are also present at the urban fringe and at surrounding smaller settlements such as Ravenstone, Hugglescote and Swannington.

Loughborough

- There are numerous listed buildings within the urban areas of Loughborough. Designated heritage assets are also present at the urban fringe on all edges of the town.

Melton Mowbray

- There are numerous listed buildings within the urban area of Melton Mowbray. Designated heritage assets are only present in some locations around the urban fringe.

Market Harborough

- There are numerous listed buildings within the urban areas of Market Harborough and nearby Great Bowden. Designated heritage assets are only present in some locations around the urban fringe.

oAN Growth projection: Option 2 focuses a large majority of the housing needs for the HMA to the market towns (60% - 54,300). At this scale of growth the potential for negative effects is heightened, as there would be less flexibility in the choice of sites. This could be particularly problematic at Loughborough and Coalville in particular (given the potential for settlements to 'merge' and / or the setting of numerous listed buildings to be affected). A **major negative effect** is predicted overall.

Cultural Heritage

For option 3 a **moderate negative effect** is predicted, as the level of growth is still fairly substantial, but it should be possible to avoid significant effects at less sensitive locations. A **minor negative effect** is predicted for options 5 and 6. For option 1, the hybrid option and 4 (in particular) the effects are lower in magnitude and ought to be more manageable for the market towns. Therefore, **neutral effects** are predicted.

Higher Growth projection: The effects would be exaggerated at a higher scale of growth. For option 2, the effects at the market towns would be significant, and therefore a **major negative effect** is still predicted. For option 3, the effects are also predicted to be **major negative effects** due to the higher scale of growth. Options 5 and 6 are still predicted to have **minor negative effects**. Option 1 is now also predicted to have an **uncertain negative effect**, whilst option 4 is still at a low enough scale of growth to be considered a **neutral effect**.

Other settlements

There are numerous settlements throughout Leicestershire that have historic and cultural value. Due to the small scale of many of these settlements, they are particularly sensitive to change in their character and historic value. Many settlements also have centres that contain listed buildings. Development at the fringe of these settlements has the potential to affect the character of such heritage assets. The rural nature of many settlements means that there are numerous buildings of historic importance in the surrounding countryside too.

OAN Growth projection: Option 5 directs a large amount of growth to the 'other settlements'. This is predicted to have a **major negative effect** on the rural and historic character of villages across the Plan area, which are typically small, with historical value. Though there may only be minor or moderate negative effects in some locations, the cumulative effects are considered to be major. The likelihood of securing enhancements under this approach is also unlikely, and thus no positive effects are identified.

Options 1 & 6 direct 18,100 homes to 'other settlements', which means that growth would be lower scale, and / or there would be greater flexibility in site choice. This should allow for effects to be more easily avoided or managed. Therefore, only a **minor negative effect** is predicted.

For options 2, 3, 4 and the hybrid option, the level of growth proposed could still have some minor effects in certain settlements, but the overall picture across the Plan area would be broadly **neutral**. This level of growth (particularly for options 4 and the hybrid option) ought to be manageable.

Higher Growth projection: At the higher growth projection, the effects would be exacerbated. For option 5, a **major negative effect** remains, whilst for options 1 and 6 the effects rise to a **moderate negative effect**. For options 2 and 3 the effects rise to a **minor negative effects**, but for option 4 a **neutral effect** remains given that growth would still be lower than all other options (even at the OAN level of growth).

New / expanded settlements

Airport

- There are a number of listed buildings around Diseworth site 1 & 2, identified as potential opportunity areas near the airport.

Cultural Heritage

Stoney Stanton

- There are several listed buildings within the urban centre. However, as a small settlement, its character is sensitive to change.

Six Hills

- As a very small settlement with no designated heritage assets. There is no historic core or features of particular cultural interest.

Lutterworth

- Number of listed buildings. Also, Scheduled Monument - Bowl Barrow at Misterton- to the east of Lutterworth.

Ibstock

- Contains several listed buildings, some of which are on the urban fringe to the south.

Kibworth

- There are numerous listed buildings within the urban area and on the settlement fringes to the north. There is also a Conservation Area that extends to the urban fringe.

OAN Growth projection: Option 4 directs 50% of housing to new/expanded settlements. There would likely be mixed effects depending upon where growth was located and at what scale. Stoney Stanton for example has little cultural heritage and would be less sensitive to growth compared to existing settlements such as Lutterworth, Ibstock and Kibworth. Six Hills, is also not identified as a particularly sensitive location in terms of cultural heritage. Growth in existing settlements could however have an effect on the urban fringes, with a change to the rural character, and potential to affect the setting of several listed buildings. The scale of growth would make it difficult to avoid effects given that the setting of many buildings is reliant on open countryside. Consequently, option 4 is predicted to have different effects in different locations. For some new settlements neutral or minor effects are likely, whilst at existing settlements, moderate to major effects are possible. On balance a **minor negative effect** is predicted overall.

The hybrid option focuses growth along the A46 corridor area through to the Southern Gateway, which encompasses a number of settlements including Barkby, Beeby, Keyham, Houghton on the Hill, Stoughton, Great Glen, Kilby, Countesthorpe, Cosby, Stoney Stanton and Croft . These settlements all contain a number of listed heritage assets, and there are some isolated heritage assets in the rural areas between these settlements and the Leicester urban periphery. The effects of new settlements on the character of existing villages and hamlets are uncertain, as specific sites are not identified at this stage. However, there is certainly potential for growth to affect the setting of heritage assets, especially where these are reliant upon an open, rural setting. This is more likely to be the case where the gap between the urban periphery and nearby settlements is narrowed.

There ought to be enough flexibility in site choices and in the layout of developments to avoid sensitive areas, and to mitigate potential effects on heritage assets and to ensure that the cumulative effects of growth are not major. Nevertheless, a **moderate negative effect** is predicted.

Higher Growth projection: At a higher growth projection the effects of options 1-6 are likely to be exacerbated, and so a **moderate negative effect** is predicted for each option.

Cultural Heritage

Overall effects

Option 1 is predicted to have mixed effects across the Plan area. Due to a focus on the City and the urban periphery, moderate to major negative effects are recorded in these areas due to pressure on heritage assets and the character of settlements.

As there would be less development at the market towns and other settlements, the effects here are neutral or minor, which offsets the negatives at the Leicester urban periphery somewhat. There is also potential for positive effects in the City associated with regeneration. On balance for the Plan area as a whole, a **moderate negative effect** is predicted, alongside a **moderate positive effect**. At the higher growth projection, the effects in the City would rise to major, and would also increase at other settlements to moderate. This equates to a **major negative effect** overall for the entire Plan area

Option 2 is predicted to have mixed effects across the Plan area. Due to a heavy focus on the market towns, major negative effects are predicted here. However, the effects at the urban periphery and in other settlements would be neutral, and those in the City would only be minor. Overall, due to the large amount of growth at the market towns, the effects across the Plan area overall are considered to be a **moderate negative effect**. Due to greater potential for enhancement in the City a **minor positive effect** is also recorded. At the higher growth projection the effects would be higher still in the market towns, whilst minor effects would also arise in the urban periphery and other settlements. Consequently, a **major negative effect** is predicted. The **minor positive effects** in the City are likely to remain.

Option 3 is predicted to have mixed effects across the Plan area. The spread of growth between the urban periphery and market towns is fairly high, and so moderate negative effects are predicted here. However, the effects in the City and other settlements would be lower than option 1 which focuses on the Leicester urban periphery. On balance a **moderate negative effect** is predicted for the Plan area as a whole, along with the **minor positive effect** generated in the City. At the higher growth projection, the negative effects would be increased in the urban periphery and market towns in particular and so a **major negative effect** is predicted. The **minor positive effects** would remain.

Option 4 is predicted to have mainly neutral effects across the Plan area. However growth in the City could still lead to minor negative effects and a minor positive effect. Whilst there would be substantial growth at new/expanded settlements, it is considered likely that this would have minor effects in some settlements. Therefore, only a minor effect is predicted overall. Consequently, the overall effects for the Plan area are predicted to be a **minor negative effect** for option 4. A **minor positive effect** is still recorded for benefits in the City. At the higher growth projection, the negative effects at the new/expanded settlements rise to a moderate negative, whilst minor negative effects also emerge at the urban periphery. Consequently, a **moderate negative effect** is predicted for the Plan area as a whole. The **minor positive effects** at the City are still recorded.

Option 5 is predicted to have mainly negative effects across the Plan area. These are only minor in the City, urban periphery and market towns, but major at the 'other settlements'. Given that a large amount of growth is focused on the 'other settlements', a **major negative effect** is predicted for the Plan area overall. Though the effects elsewhere are lower, they are still negative, and so the overall picture is worse than for the other options. A **minor positive effect** is recorded for benefits in the City. At the higher growth projection the effects are exacerbated across the Plan area, though not leading to a change in any of the scores.

Option 6 is predicted to have mainly negative effects across the Plan area, with more prominent negative effects in the City. Overall a **moderate negative effect** is predicted for the Plan area. A **moderate positive effect** is also predicted to account for more opportunities for enhancement in the City.

Cultural Heritage

At the higher growth projection, the negative effects are increased in the City to major, as well as rising to moderate negatives in the urban periphery and other settlements. This is considered to be a **major negative effect** for the HMA overall. A **moderate positive effect** would remain though.

The hybrid option is predicted to have both **minor positive effects** and **minor negative effects** on heritage. On one hand, development at new / expanded settlements could potentially affect the setting of heritage assets in the countryside and / or affect the character of small settlements along the A46 corridor and in the Northern and Southern Gateways. There could also be minor negative effects in the City. However, growth in the City also presents opportunities to enhance heritage assets that are currently in poor condition. The avoidance of negative effects across much of the Plan area is also a positive factor.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	xx / ✓✓	xxx	-	x	-	xx / ✓✓
	1b	xxx / ✓✓	xxx	?	xx	-	xxx / ✓✓
Option 2 <i>Market town focus</i>	2a	x / ✓	-	xxx	-	-	xx / ✓
	2b	x / ✓	x	xxx	x	-	xxx / ✓
Option 3 <i>Employment-led</i>	3a	x / ✓	xx	xx	-	-	xx / ✓
	3c	x / ✓	xxx	xxx	x	-	xxx / ✓
Option 4 <i>New settlements</i>	4a	x / ✓	-	-	-	x	x / ✓
	4b	x / ✓	x	-	-	xx	xx / ✓
Option 5 <i>Dispersal</i>	5a	x / ✓	x	x	xxx	-	xxx / ✓
	5b	x / ✓	x	x	xxx	-	xxx / ✓
Option 6 <i>Trends</i>	6a	xx / ✓✓	x	x	x	-	xx / ✓✓
	6b	xxx / ✓✓	xx	x	xx	-	xxx / ✓✓
Hybrid Option		x / ✓	-	-	-	xx	x / ✓

5.10 Appraisal findings: Water

5.10.1 The findings relating to the Sustainability Topic 'Water' are presented in the following tables.

Water

Discussion of effects

Water supply is generally good across the whole of the plan area, with some capacity to expand, but in some areas this is only at low flows. With regards to water resources, Severn Trent Water identifies that several areas are under moderate water stresses. In the longer term, Severn Trent Water recognises that, future supply/demand pressures will lead to a need for additional water resources and treatment capacity.

The whole of the Leicester and Leicestershire county area is designated as a nitrate vulnerable zone for surface water.

Climate change is likely to increase the risk of flooding within low-lying areas of Leicester and Leicestershire, and may also affect availability during warm and dry periods. There is therefore a need to maintain and upgrade flood defences, especially in areas which are currently susceptible to flood events, and to adopt sustainable drainage systems into new developments.

City

- Climate predictions indicate a potential increase of flood events (2016).
- The River Soar is susceptible to flooding.
- Infrastructure needs to be assessed against additional demand (2016).
- Biological river quality classified as good in 2009, which was an improvement from 2006.
- Chemical river quality classified as fair in 2009, with no change from 2006.
- To the north-west of the City's urban area there is a Eutrophic Nitrate Vulnerable Zone.

OAN Growth projection: Option 6, closely followed by option 1 could have negative effects in terms of the risk of fluvial and surface water flooding within the City. Some sites are unlikely to be within flood zones, but others may fall into areas of risk. Whilst the sequential approach would be taken, it is more likely at a higher scale of growth that site choice would be reduced. Therefore, the potential for negative effects is higher. There is also the potential for higher rates of surface water run-off overall in the City if more land is hard-surfaced. However, brownfield sites could actually provide opportunities to improve rates of run off by introducing SUDs. The use of sustainable drainage systems should also help to manage some of the effects of flooding; though in the City, there would be less space for natural drainage systems. Overall, a minor effect is predicted with regards to flood risk. Development could also have the potential to put further pressures on water supply and treatment facilities within the city. However, it is assumed that there would be investment in upgrading the current water management infrastructure. Overall a **minor negative effect** is predicted for options 1 and 6.

Options 2, 3, 4 & 5 propose growth at a lower scale within the city boundary; therefore the effects on the water network would be less significant. 10% growth across

Water

the whole City is more likely to be accommodated by infrastructure, as it isn't at maximum capacity at present.

However, there would likely be higher stresses in the longer term resulting from climate change.

With regards to flood risk, there ought to be greater flexibility and choice in sites, and the likelihood of changes to surface water run-off ought to be lower. Consequently, a **neutral effect** is predicted at this level of growth. The same is the case for the hybrid option despite a slightly higher level of growth (10,450).

Higher Growth projection: The higher growth option would exacerbate the effects due to a further 20% growth in housing through all options. Option 6 and option 1 could have the potential to have **moderate negative effects** on the city in relation to water, due to further increased pressures on the water supply, along with increasing the risks/consequences of flooding. For options 2, 3, 4 & 5 **minor negative effects** are predicted.

Urban periphery

- The majority of the urban periphery falls within Flood Zone 1, though there are pockets to the south that sit within flood zones 2 & 3 and a larger stretch of land subject to flooding in the north surrounding the River Soar.
- Flood plains particularly concentrated around the River Sence (2014) to the south of the urban periphery. Rothley Brook also has the potential for flood risk along the northern periphery, though to a lesser extent.
- The main length of the River Sence from Burton Brook to Countesthorpe Brook has moderate overall physical chemical quality (2009).

OAN Growth projection: Option 1 aims to deliver 40% growth to Leicester City urban periphery. Given the availability of land around the periphery that is not at risk of flooding, it ought to be possible to avoid locating development in areas of flood risk. The greenfield nature of many sites should also allow for green infrastructure and sustainable drainage systems to be incorporated. This would help manage any increases in surface water run-off. Overall, the effects on flooding ought to be neutral, but there is uncertainty as this level of growth may require development in areas of greater flood risk. However, this level of growth could put pressure on water supply and treatment infrastructure in the area, as well as potentially affecting the water quality of watercourses (through pollution in run-off, increased effluents etc.). Given that much of the land available for development consists of farmland, it is possible that pollution resulting from existing farming activities would be reduced through a change in land use. This could offset the potential negative effects on water quality. However, pressures on supply and treatment could remain at this level of growth. Overall, a **moderate negative effect** is predicted.

Options 3 aims to deliver 30% growth (27,150 homes). This would have similar effects to option 1, but at a lower magnitude. The potential for effects from flooding would be lower, as there would be greater flexibility in the choice of locations. The overall pressure on water infrastructure and water quality would also be lower, and thus a **minor negative effect** is predicted overall.

Options 5 & 6 aims to deliver 20-25% growth to the city boundary. The effects are considered to still be **minor negative (uncertain) effects** at this level of growth.

Options 2 & 4 aim to deliver 15% growth which ought to be much easier to accommodate without major infrastructure upgrades. The likelihood of development being on sites at risk of flooding would also be much lower. Therefore, a **neutral effect** would be predicted.

Water

The hybrid option delivers the lowest level of growth, but the cumulative effect of growth along the A46 corridor could potentially affect water quality in this area, so a **minor negative effect** is predicted.

Higher Growth projection: At the higher growth projection, option 1 which aims to deliver 43,440 new homes to the City boundary, could put greater pressures on water supply and water treatment facilities. There would also be greater potential for areas at risk of flooding to be developed given the increased demand for land. Consequently, a **major negative effect** is predicted. The effects for the other options would similarly be increased, and so option 3 is predicted to have a **moderate negative effect**. Though the effects would be greater in magnitude for options 5 and 6, the effects are predicted to remain minor. For options 2 and 4, an **uncertain minor negative effect** is predicted.

Market towns

There is a history of flooding within Leicestershire, with significant events occurring in 2012 and 2013, as defined in the Leicestershire Local Flood Risk Strategy. The strategy has also identified that any settlement that has more 100 properties shown to be at risk of surface water flooding have been classed as a 'priority settlement'. There are forty areas that have been classed as a priority settlement across Leicestershire. This includes the following settlements in the 'top ten': Loughborough (as the most at risk), Blaby, Narborough and Whetstone, Market Harborough, Wigston, Melton Mowbray, Hinckley and Burbage and Oadby.

Hinckley

- Parts identified as a priority settlement for surface water flooding.
- There are areas of land designated within flood zone 2 and 3 running through the middle of the town.

Coalville

- There is a small area lying to the south of the town that falls within flood zone 2/ 3, however it does not meet the criteria to be a priority settlement for surface water flooding.

Loughborough

- Identified in parts as a priority settlement for surface water flooding.

Melton

- Identified in parts a priority settlement for surface water flooding.
- Flood zones 2 and 3 cover approximately 60 ha of the borough, with areas running through Melton Mowbray itself.
- Groundwater Nitrate Vulnerable zones are also present in parts of Melton Mowbray.
- The River Wreake had very high levels of phosphates and nitrates (2009)

Market Harborough

- Identified in parts as a priority settlement for surface water flooding.
- The majority of land around the settlement of Market Harborough falls into Flood Zone 1.

Water

- The Environment Agency data (2014) demonstrates that across the district there are only two watercourses with good ecological status, both of which are canals. 10 watercourses have a 'moderate' status, 9 'poor' and 7 'bad'.

OAN Growth projection: Several of the market towns identified to accommodate further growth within the Plan area have been identified as 'priority settlements' for surface water flooding. There are also substantial areas of flood zone 2 and 3 to the east of Loughborough and running through Melton Mowbray. No sites have been allocated for development at this stage therefore it is hard to determine if development will have a direct impact on areas that are subject to flooding in these market towns. However, the scale of development through option 2, to deliver 10,080 homes across each market town could be anticipated to have negative effects by placing new development in areas of flood risk (less so for Market Harborough, Coalville and Hinckley, more so for Loughborough and Melton Mowbray). It should be possible to mitigate these effects somewhat given that development would likely be on large greenfield sites that should be able to accommodate SUDs. However, minor negative effects could remain depending upon the exact location and design of developments. With regards to water quality much of the land available for development consists of farmland, so it is possible that pollution resulting from existing farming activities would be reduced through a change in land use. This could offset the potential negative effects on water quality from development. However, pressures on supply and treatment could remain. Overall, a **moderate negative effect** is predicted at this scale of growth.

At a lower scale of growth, the effects are similar, but of a lower significance. Therefore, option 3 could be predicted to have **minor negative effects** on the water environment. Options 5 & 6 aim to deliver 30% growth through market towns (approx. 5,430 homes per town). This level of growth is still fairly substantial and so **minor negative effects** are predicted. Options 1 & 4 (15-20% growth) would have the least effects on water as they would provide greater flexibility in housing, as well as reducing pressure on infrastructure. Consequently a **neutral effect** is predicted.

The hybrid option proposes the same level of growth as option 1, and therefore, **neutral effects** are predicted.

Higher Growth projection: The higher growth projection would further increase the number of homes delivered within the plan area. Option 2 would need to accommodate 65,160 (60%) at the market towns, which could be difficult to manage without major infrastructure upgrades. There may also be a greater likelihood of development being at risk of flooding and / or contributing to flood risk elsewhere. Consequently a **major negative effect** is predicted. The effects would also be exacerbated for the other growth options. For option 3, there would be 48,870 (45%) homes directed to the market towns which would have a **moderate negative effect** on the water environment. Options 5 & 6 aim to deliver 32,580 additional homes across the market towns, which is predicted to have a **moderate negative effect**. Options 1 & 4 (15-20%) aim to deliver 16,290-21,720 homes in total across the 5 market towns. For option 1 a **minor negative effect** is predicted; whilst for option 4 the effects could stay **neutral**.

Other settlements

Flood risk across the Plan area varies from settlement to settlement, and it is therefore difficult to accurately predict the likely effects of a dispersed approach. However, the majority of 'other settlements' across the County do contain areas of land that are within Flood Zone 1, and are not at significant risk of surface water flooding. Therefore, overall, it ought to be possible to avoid significant effects associated with flooding in most locations, even at higher scales of growth.

Development on agricultural land could also help to reduce pollution from agricultural practices. However, increased pressure on water supply/waste water treatment

Water

would be likely, and it may be more difficult to achieve efficient upgrades to infrastructure with a more dispersed pattern of growth.

OAN Growth projection: Option 5 (40%) directs a substantial portion of housing to ‘other settlements’. This increases the possibility of flood risk in some areas, but the effects are likely to be minor overall. It also ought to be possible to incorporate mitigation measures and SUDs into developments, but these would be less likely to be strategic improvements given the smaller scale of development sites likely to be involved. With regards to water infrastructure, a negative effect is predicted, as a dispersed approach could lead to local pinch points in the system that would require upgrading, as well as overall upgrades to the wider network. This would be less efficient and more difficult to implement. Overall, a **minor negative effect** is predicted as this should avoid significant effects in any one location, but might lead to difficulties in managing infrastructure.

Options 1 & 6 (20%) aim to deliver 21,720 homes to each of the other identified settlements. The effects would be similar to those identified above, but at a lesser scale. Therefore an **uncertain minor negative effect** is predicted.

Options 2, 3, 4 and the hybrid option (10-15%) are predicted to have **neutral effects** as the level of growth would provide greater flexibility in site choice (to avoid flooding) and would put much less pressure on infrastructure in rural areas.

Higher Growth projection: Further 20% growth across all the 6 options is likely to increase the likelihood of development occurring in close proximity to flood risk areas. Increased growth would also increase the amount of pressure on the water network. For option 5, a **moderate negative effect** is predicted. For options 1 and 6 there is greater certainty of negative effects occurring, and thus a **minor negative effect** is predicted. An **uncertain negative effect** is also predicted for options 2 and 3, whilst option 4, which would still have the lowest scale of growth, would be **neutral**.

New / expanded settlements

Lutterworth / Ibstock / Kibworth - There are small areas within and around the settlements that lie within Flood Zones 2 and 3.

Airport - Much of the land located near to the airport is within Flood Zone 2/3.

Six Hills - Land in this area is mostly Flood Zone 1.

East of Loughborough - Much of the land located to the east of Loughborough falls within Flood Zones 2/3.

Stoney Stanton - Land in this area is mostly Flood Zone 1.

With regards to flood risk, development at new / expanded settlements would differ depending on the location (see above). In some locations, development would most certainly fall within or adjacent to areas of Flood Zone 2/3, and so there would be a need for thorough mitigation. In other locations, flood risk would be unlikely to be a major constraint. Similar to growth under the other approaches, most of the land involved would be agricultural, which could lead to improvements in terms of pollution from surface water run-off. Large-scale concentration of growth into these locations would put further pressure on water infrastructure though. This could require new or upgraded facilities. On a strategic level, the whole region is under moderate pressure and in order to accommodate further growth then the water network would also have to undergo significant growth.

Water

OAN Growth projection: Option 4 aims to deliver 50% of strategic growth to new/expanded settlements. This is likely to have either neutral or potentially up to major negative effects in terms of flood risk, dependent upon each location for growth. There could also be potential moderate negative effects associated with water infrastructure, though effects on water quality due to run-off pollutants may improve as a result in a change of land-use. On balance, a **moderate negative effect** is predicted taking account of these factors together. All other options are predicted to have **neutral effects** as no growth is proposed.

The hybrid option would direct growth to areas that are mostly within Flood Zone 1 (along the A46 corridor and the Southern Gateway). However, the Northern Gateway contains areas that are at a high risk of fluvial flooding. Whilst there may be pockets of surface water flooding to contend with, the strategic nature of sites that are likely to be developed ought to allow for green infrastructure/SUDs enhancements. Therefore, effects on flood risk are not anticipated to be major. However, the increase in development would lead to greater pressure on supply and treatment networks as well as generating pathways for pollution to reach watercourses. These effects ought to be possible to mitigate though, but infrastructure planning will be critical. A change in use from agricultural land at many sites could also contribute to a reduction in the run-off of nitrates, which could be a benefit for water quality. On balance, the overall effects are predicted to be **minor negative** at this stage. With good design and planning however, it is likely these effects could be neutralised.

Higher Growth projection: At 20% higher growth, the effects would be exacerbated, and so a **major negative effect** is predicted.

Overall effects

Option 1 is predicted to have mixed effects on water across the Plan area. Growth in and around the City could have negative effects on water infrastructure as well as increasing flood risk, but the effects would only be minor in the city. There may also be negative effects in 'other settlements' due to water infrastructure, though these are only likely to be minor should they occur. Overall a **minor negative effect** is predicted. At a higher scale of growth, the effects would be more substantial all across the Plan area, but particularly at the Leicester urban periphery and the City itself. Consequently, a **major negative effect** is predicted.

Option 2 is predicted to have mostly neutral effects on water across the Plan area, but the effects in the market towns would be moderately negative. Overall a **minor negative effect** is predicted. Though moderate negative effects are recorded for the market towns, and this constitutes a large portion of growth (60%), the neutral effects in all other locations offset these effects somewhat. At the higher growth projection, the negative effects increase to major in the market towns, but also start to arise in the City and potentially at the urban periphery and other settlements. Consequently, a **major negative effect** is predicted.

Option 3 is predicted to have neutral effects in the City and at other settlements, and a minor negative effect at the urban periphery and the market towns. Overall the effect across the Plan area is predicted to be a **minor negative effect**. At the higher growth projection the negative effects would be exacerbated and so a **moderate negative effect** is predicted.

Option 4 is predicted to have mostly neutral effects across the Plan area. However, major negative effects are predicted at the new/expanded settlements due to some locations being likely to increase flood risk, and pressure on infrastructure. Though 50% of growth would be accommodated at new settlements, the rest would have mostly neutral effects, which somewhat offsets the major negative effects at the new/expanded settlements. Therefore, the overall effect is predicted to be a **moderate negative effect**. At the higher scale of growth the effects are likely to remain neutral for the majority of the Plan area, with the exception of the City. Though

Water

the effects would remain major at the new / expanded settlements the overall effects are predicted to be **moderate negative effects**.

Option 5 is predicted to have negative effects across much of the Plan area, though these are only minor in nature. These are associated mainly with increased pressure on infrastructure rather than flooding. Overall a **minor negative effect** is predicted. At the higher growth projection the effects rise across the Plan area, with moderate negative effects identified for the market towns and other settlements. This is considered to be a **major negative effect** overall.

Option 6 is predicted to have similar effects to option 5, though there would be greater negative effects in the City and slightly lower effects at the ‘other settlements’. On balance a **minor negative effect** is predicted. At the higher growth projection the effects rise across the Plan area resulting in a **major negative effect**.

The hybrid option is predicted to have a **minor negative effect** overall, reflecting the potential for some development to be in areas at risk of flooding and an increase in the demands on water treatment infrastructure.

		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	x	xx	-	?	-	x
	1b	xx	xxx	x	x	-	xxx
Option 2 <i>Market town focus</i>	2a	-	-	xx	-	-	x
	2b	x	?	xxx	?	-	xxx
Option 3 <i>Employment-led</i>	3a	-	x	x	-	-	x
	3c	x	xx	xx	?	-	xx
Option 4 <i>New settlements</i>	4a	-	-	-	-	xxx	xx
	4b	x	-	-	-	xxx	xx
Option 5 <i>Dispersal</i>	5a	-	?	x	x	-	x
	5b	x	x	xx	xx	-	xxx
Option 6 <i>Trends</i>	6a	x	?	x	?	-	x
	6b	xx	x	xx	x	-	xxx
Hybrid Option		-	x	-	-	x	x

5.11 Appraisal findings: Minerals

5.11.1 The findings relating to the Sustainability Topic 'Minerals' are presented in the following tables.

Minerals

Discussion of effects

Leicestershire is a mineral rich County, and one of the principal producers of minerals within England, particularly with regards to igneous rock. Many of the active mineral extraction sites are located, or have previously been located, within the north-western areas of the County as governed by naturally occurring geology. There are also areas of active and previously active mineral sites in the south-west of Leicestershire. Igneous rocks are currently extensively worked in and around Charnwood Forest in Leicestershire, producing in excess of 10 million tonnes of aggregate each year. The quarry at Mountsorrel is one of the largest aggregate quarries in the UK. Rocks quarried also include intrusive igneous rocks and Charnian volcanoclastic sediments, much of which is then exported around England. Small quarries which extract Carboniferous Limestone are located in the north-west of Leicestershire at Breedon Hill and Cloud Hill. The Marlstone Rock Formation has been extensively quarried for Iron ore in the area surrounding Holwell, also north of the county. Concentrations of red and green mudstones, siltstones and sandstones are found in west Leicestershire, where associated brick quarrying takes place. There is a continuing demand for open-cast coal mining, although this has significantly declined since the 1990s. There are relatively few applications for deep-cast coal mining within the region. No safeguarded minerals sites have yet been identified in the County, although work is progressing on this for the County.

City:

OAN growth projection: With regards to the City, all options will have some effect on the demand for materials, although it is not clear at this stage as to the level of locally extracted minerals that would be involved in the development of the area. Assuming that a significant level of minerals are locally extracted are used in constructing the future growth of the area, option 1 (20% - 18100 homes) and option 6 (25% - 22625 homes) would place the most significant demand on mineral resources, whilst the impact arising from options 2, 3, 4, and 5 (10% - 9,050 homes) would be lower. However, as there are no current or proposed Mineral Safeguarding Areas (MSA) within the city boundary, development within this area is not expected to sterilise potential resources and increased levels of development within the City would be considered to have the a positive effect on minerals in this respect. With this in mind, higher development levels would in theory lessen the pressures on Mineral Safeguarded Areas elsewhere and therefore option 1 (20% - 18100 homes) and option 6 (25% - 22625 homes) are predicted to have a **minor positive effect** on minerals. The effects arising from options 2, 3, 4, and 5 (10% - 9,050 homes) would be lower, and less likely to help safeguard minerals elsewhere. Therefore, a **neutral effect** is predicted for each option. The hybrid option is predicted to have the same effects despite a slightly higher level of growth (10,450).

Higher growth projection: Increased levels of development within the City delivered through options 1 and 6 would continue to have a positive effect on minerals in terms of diverting growth to areas where sterilisation of minerals is less likely. However, an overall increase in the level of growth would be likely to lead to an increased demand for minerals overall. A mixed effect is predicted with a **minor positive effect** (relating to the avoidance of Minerals Safeguarded Areas) and **minor negative effect** (relating to the overall increase in demand for minerals). For all other options, there would also be an increase in minerals demand, but this would be relatively modest and so a **neutral effect** remains.

Minerals

Urban periphery:

OAN growth projection: As with all other potential growth areas, all options will have some effect on the demand for materials, although it is not clear at this stage as to the level of locally extracted minerals that would be involved in the development of the area. There are reserves of sand and gravel to the south and east of the urban periphery that could potentially be affected by development. Though this would depend on the precise location of development, it would perhaps be more likely at higher levels of growth. Option 1 (40% - 36,200 homes) and option 3 (30% - 27,150 homes) would place the most demand on mineral resources, and some of the development locations could be in areas containing sand and gravel resources. Whilst growth to the urban periphery is likely to help avoid Minerals Safeguarded Areas in other parts of the Plan area, at these higher levels of growth, some could be affected. On balance, a **minor positive effect** is predicted. Options 6 (25% -22,625 homes) and 5 (20% - 18,100 homes) would also have potential for a **minor positive effect** through avoidance of Minerals Safeguarded Areas, and be less likely to encroach upon reserves at the urban periphery compared to options 1 and 3. The options that would have **neutral effects** are options 2 and 4 (15% - 13,575 homes). Whilst growth at the periphery could help draw it away from other areas that may contain mineral reserves, it would only be at a small scale.

The hybrid option involves a very low level of growth, and so **neutral effects** are predicted.

Higher growth projection: The effects of the higher growth projection compared to the OAN are similar. Though there would be an overall increase in the level of minerals demand, it is considered that this would not lead to a change in the significance of effects, either positive or negative.

Market towns:

OAN growth projection: As with all other potential growth areas, all options will have some effect on the demand for materials, although it is not clear at this stage as to the level of locally extracted minerals that would be involved in the development of the area.

All of the market towns are within districts are surrounded by MSAs for a number of minerals, but principally sand and gravel resources and igneous rock. Charnwood, which Loughborough lies in, also has an extensive area of gypsum that is proposed to be safeguarded. Alongside sand and gravel and igneous rock, North West Leicestershire has areas of Limestone and Clays that are also proposed for safeguarding, which could be affected by proposed growth options in Coalville. Melton also has a significant area of Limestone proposed as a MSA, although this is some distance from the town and therefore may not be affected by growth proposals within this district. Therefore, distributing a significant level of growth amongst the five market towns would have a potential negative impact on the mineral resources and proposed MSAs.

Dependent on the levels of locally extracted minerals used in the future growth of the area, option 2 (60% -54,300 homes) and option 3 (45% - 40,725 homes) could have a **moderate negative effect** on mineral resources. At these levels of growth, it may be more likely that land safeguarded for minerals would be encroached upon (though this does not necessarily means that workable reserves of minerals would be affected). For options 5 and 6 (30% - 27,150 homes), which involve lower levels of growth, **minor negative effects** are predicted. Those growth options with the least effect are options 1 and 7 (20% -18,100 homes), and option 4 (15% - 13,575 homes). It ought to be possible to avoid areas of minerals safeguarding more easily at this level of growth and thus the effects are predicted to be **neutral**.

Minerals

Higher growth projection: The effects of the higher growth projection compared to the OAN are similar, although the increase in option 2 (65,160 homes) would risk increasing the effect to a **major negative effect** given the pressure on land surrounding the market towns. There would also be an overall increase in the demand for minerals. It is not considered there would be an increase in the significance of effects for any of the other options.

Other settlements:

OAN growth projection: As with all other potential growth areas, all options will have some effect on the demand for materials, although it is not clear at this stage as to the level of locally extracted minerals that would be involved in the development of the area.

Dependent on the levels of locally extracted minerals used in the future growth of the area, whichever growth strategy is proposed, there is likely to be effects upon minerals. Though the precise location of development is not known at this stage, a dispersed pattern of growth could potentially affect areas safeguarded for minerals resources. Option 5 (40% - 36,200 homes) would have the most potential for negative effects, as it directs a large portion of overall needs to more rural areas, that could coincide with mineral resources. As such, a **moderate (but uncertain) negative effect** is predicted for option 5. The effects for options 1 and 6 (18,100 homes) are considered to be less likely to occur, and if so at a lower magnitude, therefore a **minor (but uncertain) negative effect** is predicted. Whilst options 2 and 3 (15%-13,575 homes), options 4 and 7 (10% - 9,050 homes) would distribute some growth to the more rural areas, the likelihood of affecting minerals and the magnitude of effects is low. Therefore, a **neutral effect** is predicted.

Higher growth projection: The effects of the higher growth projection compared to the OAN are similar; therefore it is not considered there would be an increase in the significance of effects, either positive or negative. However, the overall increase in growth is likely to put more pressure on minerals.

New / expanded settlements:

Some of the opportunity areas for expansion or new settlements would be unlikely to affect mineral resources (e.g. Six Hills, Kibworth). However, other locations could potentially affect known mineral resources such as at Stoney Stanton, and to the east of Loughborough (Sand and gravel). Mixed effects are therefore likely to occur, and there will be some uncertainty (as per the other options) regarding the precise location of development.

OAN growth projection: Option 5 (and the hybrid option) are the only options that suggests housing provision through a focus on new and expanded settlements. Therefore, this option of 50% of housing provision (45,250 homes) has the potential to have negative effects on mineral resources and reserves. Given that some opportunity areas would avoid mineral resources, and others could potentially be pressured, the overall effect is predicted to be an **uncertain minor negative effect**. All other options are recorded as having **neutral effects** as no growth is proposed.

Higher growth projection: The effects of the higher growth projection compared to the OAN are similar. However, the overall increase in the scale of growth could lead to **minor negative effects** with a greater degree of certainty.

Minerals

Overall effects

For all options, the impact on mineral reserves is dependent on the levels of levels of locally extracted minerals used in the future growth of the area, something that cannot be established at this time, but can be influenced by Local Plan policy.

Option 1 which focuses on delivering a majority of the development in the City, and the urban periphery should help to protect mineral resources by avoiding sterilisation of mineral resources, compared to dispersed development which would generally risk a greater impact on minerals. However, there would still be growth at 'other settlements' which could lead to potential negative effects. Overall, the effects of this approach are considered to be neutral taking into account the effects across the Plan area as a whole. At a higher level of growth, the overall increase in demand for minerals is recorded as a **minor negative effect**.

Option 2 focuses much of the growth to the market towns, which are mostly surrounded by areas of sand and gravel resources. At the high level of growth proposed it is likely that moderate negative effects would occur here. The effects would be tempered somewhat by neutral effects in other locations across the Plan area. On balance a **minor negative effect** is predicted overall. At the higher growth projection, the effects of increased mineral demand constitutes a **moderate negative effect** overall.

Option 3 also focuses housing to the market towns (though less than option 2), which could potentially have an effect on minerals resources / potential safeguarded areas. However, it also focuses growth at an amount at the urban periphery that ought to avoid effects on minerals. Effects on safeguarded minerals elsewhere are unlikely to occur. Overall, a **neutral effect** is predicted. At the higher growth projection, the effects of increased mineral demand constitute a **minor negative effect**.

Option 4 is predicted to have neutral effects in most parts of the Plan area due to the low levels of growth and likelihood of being able to avoid sterilising mineral resources. Substantial growth is proposed at new or expanded settlements though, and some of these could involve effects on minerals. Due to the magnitude of growth in these areas, the effects are considered to be minor, but uncertain as growth in some areas could have effects and others not. At the higher growth projection, the effects of increased minerals demand constitute a **minor negative effect**.

Option 5 is predicted to have a **minor negative effect** overall. This is due to the potential for negative effects in the 'other settlements' and minor effects associated with growth at the market towns. Effects elsewhere would be mostly neutral though. At the higher growth projection, the effects of increased minerals demand constitute a **moderate negative effect**, and could also increase the risk of minerals sterilisation in 'other settlements' due to the greater requirement for land.

Option 6 would have positive effects by directing growth to the City, which would avoid areas safeguarded or earmarked for minerals safeguarding. There would be neutral effects in the Leicester urban periphery, but minor negative effects associated with development in market towns and 'other settlements'. On balance this constitutes a potential minor negative effect. At the higher growth projection, the effects of increased minerals demand constitute a **minor negative effect** overall.

The Hybrid Option is likely to have **uncertain negative effects** on minerals resources across much of the Plan area. The greatest potential for effects upon Mineral Safeguarded Areas relates to development at new / expanded settlements, some of which fall within areas with potential sand and gravel resources. However, reserves across the County are likely to be avoided in the main and it should be possible to avoid sterilisation.

Minerals							
		City	Urban periphery	Market towns	Other settlements	New/expanded settlements	Overall effects
Option 1 <i>Leicester urban periphery focus</i>	1a	✓	✓	-	x [?]	-	-
	1b	✓/x	✓	-	x [?]	-	x
Option 2 <i>Market town focus</i>	2a	-	-	xx	-	-	x
	2b	-	-	xxx	-	-	xx
Option 3 <i>Employment-led</i>	3a	-	✓	xx	-	-	-
	3c	-	✓	xx	-	-	x
Option 4 <i>New settlements</i>	4a	-	-	-	-	?	?
	4b	-	-	-	-	-	x
Option 5 <i>Dispersal</i>	5a	-	-	x	xx [?]	-	x
	5b	-	-	x	xxx [?]	-	xx
Option 6 <i>Trends</i>	6a	✓	-	x	x [?]	-	?
	6b	✓/x	-	x	x [?]	-	x
Hybrid Option		-	-	-	-	?	?

6 Alternatives appraisal: Summary of effects

6.1 Introduction

- 6.1.1 Table 6.1 below presents the overall scores recorded for all twelve of the original reasonable alternatives (i.e. the six distribution options at both scales of growth).
- 6.1.2 These effects have been drawn together from the detailed assessments presented in Section 5. The overall scores represent a summary of effects for the whole Plan area, which takes account of how the options could have different effects in different parts of the City/County.
- 6.1.3 First, a discussion of the distribution options is presented in the context of the OAN growth projection. This is followed by a discussion of the effects assuming a 20% increase in growth for each of the options (excluding the hybrid option).
- 6.1.4 The hybrid option was only assessed at the ‘preferred’ level of growth, to allow for comparison with the original six distribution options at that scale. The Strategic Planning Group had already ruled out the higher scale of growth at this stage based upon previous iterations of the appraisal (and other evidence).

Table 6.1 Summary of appraisal scores for each option at both scales of growth

		Biodiversity	Health & wellbeing	Housing	Economy	Transport	Climate change	Landscape and land	Heritage	Water	Minerals
Option 1 <i>Urban periphery</i>	1a	x	✓✓✓xx	✓✓	✓✓	✓✓/x	✓/?	x	xx/✓✓	x	-
	1b	xx	✓✓✓xxx	✓✓✓	✓✓✓/x	✓✓/xx	✓/x	xxx	xxx/✓✓	xxx	x
Option 2 <i>Market town focus</i>	2a	xx	✓✓xx	✓✓	✓✓/x	✓✓/xx	✓✓	x	xx/✓	x	x
	2b	xxx	✓✓xxx	✓✓	✓✓✓/xx	✓✓/xxx	✓	xxx	xxx/✓	xxx	xx
Option 3 <i>Employment-led</i>	3a	x	✓✓✓xx	✓✓✓	✓✓✓/x	✓✓/xx	✓✓	xx	xx/✓	x	-
	3b	xx	✓✓✓xxx	✓✓✓	✓✓✓	✓✓/xxx	✓	xxx	xxx/✓	xx	x
Option 4 <i>New settlements</i>	4a	x	✓✓xx	✓✓	✓✓	✓/xx	✓	x	x/✓	xx	?
	4b	xx	✓✓✓xxx	✓✓	✓✓✓/x	✓/xxx	-	xx	xx/✓	xx	x
Option 5 <i>Dispersal</i>	5a	x [?]	✓✓✓x	✓✓✓	✓✓/x	✓/xxx	x	xxx	xxx/✓	x	x
	5b	xx [?]	✓✓✓xx	✓✓✓	✓✓/xx	✓✓/xxx	xx	xxx	xxx/✓	xxx	xx
Option 6 <i>Trends</i>	6a	x	✓✓✓x	✓✓	✓✓	✓/x	✓/?	xx	xx/✓✓	x	?
	6b	xx	✓✓✓xx	✓✓✓	✓✓✓/x	✓/xx	-/x	xxx	xxx/✓✓	xxx	x

6.2 Discussion of the options under growth scenario A (90,500 homes)

6.2.1 Table 6.2 below sets out the effects for the hybrid option and the six reasonable alternatives (at this scale of growth) that were appraised prior to the preferred approach being established.

6.2.2 Although the hybrid option is broadly the same as Option 4a (in terms of the numbers distributed to the different spatial areas), there are differences in the assumptions about the location of ‘new settlements’. Therefore it is useful to compare how the hybrid option performs compared to the original spatial options.

Table 6.2 Summary of appraisal scores for each option at the OAN growth projection (90,500 homes)

		Biodiversity	Health & wellbeing	Housing	Economy	Transport	Climate change	Landscape and land	Heritage	Water	Minerals
Option 1 <i>Urban periphery</i>	1a	x	✓✓✓xx	✓✓	✓✓	✓✓/x	✓/?	x	xx/✓✓	x	-
Option 2 <i>Market town focus</i>	2a	xx	✓✓xx	✓✓	✓✓/x	✓✓/xx	✓✓	x	xx/✓	x	x
Option 3 <i>Employment-led</i>	3a	x	✓✓✓xx	✓✓✓	✓✓✓/x	✓✓/xx	✓✓	xx	xx/✓	x	-
Option 4 <i>New settlements</i>	4a	x	✓✓xx	✓✓	✓✓	✓/xx	✓	x	x/✓	xx	?
Option 5 <i>Dispersal</i>	5a	x [?]	✓✓✓x	✓✓✓	✓✓/x	✓/xxx	x	xxx	xxx/✓	x	x
Option 6 <i>Trends</i>	6a	x	✓✓✓x	✓✓	✓✓	✓/x	✓/?	xx	xx/✓✓	x	?
Hybrid Option		x	✓✓✓/xx	✓✓✓	✓✓✓	✓✓/xx	✓	xx [?]	x/✓	x	?

NB: Cells are shaded red where an option scores worse than all other options. Cells are shaded green where an option scores better than all other options.

6.2.3 The overall effects for each option do not differ greatly between options for most of the SA topics. This is largely due to the fact that each option could have positive or negative effects (or both) in different parts of the Plan area. Nevertheless, there are some differences between options that are discussed below.

- 6.2.4 **Option 1:** Option 1 is predicted to have moderate positive effects on housing, economy and transport as there is a focus on growth in accessible locations. There also ought to be positive effects on health and wellbeing, though there could also be issues in the City due to increased congestion and impacts on air quality. The environmental effects of this approach are broadly minor, with the most significant effects being identified in terms of cultural heritage. This approach would however present greater opportunities for enhancement of the built environment in the City.
- 6.2.5 **Option 2:** Similar to option 1, this option generates positive effects in terms of housing, economy and transport, as growth in the market towns is broadly accessible and close to areas of economic growth. However, despite moderate positive effects on health and wellbeing, this option could have negative effects in terms of congestion. The benefits in terms of climate change are thought to be moderately positive for this option.
- 6.2.6 Though effects on landscape, land, water and minerals are only predicted to be minor there could be moderate negative effects on biodiversity (the most for any option) and heritage, due to pressures on the built and natural environment.
- 6.2.7 **Option 3:** Option 3 generates significant positive effects in terms of housing (only option 5 and 7 perform as well) and is the only option apart from the hybrid option to have a significant positive effect on the economy. This is not surprising given that this option focuses on an employment-led distribution. Similar to options 1 and 2 though, this option could have negative effects in terms of congestion. Conversely, it performs well in terms of accessibility and climate change. The environmental effects are mostly negative, with moderate negative effects on landscape and land and heritage. This is mainly due to a loss of greenfield land at both the Leicester urban periphery and the market towns.
- 6.2.8 **Option 4:** This option generates moderate positive effects for housing and economy. However, the effects on transport are mostly negative, as growth in some locations would not make best use of existing infrastructure and could increase car dependence and trip length. Whilst the effects on environmental factors are mostly minor (i.e. biodiversity, landscape and land, heritage), the effects on flooding and infrastructure are more likely to be problematic, which is a negative effect for water, and transport.
- 6.2.9 **Option 5:** Option 5 is predicted to have a major positive effect on housing, as it would provide a wide range of locations and sites, helping to tackle housing needs across the whole Plan area. The effects on the economy would still be positive, and effects on health and wellbeing also ought to be very positive given that the benefits of development ought to be felt across the Plan area. However, with regards to landscape, land and cultural heritage, option 5 generates the most negative effects compared to all other options. This is largely due to effects on the countryside, and rural nature of settlements. This option also performs the most poorly in terms of transport and travel, as it would likely lead to greater reliance on cars, increased trip length and poorer accessibility.
- 6.2.10 **Option 6:** This option is predicted to have moderate positive effects on housing and economy, with major positive effects on health relating to housing provision and infrastructure improvement. Whilst the negative effects in terms of transport are only minor, so too are the positive effects. This option is also likely to have moderate negative effects on land, landscape and cultural heritage

6.2.11 **Hybrid Option:** This approach performs the best in relation to economy and employment as it is the only option to generate significant positive effects and no negative effects. This is largely due to the infrastructure-led approach and a focus on key centres of economic growth, but still planning for appropriate growth elsewhere to ensure that areas are not 'left behind'. From an environmental perspective, the option performs relatively well as it would only generate minor negative effects with regards to biodiversity, landscape and water. However, the potential for moderate negative effects in terms of travel and transport exist due to the focus on new settlements that will likely increase traffic and encourage car use. There is also a potential / uncertain moderate negative effect on landscape due to a focus along the A46 corridor.

Comparison of options

6.2.12 As illustrated in table 6.2, a dispersed approach is the least balanced overall; having the most negative effects for three sustainability objectives (transport and travel, landscape and land, cultural heritage). Therefore, despite having very positive effects for housing and health and wellbeing, it would be unlikely to achieve sustainable development.

6.2.13 From a social and economic perspective, the hybrid option appears to perform the best overall, as it is the only option that generates a major positive effect on both housing and economy without generating negative effects. The next best performing option is option 3, which also generates significant positive effects for housing and economy, but could generate some negatives. All other options would still generate positive effects on social and economic factors, but to a lesser extent. However, despite performing well in terms of social and economic factors, option 3 would have more negative effects on land and landscape and cultural heritage compared to options 1, 2 and 4. Those options are not without their own difficulties though, with option 2 performing worst of all options in terms of biodiversity and option 4 performing worst of all options in terms of water. The hybrid option, on the other hand, is one of the better performing options with regards to environmental protection, with the exception of landscape effects, which could be prominent at the A46 corridor.

6.2.14 It is clear that the overall performance of options 1, 2, 3 and 4 is fairly similar in terms of sustainability 'as a whole'. However, each approach has more merits or issues for different aspects of sustainability.

6.2.15 What can be concluded from this appraisal is that option 5 should not form a major element of the spatial strategy. However, there is still merit to dispersing some growth as demonstrated by positive effects on health and housing associated with option 5.

6.2.16 It is also clear that the hybrid option best meets the economic aspirations of the growth strategy and supports housing in accessible locations whilst performing as well as any other option in terms of environmental protection objectives.

6.3 Discussion of growth options at a higher level of growth

6.3.1 Before the preferred approach was established, the Strategic Planning Group considered the effects of the six distribution options at a higher level of growth (108,600 homes). Table 6.3 below summarises the effects for each option. This information contributed to the decision to discard the higher growth scenario (and therefore the hybrid option was not tested at this scale of growth).

Table 6.3 Summary of appraisal scores for each option at the higher growth projection

		Biodiversity	Health & wellbeing	Housing	Economy	Transport	Climate change	Landscape and land	Heritage	Water	Minerals
Option 1 <i>Urban periphery</i>	1b	xx	✓✓✓xxx	✓✓✓	✓✓✓/x	✓✓/xx	✓ / x	xxx	xxx / ✓✓	xxx	x
Option 2 <i>Market town focus</i>	2b	xxx	✓✓xxx	✓✓	✓✓✓/xx	✓✓/xxx	✓	xxx	xxx / ✓	xxx	xx
Option 3 <i>Employment-led</i>	3b	xx	✓✓✓xxx	✓✓✓	✓✓✓	✓✓/xxx	✓	xxx	xxx / ✓	xx	x
Option 4 <i>New settlements</i>	4b	xx	✓✓✓xxx	✓✓	✓✓✓/x	✓/xxx	-	xx	xx / ✓	xx	x
Option 5 <i>Dispersal</i>	5b	xx?	✓✓✓xx	✓✓✓	✓✓/xx	✓✓/xxx	xx	xxx	xxx / ✓	xxx	xx
Option 6 <i>Trends</i>	6b	xx	✓✓✓xx	✓✓✓	✓✓✓/x	✓/xx	- / x	xxx	xxx / ✓✓	xxx	x

NB: Cells are shaded red where an option scores worse than all other options. Cells are shaded green where an option scores better than all other options.

6.3.2 With a 20% increase in housing to allow for ‘flexibility’, the broad trend for all options is for the negative effects to become more prominent across the Plan area, whilst the positive effects do not increase as consistently or by the same magnitude.

6.3.3 For option 1, despite an improvement in the housing and economic factors, the effects on multiple environmental factors would become majorly negative and could be difficult to mitigate. There could also be major negative effects upon health and wellbeing.

6.3.4 The picture is similar for options 2 and 3, which would both see major negative effects for landscape and land and heritage, as well as more significant negative effects in terms of congestion, infrastructure and potential intrusion into minerals safeguarded areas.

- 6.3.5 Option 2 would have the most prominent negative effects on biodiversity at this level of growth compared to all other options (the same as for the lower growth scenario).
- 6.3.6 Option 3 would still remain the most positive with regards to the economy, even at this higher level of growth.
- 6.3.7 Option 4 would perhaps be best placed to accommodate even greater levels of growth, as the negative effects generated would be less significant compared to the other options. Nevertheless, the overall pattern is one of exacerbated negative effects on environmental factors compared to the OAN growth projection.
- 6.3.8 For option 5, major negative effects are also predicted for a range of environmental factors, including a rise in the significance of effects for water, biodiversity, climate change and minerals. The positive effects only rise in significance for transport and travel, as increased growth in rural areas could help to support/improve accessibility and services.
- 6.3.9 Option 6 would also see an increase in negative effects for many sustainability factors. The exception is an increase in significance of the positive effects on housing and economy.
- 6.3.10 For the higher growth scenario, option 5 does not score as badly in comparison to the other options; with it only scoring the poorest for climate change at this scale of growth. This is due to the negative effects of each other option rising with the higher level of growth.

6.4 Outline reasons for the selection of the spatial strategy

- 6.4.1 The Strategic Planning Group has come to a decision on the preferred approach based upon a range of factors including; national policy, regional priorities for the economy and infrastructure investment, the need to protect local environmental and historic assets, and the findings of the SA process (presented in an interim SA Report).
- 6.4.2 Whilst none of the original reasonable alternatives have been taken forward in their entirety, the preferred approach does reflect elements of each option where they are in accordance with the preferred strategy. For example, option 5 is rejected in terms of the focus on rural settlements, but the level of growth at the City and the market towns for this option is broadly the same as the preferred approach.
- 6.4.3 As in the case of the draft Plan, the revised Plan has been developed to take advantage of significant new infrastructure capacity that is close to the anticipated key economic growth points. The A46 corridor represents an excellent opportunity to accommodate housing growth close to and with good transport links into the City, where anticipated job growth requires a workforce well in excess of that likely to be accommodated within Leicester and the urban periphery. Growth along this corridor is anticipated to help reduce the length of journeys to work, improve the prospect of non-car journeys and create additional jobs associated with the new housing areas in the corridor.

- 6.4.4 It is anticipated that a large amount of growth would be accommodated at new / expanded settlements. Consequently, the broad approach of option 4 has formed the basis for the growth strategy (but also drawing from elements of the other distribution options as appropriate).
- 6.4.5 In the southern part of the County the Southern Gateway has been deleted and the revised plan emphasises the importance of improvements to the A5 Corridor, particularly in terms of their relationship to the delivery of development that is already committed in Local Plans or with planning permission (the A5 Improvement Corridor). New/expanded settlements will be accessible to job opportunities and the location is crossed by the Leicester-Nuneaton rail line providing good accessibility. Substantial numbers of new jobs are anticipated in in this part of the County, in addition to the proposed road and rail infrastructure investment. The area will also be connected to the A46/M69 to the south-west and, via the new southern/eastern Leicester bypass, will be connected to the M1 via the proposed new Junction 20a. The amount of new homes in Harborough District has been reduced by 2,000 dwellings in recognition of the very high annual rate of delivery that the original figure would have required. Similarly, Lutterworth is no longer designated as a key centre for growth; instead growth in this area will be managed in Local Plans.
- 6.4.6 In the revised Plan, the Leicestershire International Gateway replaces the Northern Gateway. In this area, the homes are again likely to be in new settlements and expansions to existing urban areas such as Loughborough / Shepshed. Housing growth is justified by the economic growth anticipated in this location including at Loughborough (which is an important university town), the strategic rail freight interchange, HS2 interchange at Toton just outside the County boundary and growth of East Midlands Airport. North West Leicestershire District Council has been assigned an additional 1,200 dwellings in recognition of these growth opportunities.
- 6.4.7 The strategy sets an appropriate level of growth in Leicester City, which represents the current assessment of maximum capacity in the City from the period 2031-2050. Planning for greater levels of growth here is considered likely to stifle the capacity for employment growth (office, retail, leisure) and could also have greater potential for effects on biodiversity, health and wellbeing due to the loss of open space. Consequently, options 1 and 6 which both propose substantially higher levels of growth in the City are considered to be inappropriate in this respect. Planning for lower levels of growth in the City (rather than maximising potential) is considered to be unreasonable given the ongoing shortage of homes and the inability to meet fully objectively assessed housing needs. Furthermore, the SA does not identify any significant issues with regards to the level of growth proposed in the City.
- 6.4.8 The level of growth focused at the market towns is considered to be appropriate given that there are already significant developments in the pipeline for these areas up to 2031 and beyond. Around Loughborough / Shepshed, the Leicestershire International Gateway will increase development opportunities in this location and, in the revised Plan, Melton Mowbray has been designated as 'key centre for regeneration and growth' (emphasising the importance of regeneration to the town and its relationship with new growth). In recognition of confirmed funding for the town centre bypass Melton Mowbray, in the revised plan, has been assigned an additional 800 dwellings. Focused growth at the other market towns would not take full advantage of economic opportunities and strategic infrastructure upgrades. Consequently, options 2 and 3, which focus substantial growth to the other market towns, are considered less attractive in this respect.

- 6.4.9 The level of growth proposed at the rural settlements is limited, and reflects the strategic focus on larger-scale opportunities in more accessible locations. Consequently, options 5 and 6, which propose substantial dispersal of growth, are considered to be unattractive in this respect.
- 6.4.10 The SA findings broadly support the preferred strategy, as it would generate the most benefits in terms of employment and housing growth. The focus of growth at key areas of economic growth and infrastructure capacity is also likely to reduce the length of car trips, and encourage sustainable modes of travel (particularly where there are strong rail and bus links into the City). In terms of environmental effects, the preferred approach does not generate any major negative effects and performs better or the same as the alternatives in this respect.
- 6.4.11 The role of the Strategic Growth Plan is to establish broad preferred locations for longer term growth and thus to provide a framework for statutory local plans. The broad locations would evidently be able to accommodate a range of different growth levels, so if subsequent work based on updated evidence confirms that a higher level of growth ought to be pursued in certain locations, then this can be considered at that stage and the impacts analysed accordingly. What is clear at this stage is that a higher level of growth (than the projected OAN) will have largely negative impacts. This is supported by the SA findings which suggest that the negative effects for every option would be likely to increase, and this could lead to major negative effects on the built and natural environment, water, and transport infrastructure.

7 Appraisal of the Plan

7.1 Introduction

- 7.1.1 This section presents an appraisal of the Plan considered ‘as a whole’; setting out a discussion of the effects associated with the preferred option as well as taking into account the supporting Plan principles. Essentially, this section is an update of the appraisal that was undertaken for the draft Plan and presented in the interim SA Report (February 2018).
- 7.1.2 The effects of the preferred approach are already set out in Sections 5 and 6; allowing for a like-for-like comparison with the original reasonable alternatives and new reasonable alternatives that have been tested.
- 7.1.3 This section reproduces those effects, but provides further consideration of the additional elements within the Plan (which have been developed to support the spatial approach to development).
- 7.1.4 Whilst there are no policies as such proposed within the Plan (to support the spatial approach to development), it contains a range of broad principles that provide a framework for how growth should be delivered. These are summarised below:

The Building blocks for development

Respecting the existing settlement pattern - The long-standing relationship between Leicester, the market towns and the rural areas is a feature that will be enhanced.

National policies - The Strategic Growth Plan considers how existing employment areas can be supported and where new growth should be directed to make the most of Government funding and its Industrial and housing strategies.

Our Economy and The midlands Engine Strategy - The Midlands Engine Strategy recognises the growth potential of major employment areas such as East Midlands Airport, East Midlands Gateway, the two enterprise zones – MIRA Technology Park near Hinckley and the Loughborough and Leicester Enterprise Zone – the logistics and distribution industry and the potential of Leicester City Centre. The strategy also confirms that government funding will be put in place for key projects.

Infrastructure and the Midlands Connect Strategy - The fourth building block of the Plan is an understanding of the local road and rail networks and how they are supported by proposals in the Midlands Connect Strategy. This involves a consideration of key road schemes and rail improvements. Wider improvements to passenger rail services are currently far exceeding available funding. However, the strategy identifies that such matters ought to be reviewed in the future should opportunities arise.

Protecting environmental, historic and other assets - The fifth building block in the Plan has been recognition of the key environmental assets that are important to the area and will need to be protected and enhanced. Though all locally important assets have not been identified in the Plan, there is an acknowledgement that these hold value and should be protected and enhanced. It is envisaged that Local Plans will provide the appropriate mechanism for exploring this.

7.1.5 Four priorities have also been identified as follows:

- *Creating conditions for growth- Balancing the need for homes and jobs with protection of the environment and built heritage.*
- *Focusing on strategic locations and less on non-strategic sites.*
- *Securing essential infrastructure.*
- *Maintaining the essential qualities of Leicester and Leicestershire and ensuring high quality development.*

7.1.6 The key elements of the spatial strategy for growth are summarised below. As mentioned above, whilst the spatial strategy has already been appraised in the alternatives assessment section (i.e. the hybrid option), there are supporting features in the draft Plan that have been taken into account in more detail at this stage.

7.2 The Spatial Strategy

Securing essential infrastructure

- The strategy proposes to build more development in major strategic locations and to reduce the amount that takes place in existing towns, villages and rural areas. This is to plan for new housing and employment together with new and improved roads, public transport, schools, health services, local shops and open space.
- It is recognised that securing such infrastructure is challenging and will require public sector investment, securing the improvements set out in existing Local Plans and planning applications, and delivering infrastructure before major growth occurs.

High quality development

- The common agenda is to deliver 21st century garden towns, villages and suburbs within the strategic growth areas.

Primary Growth Areas

- The A46 Growth Priority Growth Corridor is critical to the strategy. There is an assumption that there will be improvements to railway services as well as the A46 expressway. This broad area will accommodate approximately 38,000 new homes.
- Leicester City is identified as playing a critical role in the strategy. Despite the growth strategy only allocating 10,450 homes to the City, the strategy highlights the importance of the City as a location for increased jobs, entertainment, arts, leisure and cultural facilities.
- Given the scale of development on the fringes of Leicester, proposals to build the A46 Expressway would need to be accompanied by measures to increase capacity on the radial roads and improve public transport.

The Leicestershire International Gateway

- This gateway will be supported by improvements to the A42, M1, railway lines and services – all set out in the Midlands Connect Strategy.
- The area has the potential to accommodate approximately 11,000 homes, with the concept of delivering ‘Forest Towns’.

The A5 Improvement Corridor

- The expressway proposals will create opportunities for development on strategic sites well located relative to employment opportunities.

Melton Mowbray: Key Centre for Regeneration and Growth

- The recent approval for the Melton Mowbray Relief Road provides a catalyst for change to help improve congestion and accessibility.
- The town functions as a rural hub for surrounding areas and is therefore appropriate to accommodate further housing growth (approximately 3800 dwellings).

Areas of Managed Growth in Local Plans

- Further development should be consistent with the need to support local growth. This includes the settlements of Lutterworth, Market Harborough, Hinckley, Loughborough and Coalville.

Villages and Rural Areas

- There will be limited growth in these areas, consistent with providing for local needs.

Digital Connectivity

- Digital connectivity is an essential part of the infrastructure planning process and need to be funded as such.

7.3 Mitigation and enhancement

7.3.1 To allow for a consistent comparison at an earlier stage of plan-making, the alternatives assessment process made limited assumptions about mitigation. However, the Plan contains a number of elements that ought to be taken into consideration as they could help to mitigate any potential negative effects (for example, a focus on a Garden City Concept and high quality design). These factors have been taken into account in this part of the appraisal, including further recommendations where appropriate.

7.4 Methods

7.4.1 Similar to the previous sections, the appraisal is based upon the SA Framework, which consists of ten SA topics, with supporting objectives and guiding questions.

7.4.2 When determining the significance of any effects, a detailed appraisal of factors has been undertaken to take account of:

- the nature and magnitude of development;
- the sensitivity of receptors; *and*
- the likelihood of effects occurring.

7.4.3 Taking these factors into account allowed ‘significance scores’ to be established using the system outlined below. Major and moderate effects are considered to be significant, whilst minor effects are not.

Major positive	✓✓✓	Minor negative	x	Neutral / negligible effects	-
Moderate positive	✓✓	Moderate negative	xx	Uncertain negative effects	?
Minor positive	✓	Major negative	xxx	Uncertain positive effects	?

7.4.4 The assessment has been undertaken making-use of baseline information presented in the scoping report and mapping data. Whilst it has not been possible to identify exact effects due to sites not being established at this stage, we have made assumptions on the potential locations of development by referring to SHELAA sites and potential opportunity areas identified by the Strategic Planning Group.

7.4.5 There is a focus on strategic impacts at a settlement-level, rather than detailed local effects. Whilst every effort is made to make objective assessments, the findings are also based upon professional judgement and are therefore partly subjective.

7.5 Appraisal findings

7.5.1 The appraisal findings relating to the Plan are presented in this section. Table 7.1 below sets out a summary of the appraisal scores for each of the sustainability topics. In the first row, the scores are reproduced from the appraisal of the Hybrid Option, which most closely resembles the Plan approach.

7.5.2 The options appraisal considered the spatial distribution of growth only (with limited assumptions about mitigation). The second row presents the scores taking into account the broader principles, priorities and assumptions that are set out in the Plan in support of the approach to spatial distribution. In some instances, this has led to a change in the scores (mostly a reduction in negatives), reflecting the potential for effects to be mitigated.

Table 7.1 Summary of appraisal findings for the Plan

	Biodiversity	Health & wellbeing	Housing	Economy	Transport	Climate change	Landscape and land	Heritage	Water	Minerals
Hybrid option appraisal	x	✓✓✓/xx	✓✓✓	✓✓✓	✓✓/xx	✓	xx	x/✓	x	?
Effects of the Final Plan considered as a whole	?	✓✓✓/x	✓✓✓	✓✓✓	✓✓/xx?	✓	xx	x/✓	x	?

Biodiversity

7.5.3 The Plan directs 10,450 homes within the City boundary. At this scale of growth, it is less likely that there would be a significant effect on biodiversity within the City, as there will be greater flexibility to ensure that sites are located at some distance from designated sites. Growth could more readily avoid sensitive areas, and have lesser overall effects on green infrastructure in the City.

- 7.5.4 Similarly, the level of growth at the market towns ought to have only minor effects on biodiversity as there should be some flexibility in the choice of site. The focus on large strategic sites and a Garden City concept should also help to ensure that biodiversity opportunities are taken where possible.
- 7.5.5 The focus of growth at Melton is higher than previously identified in the draft Plan (800 additional dwellings). This could involve greater amounts of development to the east of the town, which is in close proximity to the River Eye SSSI. This environment is reliant on good water quality as well as the management of the physical form and function of the watercourse and its banks. The potential effects from residential development are likely to involve the introduction of domestic animals, disturbance through recreation and potential run-off from increased areas of hard standing. Though these effects ought to be possible to avoid / manage, the potential for negative effects exists.
- 7.5.6 The level of growth in the rural settlements would also be relatively low, and therefore, it ought to be possible to avoid pressure on sensitive sites both individually or cumulatively. The scale of growth in these areas would be less likely to be on strategic sites though, and so the potential for enhancement would be lower.
- 7.5.7 The strategy proposes substantial growth at new or expanded settlements along the A46 expressway corridor, which brings in development opportunities at a short distance from the Leicester urban fringes to the north-east arching round to the south / south-west. There would also be a focus on growth along the A5 improvement corridor and Leicestershire International Gateway.
- 7.5.8 In the main, the opportunities along the A46 corridor should avoid effects upon SSSIs, though there could be some pressure on the Kilby-Foxton Canal SSSI through increased recreational pressure and water quality. Likewise, there are areas of importance for wildlife along the A5 Improvement Corridor. However, in both locations, effects ought to be manageable through sensitive layout and design and the application of green infrastructure enhancements. Compared to alternative locations, the proposed growth areas are less sensitive (for example, within the north west of Leicester).
- 7.5.9 There are local wildlife sites and potentially protected species that may be affected by growth, but strategic opportunities ought to provide the potential for green infrastructure enhancement and to retain important habitats.
- 7.5.10 It will be important to ensure that development along the A46 corridor does not sever green infrastructure links into/out of the City, particularly along the River Sence. As a key principle for development, the strategy promotes the Garden City Concept that focuses on large strategic sites and sustainable growth that has green infrastructure at the heart of growth. This ought to provide the framework for Local Plans to deliver growth that helps to strengthen links between habitats rather than lead to fragmentation. However, there are uncertainties at this stage given the high-level nature of the strategy.

- 7.5.11 The Leicestershire International Gateway location is not particularly constrained by sensitive habitats (in the main). Therefore associated development ought to be possible to accommodate without having significant effects on biodiversity. Growth at the edges of the National Forest could however, lead to disturbance during construction, and potential severance of wildlife corridors. Given the strategic nature of sites and a focus on green infrastructure; such growth may potentially lead to enhancements to biodiversity though.
- 7.5.12 Though local wildlife sites and natural green space could be affected, the strategic nature of sites ought to allow for green infrastructure enhancement to be secured to protect and enhance wildlife. Though an additional 1000 homes are identified in the final Plan at this location, it is unlikely that this would lead to any substantial further effects (*compared to those that would be generated at a scale of 10,000 homes*). Exploring the potential for 'forest towns' could also help to ensure that new settlements in this area help to support and enhance strategic green infrastructure networks.
- 7.5.13 Overall, the effects across the Plan area are likely to be insignificant, with only minor negative effects likely to occur. Provided that Local Plans promote the Garden City Concept, explore forest towns, and a strategic approach to green infrastructure is developed, it ought to be possible to avoid negative effects, even where there is a focus of growth along the A46. However, there is uncertainty at this stage. These effects will need to be explored and addressed in Local Plans and accompanying Sustainability Appraisals.
- 7.5.14 Overall, an **uncertain negative effect** is predicted. The effects were predicted to be minor negative at the alternatives assessment stage, but the Plan makes it clear that environmental protection and enhancement is a key element of the strategy and this ought to be possible with a focus on Garden City principles and strategic sites.
- 7.5.15 The final Plan focuses slightly more growth to North West Leicestershire, notably at the Leicestershire International Gateway. Dependent upon the location of growth, it should be possible to avoid negative effects and potentially enhance networks of green infrastructure.

Recommendations - It would be beneficial for a green infrastructure strategy to be developed to identify how links between the City and the A46 corridor could be strengthened, ensuring that wildlife habitats are better connected. The Plan could commit to the preparation of a joint strategy to enable such opportunities to be explored and taken advantage of.

Health and wellbeing

- 7.5.16 Though there is modest housing growth directed to the City itself, new homes here are likely to be well located in respect of access to services and facilities. This could help to tackle housing affordability, and help to address deprivation. The plan also acknowledges that the City should continue to be a major center for economic growth and provision of facilities.

- 7.5.17 According to the findings of this SA, the level of growth proposed is not predicted to have a significant effect on health services, open space or air quality, particularly as it is acknowledged that infrastructure provision is a key element of the Plan. On balance a minor positive effect is likely to be generated.
- 7.5.18 The Plan places little growth within the immediate Leicester urban periphery, but substantial growth would be supported nearby at 'new settlements' along the A46 corridor. The benefits of development in the urban periphery are likely to be limited as a result of direct growth here. However, negative effects in terms of a loss of open space would be avoided.
- 7.5.19 Growth along the A46 corridor could provide opportunities for communities in the urban periphery to seek housing nearby, which is positive. But the benefits in terms of new facilities, services and infrastructure would be less likely to be felt by communities in the Leicester urban periphery (for example, on site recreation, retail and public services would not be readily accessible by foot). An increase in growth could also lead to increased congestion in the City, affecting the quality of life (and perhaps air quality) along major routes into the City. This could have negative implications for communities in the urban periphery. However, the Plan does state that a precondition of growth in these locations is an upgrade to strategic and local transport infrastructure to limit effects on traffic and air quality.
- 7.5.20 The Plan seeks to achieve controlled growth at the market towns in-line with existing Local Plans. This should help to ensure steady growth in these locations that would be less likely to require major infrastructure investment. It ought to be possible to avoid major loss of open space, but development opportunities in the longer term may be more likely to encroach upon more sensitive / valued areas, therefore an uncertain negative effect exists. Nevertheless, a minor positive effect could be generated as a result of improved housing choice, and modest investment in health, education and other facilities and services (from development contributions). Furthermore, there is an acknowledgement of the importance of regeneration and investment in these towns, particularly in opportunity areas such as Melton where growth ought to be unlocked by improved infrastructure.
- 7.5.21 With limited growth at the rural settlements, the effects upon health and wellbeing are likely to be insignificant. Whilst growth could help to support wellbeing through improved access to housing in these areas, it would be unlikely to create a critical mass to support major improvements to health facilities or other services. Access to services for new homes in these areas may therefore continue to remain poor.
- 7.5.22 A focus on the A46 corridor, A5 Improvement Corridor and the Leicestershire International Gateway ought to have mixed effects. New / expanded settlements are likely to have their own health facilities and recreational opportunities. This would be dependent upon the scale of growth, but the Plan makes it clear that the approach is one based on large-scale strategic developments. Therefore, positive effects are anticipated in terms of the creation of new facilities.

- 7.5.23 New settlements in close proximity to the Leicester urban periphery could also benefit communities in these areas (through access to affordable housing and new community facilities), though access to new facilities would be most likely by car. Overall, these amount to **significant positive effects**.
- 7.5.24 Conversely, there would be a loss of open space, though green infrastructure would likely be incorporated into new developments given the focus on large-scale sites and the Garden City / Forest Towns concepts.
- 7.5.25 Increased growth at the A46 corridor could also potentially increase traffic into the City, having negative implications for communities in these areas, particularly where air quality is an issue. Likewise, growth along the A5 Improvement Corridor could lead to additional traffic movements into centres such as Hinckley and Lutterworth. However, the improvements to the A5 itself ought to ensure that traffic is managed and helps to support committed and planned growth in these areas.
- 7.5.26 However, the need for infrastructure improvements is identified as one of the key priorities and building blocks of the Plan. Therefore, only **minor negative effects** are predicted overall in this respect. This is a slight improvement from the assessment of the hybrid option, as there is greater emphasis on green infrastructure and transport improvements within the final Plan.

Recommendations – In order to mitigate potential negative effects in terms of increased congestion and effects on air quality from vehicles, it would be beneficial to highlight a commitment to establishing the infrastructure to support electric vehicles. This would set a clear steer for Local Authorities to promote such infrastructure at strategic sites in particular. It would also be beneficial to ensure that strategic sites are well-served with public transport connections and cycling and walking routes into urban areas.

Housing

- 7.5.27 The Plan aims to deliver substantial amounts housing in the period 2031-2050 to meet ‘projected housing needs’. It is difficult to plan for growth so far into the future, as trends become more uncertain the further estimates extend. Therefore, there is an element of uncertainty about the overall levels of growth that will need to be planned for. It will therefore be important to review housing needs over time to ensure that the housing targets remain appropriate.
- 7.5.28 The level of housing delivery being planned for does not factor in additional land in order to increase flexibility (i.e. a higher growth projection). However, due to the long term nature of the Plan, and the need to prepare infrastructure to support strategic developments, a reliance on large sites is less likely to cause issues with housing delivery rates in the longer term (than has traditionally been the case in the Plan area). In addition, it is expected that approximately 34,100 homes would be delivered upon ‘non-strategic’ sites, which gives further flexibility and choice in the delivery of housing sites for each authority. Therefore, positive effects are still likely to be generated.

- 7.5.29 With regards to distribution, the Plan focuses a large amount of growth to the A46 corridor. Whilst there is also some growth at the Leicester urban periphery and in the City, this is fairly modest. Growth at market towns is also relatively modest, and at rural settlements growth is more restricted.
- 7.5.30 The crux of the strategy is to bring homes forward that are well connected to jobs and supported by strategic infrastructure improvements. This is a positive effect, as it should help to meet housing in areas of demand/need. In particular, housing growth in close proximity to the City ought to help meet needs that are originating this area, but are unable to be met in the urban area due to capacity constraints.
- 7.5.31 The approach should also ensure that needs arising in other parts of Leicestershire are met, as there is still allowance for growth at the market towns, at the Leicestershire International Gateway, and along the A5 Improvement Corridor. However, meeting needs in rural areas would be less likely to be achieved through strategic growth. Having said this, Local Plans will still provide an opportunity to tackle such needs.
- 7.5.32 Overall, a **significant positive effect** is predicted. The strategy places homes in locations that are well matched to employment, would help to meet housing needs close to where they are arising, and where land is likely to be available. Although the delivery of larger sites could take longer due to phasing and build out rates, the need to secure infrastructure in advance of development is acknowledged in the Plan.

Recommendations – No measures have been identified.

Economy and employment

- 7.5.33 Overall, the Plan supports a considerable proportion of the growth in the City, the urban periphery and along the A46 Corridor. An increase in homes in these areas would provide accommodation for workers in the City, and at strategic employment hubs (for example, Leicester City, MIRA Technology Park, Loughborough and Leicester Enterprise Zone), matching job opportunities to homes very well. Accessibility to these opportunities ought to be good, though this might be through a reliance on the private car in most locations.
- 7.5.34 This pattern of growth should aid the continuation of business growth, allowing the maintenance of Leicester as the strongest economy in the east midlands. The Plan seeks to make the most of strategic infrastructure, which should enable the scale of growth required to help deliver the Midlands Engine Strategy.
- 7.5.35 Regeneration is not a priority along the A46 corridor, but there could be knock on benefits for nearby communities at the Leicester urban periphery and Leicester City itself (for example employment in construction jobs, and provision of a workforce to support economic growth in the City). It is difficult to predict whether areas with higher levels of deprivation would benefit, as this depends upon the location of sites

and other factors. However, growth within and nearby to the City ought to help contribute to improved choice, and could bring with it improvements in infrastructure (physical and social) that could benefit such communities.

- 7.5.36 The Plan supports growth at the market towns in line with existing local plans, which is likely to lead to less prominent effects in terms of local spending and tackling deprivation. However, other elements of the spatial strategy could lead to benefits for the market towns, such as the A46 corridor bringing improved connectivity and opportunities to Hinckley, Melton Mowbray and Market Harborough, and the Leicestershire International Gateway providing a location for a growing workforce that could support people working in Coalville and Loughborough in particular.
- 7.5.37 Growth at Melton Mowbray ought to have benefits in terms of town centre improvements, regeneration, transport infrastructure upgrades and access to employment. This also links well to the A5 Improvement corridor, which would also be well located with regards to employment opportunities such as MIRA, DIRFT and Magna Park.
- 7.5.38 Though the level of growth at rural settlements would be limited, this is unlikely to have a negative effect on the vitality of these centres.
- 7.5.39 Overall, a **significant positive effect** is predicted, reflecting the focus of housing in areas of economic growth and opportunity.

Recommendations – The Plan acknowledges rural areas as being nationally significant for agriculture and food production. However, there is no explicit strategy for the rural areas. By focusing growth away from the rural areas though, the Plan does offer a degree of protection for these industries. However, additional positive effects could be generated by setting a policy framework that supports the protection, diversification and modernisation of rural businesses.

Transport and travel

- 7.5.40 The Plan seeks to direct growth towards locations that provide the greatest opportunity to access jobs, such as in Leicester City and at key employment hubs along the A5 Improvement Corridor and Leicestershire International Gateway.
- 7.5.41 This ought to help reduce the length of trips made to access employment, services, leisure and recreation. The level of growth at the market towns is broadly in-line with Local Plans, and should therefore be capable of being accommodated without substantial effects in terms of congestion. Where a higher growth opportunity is identified at Melton Mowbray, this is supported by planned infrastructure enhancements.

- 7.5.42 Given that the strategy seeks to promote large-scale new or expanded settlements, new homes should also be served by their own local facilities, and be within close proximity to higher order goods and services in the City or nearby market towns. Larger developments should also be better able to fund infrastructure improvements and incorporate green infrastructure to promote active travel.
- 7.5.43 The planned A46 expressway should help to accommodate the housing growth pattern proposed by the Plan, but it is possible that this level of growth close to the City could lead to increased car travel within Leicester itself, causing increased congestion. This presents the possibility of negative effects, but the Plan makes it clear that infrastructure improvements and public transport enhancements are critical to the success of this strategy. Consequently, it should be possible to accommodate growth without significant negative effects occurring.
- 7.5.44 Though the level of growth in the City itself would be fairly modest, development here ought to be the most accessible to services and employment by sustainable modes of travel. Though increased housing in the city centre could lead to increased car trips, it is less likely than would be the case for locations outside the city boundary.
- 7.5.45 The level of growth proposed for rural settlements is limited, which will reduce the amount of new development that is located in areas with limited accessibility. This will help to reduce the need to travel to access jobs and services.
- 7.5.46 Though the low level of growth would do little to address accessibility issues in the smaller settlements, it would ensure that new development is located in areas that are more likely to promote sustainable modes of travel.
- 7.5.47 Overall, the Plan is predicted to have mixed effects (**moderate positive** and **moderate negative effects**) on transport and travel. A large focus on new settlements along the A46 expressway, the Leicestershire International Gateway and along the A5 Improvement corridor ought to have significant benefits in terms of reducing trip lengths by placing new homes in areas of economic growth and access to new local facilities. However, this could also put pressure on routes into the City and market towns because the dominant mode of transport would likely be private car. Given that the Plan sets out the importance of securing road infrastructure improvements and public transport enhancements, the effects are considered less likely to be significant. At this stage however, these effects are uncertain.

Recommendations – Clearly investment in infrastructure will play a crucial role in the successful delivery of the strategy and minimization of negative effects. This is acknowledged in the Plan. There are no specific measures identified at this stage.

Climate change

- 7.5.48 Development within Leicester City would likely be higher density (compared to growth in peripheral areas and 'new settlements. This could assist in mitigating climate change impacts. For example, high density development increases the viability of sustainable travel modes, and

also would reduce the need to travel long distances to access employment, services, and other facilities; all of which would assist in reducing pollution and greenhouse gases.

- 7.5.49 A more densely developed area could also increase the viability and take up of district heat networks. These factors are likely to help reduce carbon emissions.
- 7.5.50 Whilst growth at the Leicester urban periphery could also have benefits in terms of reducing the need to travel, the density of development in these locations would need to be higher to ensure the character of the urban fringes was not adversely affected. The scale of growth in the City and the urban periphery combined is approximately 15,000, which should help to ensure that a proportion of future growth minimises carbon emissions.
- 7.5.51 Though increased development in the Leicester urban periphery could contribute towards an increased urban heat island effect, the scale of growth is considered unlikely to lead to significant effects, as there would be less need to consider release of open space.
- 7.5.52 The Plan directs a modest amount of growth to the market towns. As relatively accessible locations, this ought to ensure that new development is well located and reduces the need to travel (with associated emissions). However, in the longer term, development opportunities in the market towns are more likely to be distant from town centres at or beyond the urban fringes. Given that the level of growth is expected to be consistent with Local Plan targets (with the exception of additional focused growth at Melton Mowbray, the effects are likely to be similar to the baseline position (i.e. neutral effects).
- 7.5.53 In the rural settlements, access to services and facilities is broadly reliant upon longer and more frequent car travel. Therefore, lower levels of growth in rural settlements are likely to be beneficial with regards to the reduction of greenhouse gas emissions from travel. The Plan directs a modest amount of growth to the rural settlements (instead directing it towards more accessible locations), and therefore, the overall effect on emissions in the longer term ought to be positive.
- 7.5.54 By managing growth in these rural areas, it also ought to be less likely that renewable energy opportunities would be sterilised by development. For example, wind turbines and solar farms often require a more 'open' location.
- 7.5.55 Opportunities to support district energy schemes are lower in rural areas, and so a focus on higher order settlements and large new settlements ought to be more beneficial in this respect also.
- 7.5.56 A large amount of growth is directed to new/expanded settlements along the A46 corridor, and at major employment areas near the East Midlands Gateway and along the A5 Improvement Area. Broadly speaking, this places homes in close proximity to employment opportunities and a wide range of other services in Leicester City (helping to reduce the length of trips).

- 7.5.57 It is likely that car travel will continue to dominate given that the approach seeks to take advantage of the A46 expressway linkages and the A5 Improvement Corridor. However, there should be opportunities to expand sustainable modes of travel outwards into new residential areas and this is highlighted as a critical element of growth in and around the City. Whilst the positive effects of locating growth close to jobs and services may be offset slightly due to increased car usage, strategic scale new/expanded settlements provide opportunities to create communities with their own local services, to support infrastructure improvements (including sustainable travel) and to promote a higher standard of design (through the Garden City and Forest Towns concepts). This should help to ensure that carbon emissions associated with new development are reduced (but not eliminated).
- 7.5.58 In terms of low carbon energy schemes, the location of new settlements do not present strong existing opportunities for the development of heat networks to build upon. However, large scale mixed-use developments could create such opportunities themselves. These factors should be explored through Local Plans.
- 7.5.59 Overall, the Plan is predicted to have a **minor positive effect**, reflecting a potential reduction in emissions by directing growth away from rural areas and market towns, and locating a large amount of new housing in close proximity to the City and other major economic growth opportunities. The use of the private car is likely to increase, given that growth is planned around a major expressway and other vehicle based locations such as the international gateway and the A5 corridor. However, the Plan seeks to improve public transport links in these areas, and a focus on large-scale developments ought to provide good opportunities to create communities that have accessibility to new local facilities, as well as the existing services in the City and nearby market towns.

Recommendations – The Plan is mostly silent on the issue of climate change, with no strategic approach being proposed to help move towards a zero carbon economy. Given the proposed concentration of growth at a series of large scale developments (which ought to be more viable for decentralised energy schemes), the Plan could set out a commitment to achieving low carbon development and explore how separate developments can be linked together to create better opportunities for sustainable developments. Whilst Local Plans would be the more appropriate vehicle for exploring opportunities, it would be beneficial to outline the intent in the Strategic Growth Plan.

Landscape and land*Agricultural land*

- 7.5.60 The Plan area is covered by a large amount of agricultural land that could potentially be affected by development. The only area that is unlikely to be affected is within Leicester City and part of the urban periphery (where small amounts of growth are proposed).
- 7.5.61 A loss of agricultural land at the market towns and other rural settlements is probable, despite the relatively modest level of growth in these locations. However, it ought to be possible to avoid grade 1 and 2 land in most places. It is unknown whether the land likely to be lost is Grade 3a or 3b, but some minor negative effects upon soil resources are likely to occur.
- 7.5.62 A much larger amount of growth is proposed at new/expanded settlements, with the majority of land at the Leicestershire International Gateway, the A5 Improvement corridor and the A46 growth corridor classified as Grade 3. It is unknown what proportion of this is best and most versatile land (3a), but much of the land does appear to be in use for agricultural purposes. Whilst negative effects would be generated, these would not be significant in the context of the overall amount of agricultural land still remaining and the avoidance of the most sensitive areas.
- 7.5.63 Overall, the Plan is likely to have **minor negative effects** with regards to soil resources. Though there could be a fairly large amount of agricultural land affected by growth, it would be directed away from the most sensitive areas (Grade 1 and 2 land), and would not be a significant loss in the context of the resources remaining across the Plan area.
- 7.5.64 It is important to note that in the absence of the growth plan, long-term growth would still need to be secured to support population and employment growth, and it is probable that this would involve agricultural land too.

Landscape

- 7.5.65 There are landscapes along the A46 corridor that are sensitive to development, including Areas of Separation at Thurnby, Bushby and Stoughton. These areas may not be directly affected through land loss, but nearby development could alter the setting of the urban fringes of Leicester, as in some locations the 'gap' between the urban periphery and new settlements could be narrow.
- 7.5.66 Therefore, growth could potentially lead to coalescence (partially or fully) between settlements such as Thurmaston, Syston and Barkby, Oadby and Great Glen and around the settlement areas of Narborough, Blaby, Whetstone and Countesthorpe. The effects would be dependent upon site locations, layout and design, but it is likely they would alter the character of the rural area along the A46 corridor.

- 7.5.67 With regards to the A5 Improvement corridor, it will be important to ensure that the location of new strategic developments does not lead to the coalescence between existing settlement such as Stoney Stanton and Sapcote, Hinckley and Barwell.
- 7.5.68 Effects on landscape at the Leicestershire International Gateway are also likely to be negative, as new settlements would likely be in rural / open areas. With HS2 already passing through this area, substantial housing growth has potential to further erode the rural nature of this area. The final Plan proposes increased growth in this location compared to the draft Plan, which could lead to a greater magnitude of effects. However, the significance of effects is likely to remain broadly the same.
- 7.5.69 At all the new settlements, there should be good opportunities for green infrastructure to form a key element of the developments (as identified as a critical feature of the Plan approach). This would help to mitigate negative effects on landscape to an extent. A new feature of the Plan is to explore the potential to secure 'Forest Towns', which is likely to help shape development in North West Leicestershire and Charnwood in particular which are home to the National Forest and Charnwood Forest. This could help to secure strategic improvements to green infrastructure networks if developments are planned with the environment at their heart. At this stage, there is considerable uncertainty as to whether this would occur and these issues should be explored in future Local Plans.
- 7.5.70 At other locations within the Plan area, the effects on landscape ought to be less prominent given that the level of development would be lower. For example, pressure on the market towns would be reduced in the longer term, and could help to avoid the need to encroach upon sensitive areas such as Charnwood Forest, and areas of separation between the towns and surrounding settlements (such as Market Harborough and Great Bowden, Coalville and Whitwick, Loughborough and Quorn etc..). Nevertheless, negative effects are still anticipated because the sites available in the long-term are more likely to be greenfield locations at or beyond the urban fringe. Given the likely location of development on large greenfield sites, there ought to be good opportunities to incorporate green infrastructure as a key element. This would help to mitigate effects upon landscape and in some areas potentially lead to enhancements.
- 7.5.71 Growth in the City should have a positive effect by drawing development away from the more rural areas within the Plan area. Intensification in the City and maximisation of brownfield land use could also be positive.
- 7.5.72 Overall, the Plan is predicted to have a **moderate negative effect** on landscape and land. Whilst there is potential for significant effects at new settlements along the A46 corridor and other growth areas, a focus on the Garden City concept ought to help mitigate these. The Plan should also avoid significant negative effects on more sensitive locations such as around rural settlements and the market towns.

Cultural Heritage

- 7.5.73 Development has the potential to impact the cultural heritage of Leicester city due to the strong historic value the city holds. At the level of growth proposed however, it ought to be easier to avoid greenfield sites (which contribute to character in the urban area) and design appropriate schemes. Nevertheless, the potential for negative effects still remains and so minor negative effects are predicted.

- 7.5.74 Conversely, by focusing development within the built-up urban areas, this could help to maintain the character and landscape of the more rural locations around the City boundary.
- 7.5.75 Development within the City also has the potential to enhance the fabric, function and setting of historic assets by being sympathetic in design and particular in where the development involves derelict land or vacant buildings, therefore a minor positive effect is predicted also.
- 7.5.76 Growth at the urban periphery will be limited, and is therefore unlikely to have a significant effect on cultural heritage (though this is dependent upon precise development locations).
- 7.5.77 Development at the urban fringes of the market towns could be accommodated without generating significant effects upon cultural heritage. The majority of heritage assets are concentrated in the urban centres of the market towns, and whilst there are some assets at the urban fringe such as agricultural buildings, it ought to be possible to avoid the most sensitive sites. However, the focus on large scale developments would mean that growth that did occur in close proximity to heritage assets would be likely to affect their rural/open setting. At this stage an uncertain negative effect is predicted, though these would be anticipated to be minor. The effects at Melton Mowbray could potentially be greater given that this is identified as a key centre for regeneration and growth. Development opportunities are likely to the north and east of the town, and potentially to the south. Development here is likely to be on farmland and in some locations this could coincide with listed heritage assets. The potential for negative effects cannot be ruled out at this stage and would need to be addressed through future local plans/reviews.
- 7.5.78 The rural settlements are broadly more sensitive to development as it would be likely to alter their scale and character more profoundly. A controlled approach to growth in these areas is therefore more likely to avoid significant negative effects upon the historic environment. Though there may be some negative effects at particular settlements due to housing development, this could occur in the absence of the growth strategy (which actually directs growth away from rural areas). Therefore, the effects are predicted to be broadly neutral / potentially positive.
- 7.5.79 The Plan focuses substantial growth along the A46 corridor area which encompasses a number of rural settlements. These settlements all contain a number of listed heritage assets, and there are some isolated heritage assets in the rural areas between these settlements and the Leicester urban fringes. The effects of new settlements on the character of existing villages and hamlets are uncertain, as specific sites or settlement areas are not identified. However, there is certainly potential for growth to affect the setting of heritage assets, especially where these are reliant upon an open, rural setting. This is more likely to be the case where the gap between the urban fringes and nearby settings is narrowed.

- 7.5.80 There ought to be enough flexibility in site choices and in the layout of developments to avoid sensitive areas, and to mitigate potential effects on heritage assets and to ensure that the cumulative effects of growth are not major. The focus on a Garden City concept could also help to ensure that large scale development is well-integrated with existing settlements.
- 7.5.81 Along the A5 Improvement Corridor there are various small settlements that are characterised by historic (listed) farmhouses, inns, cottages and churches. Large new developments in these areas could potentially affect the setting of such heritage assets, reduce tranquility and alter the rural character of the settlements. Growth close to larger centres such as Hinckley would be less likely to alter the overall form and character of the town, but could have localised impacts on heritage features depending upon site location.
- 7.5.82 On balance, the Plan is predicted to have both **positive** and **negative** effects on heritage. On one hand, development at new / expanded settlements could potentially affect the setting of heritage assets in the countryside and / or affect the character of small settlements along the A46 corridor, the A5 improvement corridor and the Leicestershire International Gateway. There could also be minor negative effects in the City associated with a loss of open space. However, growth in the City also presents opportunities to enhance heritage assets that are currently in poor condition. The avoidance of negative effects across much of the Plan area is also a positive factor, as would be regeneration based development in areas such as Coalville and Melton. Significant negative effects cannot be entirely ruled out at this stage due to the high level nature of the plan, but the broad location of growth areas should allow for sensitive assets to be avoided and / or mitigation measures employed. It is critical that these issues are addressed in Local Plans though, and this should include consideration of cross boundary issues.

Recommendations – No measures have been identified at this stage. Potential negative effects upon cultural heritage ought to be possible to mitigate through Local Plan policies relating to the historic environment and design. The selection of sites for development will also need to take account of heritage considerations, and it is expected that this would be explored as part of the Local Plan making process for each Local Authority. Significant negative effects should therefore be possible to avoid, but there is a degree of uncertainty at this stage.

Water

- 7.5.83 Growth within Leicester City and the urban periphery is relatively modest, and is therefore unlikely to put undue pressure upon water treatment and drainage infrastructure. Given the long term nature of the strategy it also ought to be possible to plan for increases in population well in advance.

- 7.5.84 Though there may be some sites within flood zones 2 and 3, application of a sequential approach ought to ensure that such areas are avoided if possible. Given the fairly low scale of growth in the City and the urban periphery overall, there ought to be flexibility in site choice to allow for this.
- 7.5.85 There is also the potential for higher rates of surface water run-off overall in the City if more land is hard-surfaced. However, brownfield sites could actually provide opportunities to improve rates of run off by introducing SUDs. The use of sustainable drainage systems should also help to manage some of the effects of flooding; though in the City, there would be less space for natural drainage systems. Overall, the effects on wastewater and flood risk in the City would be largely neutral.
- 7.5.86 Growth at the market towns will be broadly in-line with Local Plan targets, so it is likely that water infrastructure will be capable of supporting new developments in the longer term. Whilst there are areas of flood risk at each settlement, it ought to be possible to avoid these in the main as there is flexibility in site choice given the relatively modest levels of growth. The majority of development in these areas would also be likely to be on large greenfield sites that should be able to accommodate SUDs.
- 7.5.87 With regards to water quality much of the land available for development consists of farmland, so it is possible that pollution (e.g. nitrates) resulting from existing farming activities would be reduced through a change in land use. On balance a neutral effect is predicted overall with regards to water quality and flood risk at the market towns.
- 7.5.88 At the rural settlements, flood risk varies, but the majority of villages and hamlets are not at significant risk of surface water flooding. Therefore, overall, it ought to be possible to avoid significant effects associated with flooding in most locations, especially at the low levels of growth proposed. Development for housing on agricultural land could also help to reduce pollution from agricultural practices. Increased pressure on water supply/waste water treatment could be likely, and it may be more difficult to achieve efficient upgrades to infrastructure with a more dispersed pattern of growth. However, the small amount of development planned is unlikely to generate significant effects.
- 7.5.89 With regards to new / expanded settlements, the Plan directs growth to areas that are mostly within flood zone 1 along the A46 corridor and the A5 Improvement Corridor. However, the Leicestershire International Gateway contains areas that are at a higher risk of fluvial flooding. Whilst there may be pockets of surface water flooding to contend with, the strategic nature of sites that are likely to be developed ought to allow for green infrastructure/SUDs enhancements. Therefore, effects on flood risk are not anticipated to be major. However, the increase in development would lead to greater pressure on supply and treatment networks as well as generating pathways for pollution to reach watercourses. These effects ought to be possible to mitigate though, but infrastructure planning will be critical.
- 7.5.90 A change in use from agricultural land at most sites could also contribute to a reduction in the run-off of nitrates, which could be a benefit for water quality. On balance, the overall effects are predicted to be minor negative at this stage. With good design and planning however, it is likely these effects could be neutralised.

- 7.5.91 Overall, the Plan is predicted to have a **minor negative effect**. This reflects the potential for some development to be in areas at risk of flooding and an increase in the demands on water treatment and drainage infrastructure.

Recommendations – No measures have been identified at this stage. The application of SUDs and forward infrastructure planning ought to mitigate potential minor negative effects.

Minerals

- 7.5.92 Growth in any location across the Plan area has the potential to fall within Minerals Safeguarding Areas (MSAs) because they are fairly extensive across Leicestershire. A range of minerals could be affected, though the prominent resources that could be affected would be sand and gravel.
- 7.5.93 The distribution of growth ought to allow for overlap with potential mineral resources to be minimised. The amount of growth along river valleys is modest, and therefore overlaps with reserves of sand and gravel in these locations are likely to be manageable. Furthermore, some site locations for growth may not be suitable for minerals workings despite being highlighted as safeguarded areas.
- 7.5.94 At the market towns and rural settlements, effects are predicted to be neutral. There is flexibility in site choice, and it is also not considered likely that mineral working would be deemed suitable immediately adjacent to the urban fringe where most development opportunities are located.
- 7.5.95 The majority of growth is focused along the A46 Corridor, which overlaps in some areas with potential sand and gravel resources. The A5 improvement area also overlaps with areas of sand and gravel and clay resources. The Leicestershire International Gateway broad area also overlaps with areas of sand and gravel in parts (to the north of Castle Donington for example).
- 7.5.96 In the main, the areas of overlap correspond with flood plains in locations that are unlikely to be promoted for housing development. It is also considered likely that existing minerals working sites would be expanded if possible, rather than seeking to deliver entirely new sites. The Leicester and Leicestershire Minerals and Waste Plan mostly focuses on expansion to existing sites (for the majority of mineral types including sand and gravel), though it is acknowledged that this does not cover the period 2031-2050 (meaning that new locations may need to be explored). Consequently, the potential sterilisation of minerals ought to be minimised through the proposed Plan approach.
- 7.5.97 Overall, an **uncertain negative effect** is predicted. Though the distribution of growth ought to allow for viable mineral resources to be avoided, there is potential for overlap with reserves, particularly where there is a focus of growth to the A46 corridor and the A5 Improvement Corridor.

7.5.98 Given that there may be a need for additional resources to be worked in the period 2031-2050, it is possible that potential development opportunities could overlap with mineral resources (mostly sand and gravel). It should however, be noted that minerals resources could be extracted prior to development anyway, which would mitigate the effects somewhat. Therefore, effects would not be anticipated to be significant.

Recommendations – No recommendations are made. It is considered appropriate for Local Plan’s to deal with the potential effects on mineral resources through consideration of specific development opportunities and the development of protective policies.

7.6 Mitigation and enhancement

7.6.1 Where appropriate, recommendations were made as part of the appraisal of the draft Plan. These are summarised below, along with a response from the Strategic Planning Group to demonstrate how the recommendations have been taken into consideration.

7.6.2 A key principle is that the scope of the Strategic Growth Plan was to focus on the spatial distribution of development and infrastructure requirements, rather than the form of development. Therefore, it is expected that more detailed work would be deferred to later stages (i.e. through Local Plans and other strategic plans). There is also an assumption that measures can be addressed through the garden cities agenda, which is a key principle expected to be reflected in future detailed Plans.

Table 7.2: Summary of recommendations

SA Recommendations	Strategic Planning Group response
<p>It would be beneficial for a green infrastructure strategy to be developed to identify how links between the City and the A46 corridor could be strengthened, ensuring that wildlife habitats are better connected. The Plan could commit to the preparation of a joint strategy to enable such opportunities to be explored and taken advantage of.</p>	<p>A Landscape and Green Infrastructure Study informed thinking on the draft and revised versions of the Plan. This work will be taken forward in more detail as decisions are made, in Local Plans, on potential development sites.</p>

SA Recommendations	Strategic Planning Group response
<p>In order to mitigate potential negative effects in terms of increased congestion and effects on air quality from vehicles, it would be beneficial to highlight a commitment to establishing the infrastructure to support electric vehicles. This would set a clear steer for Local Authorities to promote such infrastructure at strategic sites in particular. It would also be beneficial to ensure that strategic sites are well-served with public transport connections and cycling and walking routes into urban areas.</p>	<p>The two highway authorities (Leicester City Council and Leicestershire County Council) are preparing a Strategic Transport Plan to provide an overall context for Local Transport Plans, statutory Local Plans and other strategies. This will consider the merits of a wide range of green transport measures including public transport, electric vehicles and other green transport measures and the infrastructure that is needed to support them.</p>
<p>The Plan acknowledges rural areas as being nationally significant for agriculture and food production. However, there is no explicit strategy for the rural areas. By focusing growth away from the rural areas though, the Plan does offer a degree of protection for these industries. However, additional positive effects could be generated by setting a policy framework that supports the protection, diversification and modernisation of rural businesses.</p>	<p>The future of rural areas will be addressed in Local Plans. There is a need to balance the need for agriculture and food production with the diversification of local economies.</p>
<p>The Plan is mostly silent on the issue of climate change, with no strategic approach being proposed to help move towards a zero carbon economy. Given the proposed concentration of growth at a series of large scale developments (which ought to be more viable for decentralised energy schemes), the Plan could set out a commitment to achieving low carbon development and explore how separate developments can be linked together to create better opportunities for sustainable developments. Whilst Local Plans would be the more appropriate vehicle for exploring opportunities, it would be beneficial to outline the intent in the Strategic Growth Plan.</p>	<p>Climate change is recognised as an important consideration in the context of sustainability. The scope of work for the Strategic Growth Plan, however, has been clearly articulated since the outset i.e. to focus on housing, employment, infrastructure and environmental protection. Climate change is a matter that is being addressed in Local Plans/Local Plan reviews and in the context of site specific development proposals.</p>

7.7 Monitoring of significant effects

7.7.1 At this stage there is a requirement to outline the measures envisaged to monitor the predicted effects of the Plan. In particular, there is a need to focus on the significant effects that are identified. It is important to track predicted effects to ensure that positive effects are actually being realised and to identify any unforeseen negative effects that may occur.

7.7.2 Table 7.3 below sets out monitoring measures under each SA topic which are intended to monitor any significant effects as well as tracking the baseline position more generally. At this stage the monitoring measures have not been finalised. This occurs once the Plan is approved, when an SA Statement needs to be prepared that explains how the SA has influenced the Plan's development.

Table 7.3: Proposed monitoring measures

SA Topic	Potential monitoring measures
<p>Biodiversity</p> <p>Uncertain negative effects are predicted overall relating to the potential for localised effects on habitats and species as a result of large scale development. However, these effects are not predicted to be significant given the avoidance of the most sensitive areas and the focus on a Garden City concept.</p>	<ul style="list-style-type: none"> • Net loss/gain in designated habitats (ha). • Ecological enhancement schemes delivered at strategic sites. • Ecological water quality. • Establishment of a green infrastructure strategy.
<p>Health and wellbeing</p> <p>A significant positive effect is predicted for health and wellbeing due to the potential to improve access to health services, community facilities and affordable housing.</p> <p>Minor negative effects are identified with regards to a loss of open space and potential increase in air quality issues in the City.</p>	<ul style="list-style-type: none"> • Net change in open space provision. • Number of new health care facilities delivered. • Access to local green space. • Change in levels of deprivation in the top 20% areas. • Achievement of air quality objectives
<p>Housing</p> <p>A significant positive effect is predicted overall for housing. This reflects the support for affordable and market housing in areas of need that are well located to employment opportunities.</p>	<ul style="list-style-type: none"> • Rates of housing delivery. • Percentage of affordable housing delivered. • Availability of land for strategic development opportunities in the key locations.

SA Topic	Potential monitoring measures
<p>Economy and employment</p> <p>Significant positive effects are predicted for the economy and employment as the strategy seeks to help deliver and take advantage of infrastructure and economic growth opportunities. Housing growth is focused to areas that have good access to jobs, and ought to support increased local spending, provide jobs in construction, and provide accommodation for a growing workforce.</p>	<ul style="list-style-type: none"> • Gross Added Value Leicester and Leicestershire. • Unemployment rate. • Retention of working age population. • Changes in the levels of deprivation. • Change in numbers of people employed by sector
<p>Transport and travel</p> <p>The Plan is predicted to have mixed effects on transport and travel. The close proximity of new homes to employment opportunities ought to reduce the length of travel. The focus on new settlements should also ensure that new communities have good access to local facilities and services. A significant positive effect is predicted in this respect.</p> <p>However, substantial growth around the City and along the transport corridors could put additional pressure on orbital routes and in and out of the Leicester and market towns such as Hinckley. This could have moderate negative effects in terms of congestion.</p>	<ul style="list-style-type: none"> • Number and proportion of homes within walking distance of key public services, recreational opportunities and public transport services. • New / expanded public transport services secured through strategic development. • Average annual traffic flows. • Average trip length to access employment.
<p>Climate change</p> <p>The Plan is predicted to have a minor positive effect overall, reflecting a potential reduction in emissions from transport by directing the majority of growth to areas with good accessibility.</p>	<ul style="list-style-type: none"> • Change in the amount of carbon emissions generated from transport (per capita).

SA Topic	Potential monitoring measures
<p>Landscape and land</p> <p>The Plan is likely to have minor negative effects with due to the likely loss of best and most versatile agricultural land.</p> <p>With regards to landscape character, a moderate negative effect is predicted overall, though more significant effects could occur along the A46 corridor depending upon the location and layout/design of development.</p>	<ul style="list-style-type: none"> • Amount of best and most versatile agricultural land lost to development by grade. • Number of allotments established at strategic development sites. • Landscape character assessments undertaken to identify sensitive parcels of land at key growth areas.
<p>Cultural heritage</p> <p>The Plan is predicted to have both minor positive effects and minor negative effects on heritage.</p> <p>There is the potential for the character of settlements to be affected by large scale development and a loss of open space.</p> <p>Development in Leicester City in particular presents opportunities to enhance heritage assets that are currently in poor condition. The avoidance of negative effects across much of the Plan area is also a positive factor.</p>	<ul style="list-style-type: none"> • Loss of or change in the significance of designated heritage assets. • Townscape and landscape character assessments completed. • Amount of derelict land restored (ha). • Heritage assets removed or added from the 'at risk' register. • Net loss/gain of open space in Leicester City.
<p>Water</p> <p>The draft Plan is predicted to have a minor negative effect overall, reflecting the potential for some development to be in areas at risk of flooding and an increase in the demands on water treatment infrastructure.</p>	<ul style="list-style-type: none"> • Percentage of new development within flood zones 2 and 3. • SUDs schemes incorporated into new developments.
<p>Minerals</p> <p>An uncertain negative effect is predicted as it is possible that new development in the areas identified for growth could overlap with Minerals Safeguarded Areas (particularly for sand and gravel).</p>	<ul style="list-style-type: none"> • Amount of development within Minerals Safeguarding Areas (ha). • Potential sterilisation of minerals at strategic development sites.

7.8 Cumulative effects

- 7.8.1 Cumulative effects have been considered in two different ways. In the first instance, the cumulative effects of the Plan have been considered ‘internally’. This means that the effects of all elements of the Plan have been considered ‘in-combination’ to identify what the overall implications are for each sustainability topic. These cumulative effects are discussed in Section 5 for the alternatives and Section 7 for Plan considered ‘as a whole’.
- 7.8.2 The effects of the Plan in-combination with other key plans, programmes and projects can be described as the ‘external’ cumulative effects. These issues are already identified to an extent by setting out the projected future baseline (within the Scoping Report) that the Plan is appraised against. Given that the projected baseline takes account of the key plans, programmes and projects that could affect future trends, these ‘external’ factors have already been broadly considered. However, for additional clarity, we have presented the most important policies, plans and programmes that could work alongside the Strategic Growth Plan to generate synergistic / cumulative effects.
- 7.8.3 Given that the Strategic Growth Plan is focused on the longer term (2031-2050), the number of relevant plans and projects is limited.

Table 7.4: Cumulative effects of the Plan alongside long term plans, programmes and projects

Plan, programme, project	Cumulative / synergistic effects
<p>Midlands Connect Transport Strategy (2017) – This document sets out the region’s vision to become an engine for growth through investment in transport infrastructure. It is a long term strategy, seeking to support businesses in the next 25 years and to lay the foundations for future growth beyond 2030. In this respect, the Strategy is particularly important in setting the context for employment and housing growth.</p>	<p>A range of infrastructure schemes are likely to be delivered as part of the Midlands Connect Strategy including the A46 expressway, HS2, and Melton Mowbray Eastern Link Road. These would all involve physical infrastructure cutting across areas of open countryside. These schemes could therefore alter the character of landscapes, lead to a loss of agricultural land and potentially cut across ecological networks. Consequently, this changes the baseline position within which the growth associated with the Strategic Growth Plan would occur.</p> <p>It is possible that further growth (i.e. housing development) along these transport corridors could further degrade the character of landscapes and the function of open space for biodiversity. The combination of effects from infrastructure schemes and strategic housing growth could therefore be more prominent when considered side-by-side. This has been taken into consideration in the appraisal of the Plan, and it is considered that significant effects on landscape and biodiversity should still be possible to avoid provided that; green infrastructure enhancement is a key principle of development, and; that Local Plans identify the most appropriate locations for strategic development based upon an assessment of sustainability implications.</p> <p>Conversely, the implementation of infrastructure schemes ought to have positive in-combination effects upon the economy, transport and travel, and climate change. The growth Plan is predicated on infrastructure improvements, and this is taken into account when identifying the positive effects of the Plan with regards to the</p>

	economy, transportation and climate change.
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8 Next Steps

- 8.1.1 The Leicester and Leicestershire Strategic Planning Group have prepared a final plan that sets out the broad scale and distribution of development in the long term for Leicester and Leicestershire. The Plan also contains a number of key principles to guide growth.
- 8.1.2 The SA Report has been prepared to document the SA process that has been undertaken to inform the Plan. This has involved an assessment of reasonable alternatives to a draft Plan which was consulted upon in February – March 2018.
- 8.1.3 Further consideration of options was undertaken in response to consultation feedback, which suggested there were alternative approaches that ought to be tested. Once the Plan was finalised, the appraisal was also updated to take account of minor changes to the strategy and supporting principles.
- 8.1.4 Now that the Plan has been finalised, the Strategic Planning Group hopes to adopt the Strategic Growth Plan by early 2019.
- 8.1.5 Once approved an SA Statement will be prepared to discuss; the SA process, how it has influenced the plans development, and the measures that will be employed to monitor significant effects.

APPENDIX A: THE SCOPING REPORT

Leicester and Leicestershire Strategic Growth Plan

Sustainability Appraisal

SA Report

Non-Technical Summary

September 2018



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Introduction

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1 INTRODUCTION

1.1 Background

- 1.1.1 AECOM is commissioned by the Leicester and Leicestershire Strategic Planning Group to undertake Sustainability Appraisal (SA) in support of the Leicester and Leicestershire Strategic Growth Plan. SA is a mechanism for considering and communicating the likely significant effects of a draft plan, and alternatives, in terms of sustainability issues, with a view to avoiding and mitigating adverse effects and maximising the positives.
- 1.1.2 SA is not a legal requirement for a non-statutory document such as the Strategic Growth Plan. However, a Strategic Environmental Assessment is required given the scope of the Plan. The Strategic Planning Group consider that it is beneficial to widen the scope of the SEA to include social and economic factors. Therefore, a full SA is being prepared which incorporates the requirements of an SEA.
- 1.1.3 This document is a Non-Technical Summary of the main SA Report which appraises the implications of the Strategic Growth Plan, as well as documenting the SA process and outputs from previous stages of the plan-making process.
- 1.1.4 SA is a process for helping to ensure that Plans achieve an appropriate balance between environmental, economic and social objectives. SA should help to identify the sustainability implications of different plan approaches and recommend ways to reduce any negative effects and to increase the positive outcomes.
- 1.1.5 The Plan, once adopted, will provide a spatial strategy to help the Local Authorities within the Leicester and Leicestershire area to plan for new housing and employment needs across the housing market area.

1.2 Outline of the Plan

- 1.2.1 A Strategic Growth Plan has been established which sets out a spatial approach to the delivery of development in the long term (2031-2050). The key elements of the Plan are described below, with the strategic locations for growth illustrated on figure 1, which is reproduced from the final Plan document.
- 1.2.2 Before the plan was finalised, a draft version was prepared and consulted upon to seek feedback from stakeholders. An appraisal of the draft Plan was undertaken as required by the SEA Regulations. The comments made about the draft Strategic Growth Plan were taken into account and then the plan was revised.
- 1.2.3 The Plan is focused on making the most out of future infrastructure improvements and key centres of economic growth opportunities. New housing (approximately 90,500 dwellings) is to be focused to the following locations, supported by the notion of large scale development with Garden Village principles.

Primary Growth Areas

- The A46 Corridor and Leicester City are critical areas for growth (highlighted orange on Figure 1).

Secondary growth areas

- The Leicestershire International Gateway (highlighted purple on figure 1) is a key growth area that will support approximately 11,000 dwellings close to significant employment opportunities.
- The A5 improvement corridor is an opportunity to support existing growth from the west at Tamworth through south west alongside Hinckley and Lutterworth. It will help to unlock further growth opportunities as well in these locations.

Key Centre for regeneration

- Growth will be supported at Melton Mowbray to help support new infrastructure, services and economic growth and regeneration.

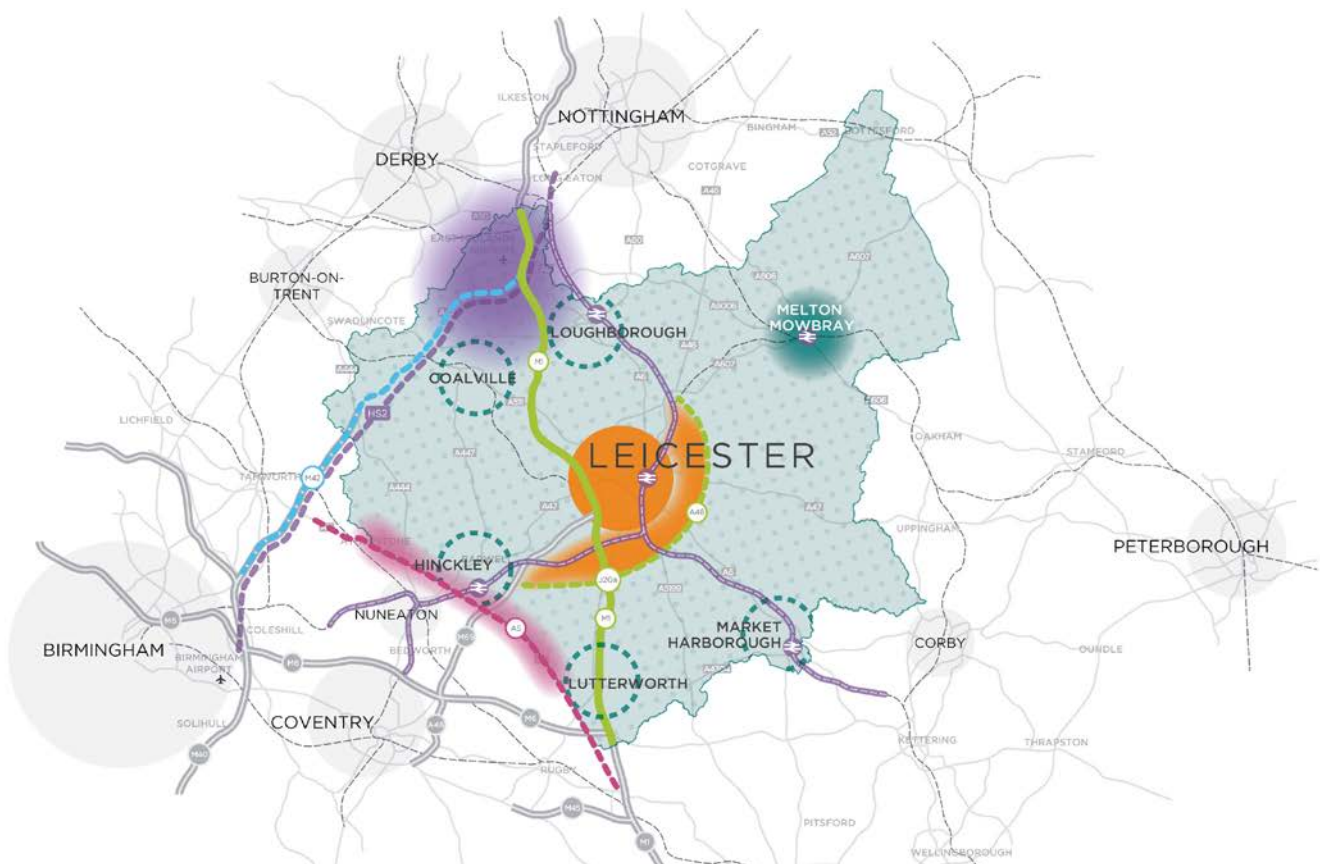
Areas of managed growth

- Development at Coalville, Loughborough, Hinckley and Market Harborough will be consistent with the need to support local growth.

Villages and rural areas

- There will be limited growth in these areas, consistent with providing for local needs.

Figure 1: The draft Spatial Strategy



Three thin black lines intersect to form a large, irregular shape in the upper left quadrant of the page. One line is nearly horizontal, while the other two are diagonal, crossing each other and the horizontal line.

Scoping

02

2 SCOPING

2.1 Background

2.1.1 The scoping stage of sustainability appraisal involves the collation of evidence relating to the baseline position and policy context - culminating in a series of key issues that should be a focus for the SA and which helped to establish a sustainability framework. These key issues are summarised below; with the corresponding sustainability objectives identified (which form part of the SA framework).

2.2 Key issues

2.2.1 **Table 1** below sets out the Sustainability topics that were identified within the scoping report, the associated key issues, and the corresponding sustainability objectives. Where a decision was made that topics could be 'scoped out' of the SA, no SA objectives were developed.

Table 1: Key issues and the SA Objectives

Key issues	SA Objective
<p>Biodiversity and geodiversity</p> <p>The County has a relatively low level of designated biodiversity sites. However, these are in a mostly favourable or recovering position. Opportunities to strengthen ecological networks should therefore be taken advantage of.</p> <p>The quality of water could affect a range of biodiversity habitats and species across the County, making strategic river networks an important feature to protect, maintain and enhance.</p>	<p>1. Create new, protect, maintain and enhance habitats, species and ecological networks.</p>
<p>Health and wellbeing</p> <p>The population is ageing, with impacts for the delivery of health services.</p> <p>Also key issue due to rising ageing population is provision of sufficient and appropriate housing within the HMA / districts.</p>	<p>2. Maintain and improve levels of health, whilst reducing health inequalities</p>
<p>Housing</p> <p>There is a need to meet needs for housing as identified in the HEDNA (2017). In some districts it may be difficult to meet full needs 'locally' (i.e. within the district it arises). This could necessitate housing needs for some districts being met in other parts of the HMA.</p> <p>Housing affordability is an issues across the HMA. There is an increasing need to provide housing suitable for an ageing population.</p>	<p>3. Secure the delivery of high quality, market and affordable homes, to meet projected housing requirements.</p>

Key issues	SA Objective
<p>Employment and economy</p> <p>The County is well positioned for growth in the strategic distribution sector; though there is a need to identify the appropriate distribution of growth opportunities. Unemployment rates are falling across the HMA, though remain the highest within the city.</p>	<p>4. Support the continued growth and diversification of the economy.</p>
<p>Transport and travel</p> <p>Accessibility to services, facilities and jobs is poor in rural areas.</p> <p>Access to strategic employment sites by public transport is not ideal.</p> <p>There may be constraints to the amount of development that can be accommodated on the edge or near the Leicester urban area in light of congestion along parts of the orbital road network.</p>	<p>5. Improve accessibility to services, jobs and facilities by reducing the need to travel, promoting sustainable modes of transport and securing strategic infrastructure improvements.</p>
<p>Though generally good, air pollution presents an issue in some parts of the County, typically within areas that suffer from higher levels of traffic and congestion.</p>	<p>6. Minimise exposure to poor air quality, whilst managing contributing sources.</p>
<p>Climate change</p> <p>There are opportunities to increase the amount of low carbon and renewable sources of energy above the relatively low baseline position</p>	<p>7. Contribute to a reduction in greenhouse gas emissions and an increase in the use of low carbon energy.</p>
<p>Landscape and land</p> <p>There are parcels of high quality agricultural land throughout the district that should be protected given the relatively low amount of Grade 1 and 2 land present.</p> <p>No nationally designated landscapes are present. But there are a variety of important landscapes which are important to the character of the countryside, preventing urban sprawl and supporting the natural environment. Whilst these are in relatively good condition, there are increasing pressures for from development that need to be managed.</p>	<p>8. Protect, maintain and enhance landscapes whilst promoting their value to sustainable growth.</p> <p>9. Protect high quality agricultural land from permanent development.</p>

Key issues	SA Objective
<p>Cultural heritage</p> <p>There is a wealth and variety of heritage features, many of which are designated for their heritage value. It will be important to protect the condition and setting of these assets. There may be cross border heritage assets.</p> <p>Though the number of 'at risk heritage assets has decreased slightly from 2015-2017, the majority of heritage assets that remain on the 'at risk' register are declining in condition.</p>	<p>10. Conserve and enhance the historic environment, heritage assets and their settings.</p>
<p>Water</p> <p>The quality of many water resources across the County is in need of improvement, yet could come under increased pressure from new development. SUDs should be encouraged to support the natural and sustainable management of water resources.</p> <p>There are areas across the County that are sensitive to and at risk of flooding (which could be exacerbated by climate change). There is a need to ensure that future development does not put more people at risk of flooding whilst ensuring that overall levels of flooding do not increase. This could/should constrain development in some areas, such as the flood plains of the River Soar and watercourses leading to and through Leicester City.</p>	<p>11. Steer development away from the areas at the greatest risk of flooding, whilst supporting schemes that reduce the risk and impacts of flooding.</p> <p>12. Protect, maintain and enhance the quality of water resources.</p>
<p>Waste and minerals</p> <p>Levels of recycling, reuse and composting are relatively high, and rates continue to improve. There has also been a general decrease in the amount of waste per capita.</p> <p>Growth in housing and employment is likely to generate more waste in terms of the overall volume. However, improved efficiency and continued drives to reduce the amount of waste sent to landfill should help to reduce the amount of waste generated per capita.</p> <p>There are mineral resources across the County, some of which could be sterilised by development. It is important to protect such reserves from sterilisation.</p>	<p>Waste – Scoped out. The trends are generally positive, and the planning for growth ought to be managed through the Leicester and Leicestershire Waste Plans.</p> <p>13. Protect mineral resources from sterilisation, and support their sustainable extraction.</p>

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Alternatives

03

3 ALTERNATIVES

3.1 Introduction

- 3.1.1 Stage 2 of the SA/SEA process involves identification and assessment of 'reasonable alternatives'. This means comparing different approaches that could be taken to achieve the objectives of the Plan; which in this case relates to whether there are different options for delivering housing growth from 2031-2050.

3.2 Identifying alternatives

- 3.2.1 The Leicester and Leicestershire Strategic Planning Group explored several alternatives to the amount and distribution of growth. These are discussed below:

Amount of growth

- 3.2.2 Two levels of growth have been tested in the SA. The first is based on a projection of housing needs for the period 2011-2036. This would equate to an approximate notional requirement for new homes over the period 2031-2050 of 90,500 homes.
- 3.2.3 A higher target (20% more than notional projected housing requirements) has also been tested to account for greater flexibility in achieving housing delivery and to support greater economic growth aspirations.
- 3.2.4 A lower level of growth than notional projected housing requirements is considered to be an unreasonable alternative. While there are constraints within and across Leicester and Leicestershire, these are not of such scale and importance, either individually or collectively, to prevent notional housing requirements being accommodated in a sustainable way.

The distribution of development

- 3.2.5 The Strategic Planning Group established a range of options for the distribution of housing and employment. This work has been influenced by a range of factors including emerging evidence on growth opportunities, progress on individual authorities' Local Plans to 2031 or 2036, and options explored and tested as part of the Local Plan processes.
- 3.2.6 Six reasonable alternatives were established setting out the amount of growth that would be distributed to key locations across the HMA. Each of the reasonable alternatives involve differing levels of housing growth in each area to represent a greater or lesser focus on each of the broad strategies.

Option 1: Focus on the Leicester Urban Area - Emphasise development in and immediately around the built framework of Leicester, with growth elsewhere constrained.

Option 2: A greater focus on Market Towns - Emphasise development in and immediately around the market towns of Coalville, Hinckley, Loughborough, Market Harborough and Melton Mowbray, with growth elsewhere constrained.

Option 3: Employment / Infrastructure led - Emphasise development in the vicinity of known economic growth areas and associated infrastructure investment, with growth elsewhere constrained.

Option 4: New / Expanded settlements - Emphasise the option of growth being accommodated via new and expanded settlements, with constraints on growth in other key settlements and the urban area of Leicester.

Option 5: Dispersed growth

Option 6: Continuation of established trends

Combining growth and distribution Options

- 3.2.7 In order to give the appraisal greater context and meaning, the two housing growth scenarios were combined with each of the six spatial options. This allowed for a broad understanding of effects to be identified for each of the spatial options, and how these effects would differ should the level of growth be higher or lower.
- 3.2.8 This combination resulted in twelve discrete options that have been tested in the SA.
- 3.2.9 As outlined in tables 2 and 3, each of the options involve different amounts of growth in the City, Leicester Urban Periphery, Market Towns, 'other settlements' and at new/expanded settlements.

Table 2: Six reasonable alternatives at the notional projected housing requirement growth scenario (90,500 dwellings)

	1a.PUA focus	2a.Market Towns focus	3a.Employment/ infrastructure led	4a.New/expanded settlements focus	5a.Dispersal	6a.Trend
City	20% 18,100	10% 9,050	10% 9,050	10% 9,050	10% 9,050	25% 22,625
Leicester Urban periphery	40% 36,200	15% 13,575	30% 27,150	15% 13,575	20% 18,100	25% 22,625
Market towns	20% 18,100	60% 54,300	45% 40,725	15% 13,575	30% 27,150	30% 27,150
Other settlements	20% 18,100	15% 13,575	15% 13,575	10% 9,050	40% 36,200	20% 18,100
New/expanded settlements	0%	0%	0%	50% 45,250	0%	0%

Table 3: Six reasonable alternatives at the higher growth scenario for flexibility (108,600)

	1b.PUA focus	2b.Market Towns focus	3b.Employment/ infrastructure led	4b.New/expanded settlements focus	5b.Dispersal	6b.Trend
<i>City</i>	20% 21,720	10% 10,860	10% 10,860	10% 10,860	10% 10,860	25% 22,625
<i>Urban periphery</i>	40% 43,440	15% 16,290	30% 32,580	15% 16,290	20% 21,720	25% 27,150
<i>Market towns</i>	20% 21,720	60% 65,160	45% 48,870	15% 16,290	30% 32,580	30% 32,580
<i>Other settlements</i>	20% 21,720	15% 16,290	15% 16,290	10% 10,860	40% 43,440	20% 21,720
<i>New/expanded settlements</i>	0%	0%	0%	50% 54,300	0%	0%

3.3 Hybrid option

3.3.1 Following the appraisal of the twelve reasonable alternatives, the Council developed a hybrid option, which took different elements of some of the approaches tested. The hybrid option was appraised alongside the original alternatives to allow for a comparison of the preferred strategy with these options.

3.3.2 The Hybrid Option formed the basis of the draft Plan strategy and distributes housing as follows:

- Leicester City – 10, 450 dwellings
- Urban periphery – 4,500 dwellings
- Market Towns – 18,100 dwellings
- Other Settlements – 9,050 dwellings
- New/expanded settlements – 48,000 dwellings (A46 corridor, Southern / Northern Gateways)

3.4 Reconsidering the alternatives

3.4.1 Comments received during consultation suggested that there were options for strategic growth that should have been appraised in the SA. These are summarised below, with an explanation as to why the Strategic Working Group do not think these options are reasonable.

3.4.2 One of the alternatives suggested was that more housing should be going into Leicester City.

3.4.3 The SA already tested what it would mean in the City if there was 22,625 dwellings located here. This is much higher than the 10,500 dwellings being proposed in the Plan. Putting more housing into the City (than 22,625), would mean releasing further greenfield and open space. This could have negative effects on objectives such as biodiversity, amenity and health and wellbeing – being detrimental to some communities. Increasing densities is also viewed as unreasonable as it would change the historic nature of the City.

- 3.4.4 Another suggestion was that there should be increased growth to the East at an 'Eastern Gateway'. However, there is limited transport infrastructure and employment opportunities in these areas making it a less favourable growth area.
- 3.4.5 A potential location for the eastern gateway may be along the A46 corridor – however, this would need all the local authorities to designate sites along the route in their local plans to allow this approach to have a better understanding of the potential effects.
- 3.4.6 There was a suggestion that a strategy should be looked at which is less reliant on the A46. However two of the original strategic options take this approach by dispersing a greater amount of housing growth. Therefore this does not need to be tested further as an alternative approach.
- 3.4.7 Another suggestion was that there should be more than 38% of housing proposed on non-strategic sites. This would involve housing being distributed less strategically, and would not make the most of infrastructure. Furthermore, the Strategic Working Group consider that the split between strategic and non-strategic sites/locations for growth is appropriate. There would also be choice between strategic sites for each of the authorities to deal with in their Local Plans.

3.5 Methodology

- 3.5.1 The appraisal has been undertaken and presented against each of the ten sustainability topics established through scoping.
- 3.5.2 For each of the SA topics an appraisal table has been completed which discusses the likely effects for each option (see the SA Report). An overall score for each option is derived from an appraisal and understanding of the effects across the HMA in different spatial contexts. These 'building blocks' for each option are as follows (in-line with how the alternatives have been established):
- Effects on the City
 - Effects on the Urban Periphery (PUA)
 - Effects on Market Towns
 - Effects on 'other (rural) settlements'
 - Effects at new settlements / expanded settlements.
- 3.5.3 These individual elements are then considered together to establish an overall score for each option against the SA Objectives. A summary of the overall scores is provided in this non-technical summary.
- 3.5.4 When determining the significance of any effects, a detailed appraisal of factors has been undertaken to take account of:
- the nature and magnitude of development;
 - the sensitivity of receptors; *and*
 - the likelihood of effects occurring.
- 3.5.5 Taking these factors into account allowed 'significance scores' to be established using the system outlined below.

Major positive	✓✓✓	Minor negative	×	Neutral / negligible effects	-
Moderate positive	✓✓	Moderate negative	××	Uncertain effects	?
Minor positive	✓	Major negative	×××		

- 3.5.6 The assessment has been undertaken making-use of baseline information presented in the scoping report and mapping data. Whilst it has not been possible to identify exact effects due to sites not being established at this stage, we have made assumptions on the potential locations of development by referring to SHELAA sites and potential opportunity areas identified by the Strategic Planning Group. There is a focus on strategic impacts at a settlement-level, rather than detailed local effects. Whilst every effort is made to make objective assessments, the findings are also based upon professional judgement and are therefore partly subjective.

3.6 Summary of appraisal findings

- 3.6.1 Table 4 (page 18) presents the overall scores recorded for all twelve of the reasonable alternatives (i.e. the six distribution options at both scales of growth). A summary of the findings is discussed in this section.

Notional projected housing requirements (90,500 dwellings)

- 3.6.2 A dispersed approach is the least balanced overall; having the most negative effects for three sustainability objectives (transport and travel, landscape and land, cultural heritage). Therefore, despite having very positive effects for housing and health and wellbeing, it would be unlikely to achieve sustainable development.
- 3.6.3 From a social and economic perspective, the hybrid option appears to perform the best overall, as it is the only option that generates a major positive effect on both housing and economy without generating negative effects. The next best performing option is option 3, which also generates significant positive effects for housing and economy, but could generate some negatives. All other options would still generate positive effects on social and economic factors, but to a lesser extent.
- 3.6.4 However, despite performing well in terms of social and economic factors, option 3 would have more negative effects on land and landscape and cultural heritage compared to options 1, 2 and 4. Those options are not without their own difficulties though, with option 2 performing worst of all options in terms of biodiversity and option 4 performing worst of all options in terms of water. The hybrid option, on the other hand, is one of the better performing options with regards to environmental protection, despite potentially significant effects on landscape.
- 3.6.5 It is clear that the overall performance of options 1, 2, 3 and 4 is fairly similar in terms of sustainability 'as a whole'. However, each approach has more merits or issues for different aspects of sustainability.
- 3.6.6 What can be concluded from this appraisal is that option 5 should not form a major element of the spatial strategy. However, there is still merit to dispersing some growth as demonstrated by positive effects on health and housing associated with option 5.
- 3.6.7 It is also clear that the hybrid option best meets the economic aspirations of the growth strategy and supports housing in accessible locations whilst performing as well as any other option in terms of environmental protection objectives.

Higher growth options

- 3.6.8 With a 20% increase in housing to allow for 'flexibility', the broad trend for all options is for the negative effects to become more prominent across the HMA, whilst the positive effects do not increase as consistently or by the same magnitude.

- 3.6.9 For option 1, despite an improvement in the housing and economic factors, the effects on multiple environmental factors would become majorly negative and could be difficult to mitigate. There could also be major negative effects upon health and wellbeing.
- 3.6.10 The picture is similar for options 2 and 3, which would both see major negative effects for landscape and land and heritage, as well as more significant negative effects in terms of congestion, infrastructure and potential intrusion into minerals safeguarded areas.
- 3.6.11 Option 2 would have the most prominent negative effects on biodiversity at this level of growth compared to all other options (the same as for the lower growth scenario).
- 3.6.12 Option 3 would still remain the most positive with regards to the economy, even at this higher level of growth.
- 3.6.13 Option 4 would perhaps be best placed to accommodate even greater levels of growth, as the negative effects generated would be less significant compared to the other options. Nevertheless, the overall pattern is one of exacerbated negative effects on environmental factors compared to the notional projected housing requirement.
- 3.6.14 For option 5, major negative effects are also predicted for a range of environmental factors, including a rise in the significance of effects for water, biodiversity, climate change and minerals. The positive effects only rise in significance for transport and travel, as increased growth in rural areas could help to support/improve accessibility and services.
- 3.6.15 Option 6 would also see an increase in negative effects for many sustainability factors. The exception is an increase in significance of the positive effects on housing and economy.
- 3.6.16 For the higher growth scenario, option 5 does not score as badly in comparison to the other options; with it only scoring the poorest for climate change at this scale of growth. This is due to the negative effects of each other option rising at the higher level of growth.
- 3.6.17 The hybrid option was not tested at the higher level of growth as the preferred scale of growth is the housing needs figure not the higher projection.

3.7 Outline reasons for the selection of the spatial strategy

- 3.7.1 The Strategic Planning Group has come to a decision on the preferred approach based upon a range of factors including; national policy, regional priorities for the economy and infrastructure investment, the need to protect local environmental and historic assets, and the findings of the SA process (presented in an interim SA Report).
- 3.7.2 Whilst none of the original reasonable alternatives have been taken forward in their entirety, the preferred approach does reflect elements of each option where they are in accordance with the preferred strategy. For example, option 5 is rejected in terms of the focus on rural settlements, but the level of growth at the City and the market towns for this option is broadly the same as the preferred approach.
- 3.7.3 As in the case of the draft Plan, the revised Plan has been developed to take advantage of significant new infrastructure capacity that is close to the anticipated key economic growth points. The A46 corridor represents an excellent opportunity to accommodate housing growth close to and with good transport links into the City, where anticipated job growth requires a workforce well in excess of that likely to be accommodated within

Leicester and the urban periphery. Growth along this corridor is anticipated to help reduce the length of journeys to work, improve the prospect of non-car journeys and create additional jobs associated with the new housing areas in the corridor.

- 3.7.4 It is anticipated that a large amount of growth would be accommodated at new / expanded settlements. Consequently, the broad approach of option 4 has formed the basis for the growth strategy (but also drawing from elements of the other distribution options as appropriate).
- 3.7.5 In the southern part of the County the Southern Gateway has been deleted and the revised plan emphasises the importance of improvements to the A5 Corridor, particularly in terms of their relationship to the delivery of development that is already committed in Local Plans or with planning permission (the A5 Improvement Corridor). New/expanded settlements will be accessible to job opportunities and the location is crossed by the Leicester-Nuneaton rail line providing good accessibility.
- 3.7.6 Substantial numbers of new jobs are anticipated in in this part of the County, in addition to the proposed road and rail infrastructure investment. The area will also be connected to the A46/M69 to the south-west and, via the new southern/eastern Leicester bypass, will be connected to the M1 via the proposed new Junction 20a. The amount of new homes in Harborough District has been reduced by 2,000 dwellings in recognition of the very high annual rate of delivery that the original figure would have required. Similarly, Lutterworth is no longer designated as a key centre for growth; instead growth in this area will be managed in Local Plans.
- 3.7.7 In the revised Plan, the Leicestershire International Gateway replaces the Northern Gateway. In this area, the homes are again likely to be in new settlements and expansions to existing urban areas such as Loughborough / Shepshed. Housing growth is justified by the economic growth anticipated in this location including at Loughborough (which is an important university town), the strategic rail freight interchange, HS2 interchange at Toton just outside the County boundary and growth of East Midlands Airport. North West Leicestershire District Council has been assigned an additional 1,200 dwellings in recognition of these growth opportunities.
- 3.7.8 The strategy sets an appropriate level of growth in Leicester City, which represents the current assessment of maximum capacity in the City from the period 2031-2050. Planning for greater levels of growth here is considered likely to stifle the capacity for employment growth (office, retail, leisure) and could also have greater potential for effects on biodiversity, health and wellbeing due to the loss of open space. Consequently, options 1 and 6 which both propose substantially higher levels of growth in the City are considered to be inappropriate in this respect. Planning for lower levels of growth in the City (rather than maximising potential) is considered to be unreasonable given the ongoing shortage of homes and the inability to meet fully objectively assessed housing needs. Furthermore, the SA does not identify any significant issues with regards to the level of growth proposed in the City.
- 3.7.9 The level of growth focused at the market towns is considered to be appropriate given that there are already significant developments in the pipeline for these areas up to 2031 and beyond. Around Loughborough / Shepshed, the Leicestershire International Gateway will increase development opportunities in this location and, in the revised Plan, Melton Mowbray has been designated as 'key centre for regeneration and growth' (emphasising the importance of regeneration to the town and its relationship with new growth).

- 3.7.10 In recognition of confirmed funding for the town centre bypass Melton Mowbray, in the revised plan, has been assigned an additional 800 dwellings. Focused growth at the other market towns would not take full advantage of economic opportunities and strategic infrastructure upgrades. Consequently, options 2 and 3, which focus substantial growth to the other market towns, are considered less attractive in this respect.
- 3.7.11 The level of growth proposed at the rural settlements is limited, and reflects the strategic focus on larger-scale opportunities in more accessible locations. Consequently, options 5 and 6, which propose substantial dispersal of growth, are considered to be unattractive in this respect.
- 3.7.12 The SA findings broadly support the preferred strategy, as it would generate the most benefits in terms of employment and housing growth. The focus of growth at key areas of economic growth and infrastructure capacity is also likely to reduce the length of car trips, and encourage sustainable modes of travel (particularly where there are strong rail and bus links into the City). In terms of environmental effects, the preferred approach does not generate any major negative effects and performs better or the same as the alternatives in this respect.
- 3.7.13 The role of the Strategic Growth Plan is to establish broad preferred locations for longer term growth and thus to provide a framework for statutory local plans. The broad locations would evidently be able to accommodate a range of different growth levels, so if subsequent work based on updated evidence confirms that a higher level of growth ought to be pursued in certain locations, then this can be considered at that stage and the impacts analysed accordingly. What is clear at this stage is that a higher level of growth (than the projected OAN) will have largely negative impacts. This is supported by the SA findings which suggest that the negative effects for every option would be likely to increase, and this could lead to major negative effects on the built and natural environment, water, and transport infrastructure.

Table 4 - Summary of appraisal scores for the twelve reasonable alternatives plus the hybrid option

		Biodiversity	Health & wellbeing	Housing	Economy	Transport	Climate change	Landscape and land	Heritage	Water	Minerals
Option 1 <i>PUA Focus</i>	1a	x	✓✓✓xx	✓✓	✓✓	✓✓/x	✓/?	x	xx/✓✓	x	-
	1b	xx	✓✓✓xxx	✓✓✓	✓✓✓/x	✓✓/xx	✓/ x	xxx	xxx/✓✓	xxx	x
Option 2 <i>Market town focus</i>	2a	xx	✓✓xx	✓✓	✓✓/ x	✓✓/xx	✓✓	x	xx/✓	x	x
	b	xxx	✓✓xxx	✓✓	✓✓✓/xx	✓✓/xxx	✓	xxx	xxx/✓	xxx	xx
Option 3 <i>Employment-led</i>	3a	x	✓✓✓xx	✓✓✓	✓✓✓/x	✓✓/xx	✓✓	xx	xx/✓	x	-
	b	xx	✓✓✓xxx	✓✓✓	✓✓✓	✓✓/xxx	✓	xxx	xxx/✓	xx	x
Option 4 <i>New settlements</i>	4a	x	✓✓xx	✓✓	✓✓	✓/xx	✓	x	x/✓	xx	?
	4b	xx	✓✓✓xxx	✓✓	✓✓✓/x	✓/xxx	-	xx	xx/✓	xx	x
Option 5 <i>Dispersal</i>	5a	x [?]	✓✓✓x	✓✓✓	✓✓/x	✓/xxx	x	xxx	xxx/✓	x	x
	5b	xx [?]	✓✓✓xx	✓✓✓	✓✓/xx	✓✓/xxx	xx	xxx	xxx/✓	xxx	xx
Option 6 <i>Trends</i>	6a	x	✓✓✓x	✓✓	✓✓	✓/x	✓/?	xx	xx/✓✓	x	?
	6b	xx	✓✓✓xx	✓✓✓	✓✓✓/x	✓/xx	-/ x	xxx	xxx/✓✓	xxx	x
Hybrid option		x	✓✓✓/xx	✓✓✓	✓✓✓	✓✓/xx	✓	xx [?]	x/✓	x	?



Appraisal of the Plan

04

4 APPRAISAL OF THE PLAN

4.1 Introduction

- 4.1.1 This section presents a summary of the appraisal of the Plan considered 'as a whole'.
- 4.1.2 Whilst there are no policies as such proposed within the Plan (to support the spatial approach to development), it contains a range of broad principles that provide a framework for how growth should be delivered.
- 4.1.3 The key principles are:
- A focus on large scale sustainable developments.
 - The need to deliver the principles of the Garden City Concept.
 - The need to protect the built and natural environment.
 - Taking advantage of strategic infrastructure improvements.

4.2 Methodology

- 4.2.1 The appraisal was based upon the SA Framework, which consists of ten SA Topics, with supporting objectives and guiding questions.
- 4.2.2 When determining the significance of any effects, a detailed appraisal of factors has been undertaken to take account of:
- the nature and magnitude of development;
 - the sensitivity of receptors; *and*
 - the likelihood of effects occurring.
- 4.2.3 Taking these factors into account allowed 'significance scores' to be established using the system outlined below. Major and moderate effects are considered to be significant, whilst minor effects are not.

Major positive	✓✓✓	Minor negative	×	Neutral / negligible effects	-
Moderate positive	✓✓	Moderate negative	××	Uncertain effects	?
Minor positive	✓	Major negative	×××		

- 4.2.4 The assessment has been undertaken making-use of baseline information presented in the scoping report and mapping data. Whilst it has not been possible to identify exact effects due to sites not being established at this stage, we have made assumptions on the potential locations of development by referring to SHELAA sites and potential opportunity areas identified by the Strategic Planning Group. There is a focus on strategic impacts at a settlement-level, rather than detailed local effects. Whilst every effort is made to make objective assessments, the findings are also based upon professional judgement and are therefore partly subjective.

4.3 Summary of appraisal findings

4.3.1 **Table 5** below presents a summary of the effects associated with the final Plan. There is particular emphasis on identifying whether effects are significant or not.

4.3.2 Also presented is a range of potential monitoring measures to check whether positive effects are actually occurring or unforeseen negative effects arise.

Table 5 - Summary of Plan effects including potential monitoring measures.

SA Topic	Potential monitoring measures
<p>Biodiversity</p> <p>Uncertain negative effects are predicted overall relating to the potential for localised effects on habitats and species as a result of large scale development. However, these effects are not predicted to be significant given the avoidance of the most sensitive areas and the focus on a Garden City concept.</p>	<ul style="list-style-type: none"> • Net loss/gain in designated habitats (ha). • Ecological enhancement schemes delivered at strategic sites. • Ecological water quality. • Establishment of a green infrastructure strategy.
<p>Health and wellbeing</p> <p>A significant positive effect is predicted for health and wellbeing due to the potential to improve access to health services, community facilities and affordable housing.</p> <p>Minor negative effects are identified with regards to a loss of open space and potential increase in air quality issues in the City.</p>	<ul style="list-style-type: none"> • Net change in open space provision. • Number of new health care facilities delivered. • Access to local green space. • Change in levels of deprivation in the top 20% areas. • Achievement of air quality objectives
<p>Housing</p> <p>A significant positive effect is predicted overall for housing. This reflects the support for affordable and market housing in areas of need that are well located to employment opportunities.</p>	<ul style="list-style-type: none"> • Rates of housing delivery. • Percentage of affordable housing delivered. • Availability of land for strategic development opportunities in the key locations.
<p>Economy and employment</p> <p>Significant positive effects are predicted for the economy and employment as the strategy seeks to help deliver and take advantage of infrastructure and economic growth opportunities. Housing growth is focused to areas that have good access to jobs, and ought to support increased local spending, provide jobs in construction, and provide accommodation for a growing workforce.</p>	<ul style="list-style-type: none"> • Gross Added Value Leicester and Leicestershire. • Unemployment rate. • Retention of working age population. • Changes in the levels of deprivation. • Change in numbers of people employed by sector

SA Topic	Potential monitoring measures
<p>Transport and travel</p> <p>The Plan is predicted to have mixed effects on transport and travel.</p> <p>The close proximity of new homes to employment opportunities ought to reduce the length of travel. The focus on new settlements should also ensure that new communities have good access to local facilities and services. A significant positive effect is predicted in this respect.</p> <p>However, substantial growth around the City could put additional pressure on orbital routes and in and out of the Leicester. This could have minor negative effects in terms of congestion.</p>	<ul style="list-style-type: none"> • Number and proportion of homes within walking distance of key public services, recreational opportunities and public transport services. • New / expanded public transport services secured through strategic development. • Average annual traffic flows. • Average trip length to access employment.
<p>Climate change</p> <p>The Plan is predicted to have a minor positive effect overall, reflecting a potential reduction in emissions from transport by directing the majority of growth to areas with good accessibility.</p>	<ul style="list-style-type: none"> • Change in the amount of carbon emissions generated from transport (per capita).
<p>Landscape and land</p> <p>The Plan is likely to have minor negative effects with due to the likely loss of best and most versatile agricultural land.</p> <p>With regards to landscape character, an uncertain moderate negative effect is predicted overall, though significant effects could occur along the A46 corridor depending upon the location and layout/design of development.</p>	<ul style="list-style-type: none"> • Amount of best and most versatile agricultural land lost to development by grade. • Number of allotments established at strategic development sites. • Landscape character assessments to identify sensitive parcels of land at key growth areas.
<p>Cultural heritage</p> <p>The Plan is predicted to have both minor positive effects and minor negative effects on heritage.</p> <p>There is the potential for the character of settlements to be affected by large scale development and a loss of open space.</p> <p>Development in Leicester City in particular presents opportunities to enhance heritage assets that are currently in poor condition. The avoidance of negative effects across much of the Plan area is also a positive factor.</p>	<ul style="list-style-type: none"> • Loss of or change in the significance of designated heritage assets. • Townscape and landscape character assessments. • Amount of derelict land restored (ha). • Heritage assets removed or added from the 'at risk' register. • Net loss/gain of open space in Leicester City.

SA Topic	Potential monitoring measures
<p>Water</p> <p>The Plan is predicted to have a minor negative effect overall, reflecting the potential for some development to be in areas at risk of flooding and an increase in the demands on water treatment infrastructure.</p>	<ul style="list-style-type: none"> Percentage of new development within flood zones 2 and 3. SUDs schemes incorporated into new developments.
<p>Minerals</p> <p>An uncertain negative effect is predicted as it is possible that new development in the areas identified for growth could overlap with Minerals Safeguarded Areas (particularly for sand and gravel).</p>	<ul style="list-style-type: none"> Amount of development within Minerals Safeguarding Areas (ha). Potential sterilisation of minerals at strategic development sites.

4.4 Mitigation and Enhancement

- 4.4.1 Where appropriate, recommendations were made as part of the appraisal of the draft Plan. These are summarised below, along with a response from the Strategic Planning Group to demonstrate how the recommendations have been taken into consideration.
- 4.4.2 A key principle is that the scope of the Strategic Growth Plan was to focus on the spatial distribution of development and infrastructure requirements, rather than the form of development. Therefore, it is expected that more detailed work would be deferred to later stages (i.e. through Local Plans and other strategic plans). There is also an assumption that measures can be addressed through the garden cities agenda, which is a key principle expected to be reflected in future detailed Plans.

Table 7.2: Summary of recommendations

SA Recommendations	Strategic Planning Group response
It would be beneficial for a green infrastructure strategy to be developed to identify how links between the City and the A46 corridor could be strengthened, ensuring that wildlife habitats are better connected.	A Landscape and Green Infrastructure Study informed thinking on the draft and revised versions of the Plan. This work will be taken forward in more detail as decisions are made, in Local Plans, on potential development sites.
In order to mitigate potential negative effects in terms of increased congestion and effects on air quality from vehicles, it would be beneficial to highlight a commitment to establishing the infrastructure to support electric vehicles.	The two highway authorities (Leicester City Council and Leicestershire County Council) are preparing a Strategic Transport Plan to provide an overall context for Local Transport Plans, statutory Local Plans and other strategies.
Additional positive effects could be generated by setting a policy framework that supports the protection, diversification and modernisation of rural businesses.	The future of rural areas will be addressed in Local Plans. There is a need to balance the need for agriculture and food production with the diversification of local economies.

SA Recommendations	Strategic Planning Group response
<p>Given the proposed concentration of growth at a series of large scale developments (which ought to be more viable for decentralised energy schemes), the Plan could set out a commitment to achieving low carbon development and explore how separate developments can be linked together to create better opportunities for sustainable developments.</p>	<p>The scope of work for the Strategic Growth Plan is to focus on housing, employment, infrastructure and environmental protection at strategic level. Climate change is a matter that is being addressed in Local Plans/Local Plan reviews and for specific development proposals.</p>



Next Steps

05

5 NEXT STEPS

- 5.1.1 The draft Plan was consulted upon during the period 11th January 2018 – 5th April 2018. Responses were submitted with regards to the Plan, and supporting evidence (including the SA Report).
- 5.1.2 Following consideration of consultation feedback, the Strategic Planning Group has now finalised the Plan. This involves a preferred approach for the scale and distribution of development in the long term and a number of key principles to guide growth.
- 5.1.3 The SA Report has been prepared to document the SA process that has been undertaken to inform the Plan; including an assessment of a draft plan and any reasonable alternatives.
- 5.1.4 This SA Report will accompany the final Plan to help to support Plan approval by each of the partner authorities.
- 5.1.5 It is anticipated that the Strategic Growth Plan will be approved in winter 2018/2019. At this time, a Sustainability Statement will be prepared, which sets out the SA process that has been followed and how this influenced the development of the Strategic Growth Plan.

Leicester and Leicestershire, Strategic Growth Plan

SA Scoping Report

*Blaby District Council,
Charnwood Borough Council,
Harborough District Council,
Hinckley & Bosworth Borough Council,
Leicester City Council,
Leicestershire County Council,
The Leicester & Leicestershire Enterprise
Partnership,
Melton Borough Council,
North West Leicestershire District Council &
Oadby & Wigston Borough Council*

January 2018

REVISION SCHEDULE					
Rev	Date	Details	Prepared by	Reviewed by	Approved by
1	January - August 2017	Draft Report	Ian McCluskey <i>Senior Consultant</i> Matt Stopforth <i>Planner</i> Lucy Sykes <i>Graduate Planner</i>	Ian McCluskey <i>Senior Consultant</i>	Alex White <i>Associate Consultant</i>
2	January 2018	Final Report	Ishaq Khan <i>Graduate Planner</i>	Ian McCluskey <i>Principal Consultant</i>	Alan Houghton <i>Associate Director</i>

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1. Introduction

1.1 This commission

1.1.1 AECOM have been commissioned by The Leicester and Leicestershire Councils and the Local Enterprise Partnership to prepare a Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) and Habitat Regulations Assessment (HRA) for the Leicester and Leicestershire Strategic Growth Plan.

1.1.2 The Strategic Growth Plan will cover the whole of the County of Leicestershire, and the City of Leicester. This work will include preparation of the following:

- SA Framework/Scoping Report;
- HRA screening including where necessary an Appropriate Assessment;
- SA of Objectives in the Strategic Growth Statement;
- SA of Reasonable Alternatives for the Scale and Spatial Distribution of Growth;
- SA/SEA/HRA of the Draft Strategic Growth Plan; and
- SA/SEA/HRA of Final Strategic Growth Plan.

1.1.3 The SA/SEA/HRA will need to assess and influence the key elements of the Strategic Growth Plan including:

- Objectives;
- Scale of growth for housing and employment land;
- Spatial distribution of growth;
- Major infrastructure requirements; and
- Environmental protection.

1.2 The SEA/SA process

1.2.1 Strategic Environmental Assessment is a statutory process that must be carried out when a plan, policy or programme is considered likely to have significant effects on the environment. In the case of the Strategic Growth Plan (which sets the framework for future Local Plans) an SEA is determined to be necessary. However, to ensure that social and economic factors are also taken into consideration, it has been considered beneficial to undertake a sustainability appraisal (SA), which covers a wider range of factors including social and economic factors.

1.2.2 Sustainability Appraisal (SA) is a process for helping to ensure that plans, policies and programmes achieve an appropriate balance between environmental, economic and social objectives. The process that is followed incorporates the requirements of an SEA.

1.2.3 SA should help to identify the sustainability implications of different plan approaches and recommend ways to reduce any negative effects and to increase the positive outcomes.

1.2.4 SA is also a tool for communicating the likely effects of a Plan (and any reasonable alternatives), explaining the decisions taken with regards to the approach decided upon, and

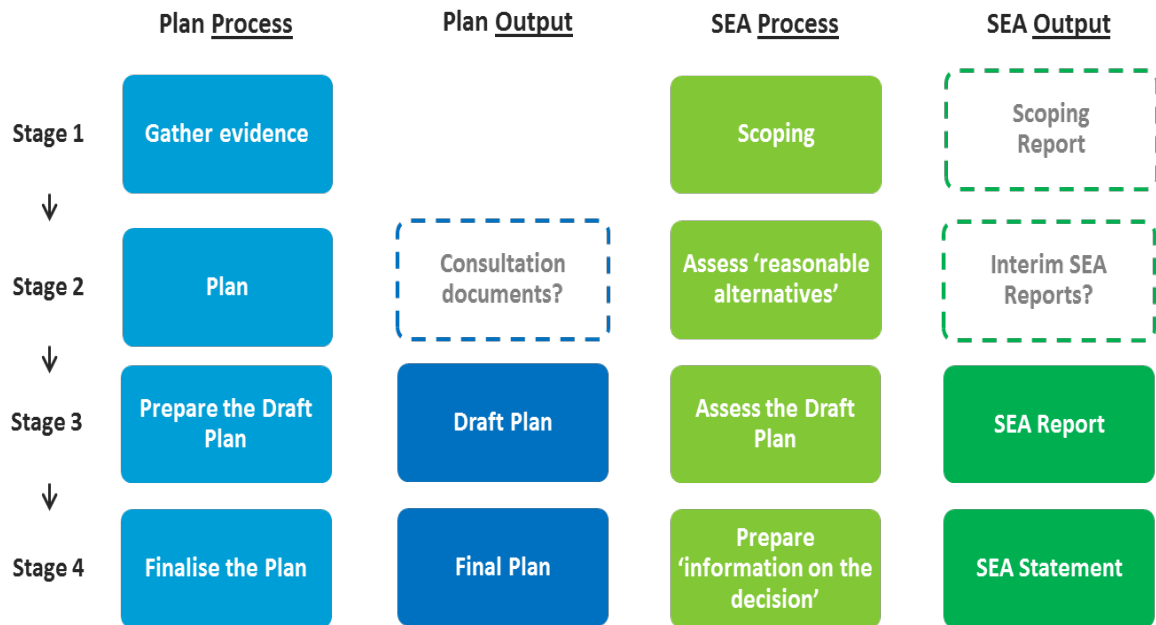
encouraging engagement from key stakeholders such as local communities, businesses and plan-makers.

1.2.5 Although SA can be applied flexibly, it contains legal requirements under the ‘Environmental Assessment of Plans and Programmes Regulations 2004 (which were prepared in order to transpose into national law the EU Strategic Environmental Assessment (SEA) Directive). The regulations set out prescribed processes that must be followed. In particular the Regulations require that a report is published for consultation alongside the draft plan that ‘identifies, describes and evaluates’ the likely significant effects of implementing ‘the plan, and reasonable alternatives’. The SA/SEA report must then be taken into account, alongside consultation responses when finalising the plan.

1.2.6 Though the strategic growth strategy is not a statutory document, it has the potential to have significant effects upon the environment, communities and economy. Therefore, it is considered necessary and beneficial to undertake a sustainability appraisal that meets the requirements of the SEA Regulations.

1.2.7 SA/SEA can be viewed as a four-stage process that produces a number of statutory and non-statutory outputs. As illustrated in Figure 1.1 below, ‘Scoping’ is a mandatory process under the SEA Directive, but the publication of a scoping report is a voluntary (but useful) output.

Figure 1.1: SA/SEA as a four stage process



1.3 The Plan area

1.3.1 The Strategic Growth Plan covers the whole of the County of Leicestershire and the City of Leicester. This is shown in Figure 1.2.

1.3.2 Each Local Authority has adopted, or is in the process of adopting, a Local Plan in order to guide development within their Borough or District. The status of these (as of June 2017) is outlined in Table 1.1, along with a summary of key issues identified through the SA and Plan making process.

Table 1.1 Plan progress for each authority

Local Authority	Local Plan Progress	Key Issues and objectives
North West Leicestershire	The new Local Plan was Adopted in November 2017.	<ul style="list-style-type: none"> • Need to match housing growth with services • High car usage results in high carbon emissions • Ageing population • Ensure rural access to services • Affordability concerns • Improve public transport links and services • Air quality concerns • Limited renewable energy regeneration in district • Avoid areas of Flood Risk. <p><i>*points taken from AECOM NWL SA Report (2016)</i></p>
Leicester City Council	Currently working on a new Local Plan (expected to be adopted in 2018) which will replace the 2006 Local Plan and the 2014 Core Strategy.	<ul style="list-style-type: none"> • Delivery of housing type, tenure and number to accommodate population growth • Reduce inequalities in health • Improve access to facilities and open space • Respond to an over-dependence on declining manufacturing jobs • Ensure adequate supply of employment land and workspace to meet local need • Increase graduate retention • Address strategic transport needs and reduce congestion • Avoid areas of Flood Risk. <p><i>*points taken from the core strategy (2014)</i></p>
Blaby District Council	The Local Plan (Core Strategy) was adopted February 2013. It has been through several stages of production. It provides a vision and strategy to 2029.	<ul style="list-style-type: none"> • Pressure on housing supply and affordability due to population growth • Unequal access to services • District not thought to have a balanced portfolio of employment sites- might stifle future economic growth requirements • Dominance of micro-businesses in area • Congestion especially around Junction 21 of M1. Transport links thought to be key obstacle to econ growth • Air quality constraints • Avoid areas of Flood Risk. <p><i>*taken from Local Plan Core Strategy</i></p>
Charnwood Borough Council	<p>The Adopted Local Plan for Charnwood is made up of the Charnwood Local Plan Core Strategy 2011-2028 (2015) and the saved policies from the Borough of Charnwood Local Plan (2004).</p> <p>Work on a new Local Plan has commenced. Consultation on the scope of the Plan was undertaken in July 2016.</p>	<ul style="list-style-type: none"> • Growing population demands increase in homes and services • Lack of employment land to satisfy new and expanding businesses • River valleys are subject to pressure from new development • Lack of green space and leisure facilities • Competition from shopping at Leicester, Derby and Nottingham • Avoid areas of Flood Risk. <p><i>*Taken from Charnwood Local plan</i></p>

Local Authority	Local Plan Progress	Key Issues and objectives
<p>Harborough District Council</p>	<p>The adoption of the Core Strategy 2006-2028 (Nov 2011) has replaced a large number of policies set out within the Harborough District Local Plan (April 2001). Saved policies are listed within the Adopted Core Strategy.</p> <p>In the process of preparing a new local plan for the period until 2031. Consultation on the Regulation 19 Pre-Submission Local Plan was undertaken between September and November 2017. The Council intends to submit the plan for examination in March 2018.</p>	<ul style="list-style-type: none"> • Relationship with the Leicester urban area for employment and services • Need to improve public transport services • Declining manufacturing sector causing employment pressures • Continuing development pressure for housing. • Avoid areas of Flood Risk. <p><i>*Taken from Harborough LDF Core Strategy 2006-2028</i></p>
<p>Melton Borough Council</p>	<p>Melton Core Strategy was withdrawn from examination in April 2013. The consultation on the emerging Local Plan was held between January and April 2016. The emerging plan is currently undergoing examination.</p>	<ul style="list-style-type: none"> • Improve local economy and infrastructure • Make existing structures and projects more accessible • Reduce traffic congestion in district • Enable more affordable housing • Avoid areas of Flood Risk. <p><i>*Taken from Melton Local Plan</i></p>
<p>Oadby & Wigston Borough Council</p>	<p>Current up to date policy can be found in Core Strategy and Town Centres Area Action Plan. The saved (original) Local Plan contains existing policies and guidance on development within the Borough.</p> <p>The Council has recently completed a consultation held in November and December on a pre-submission Draft Local Plan, with an aim to adopt in mid-2018.</p>	<ul style="list-style-type: none"> • Addressing affordable housing. • Enhance quality of life. • Make use of a highly skilled workforce • Protect and enhance natural assets. • Providing stronger, self-reliant centres. • Provide better located accessible development. • Encourage sustainable transport. • Create the right balance of jobs, housing and infrastructure. • Avoid areas of Flood Risk. <p><i>*Oadby and Wigston pre-submission Draft Local Plan (2017)</i></p>

Local Authority	Local Plan Progress	Key Issues and objectives
<p>Hinckley and Bosworth Borough Council</p>	<p>The Local Plan 2006-2026 (formerly the LDF) replaces the Local Plan 2001.</p> <p>The Council is currently working on a Plan Review. Consultation on the scope, issues and options for a new Local Plan is currently underway, with an estimated examination in public penciled for November 2020.</p>	<ul style="list-style-type: none"> • Overreliance on manufacturing industry • Improve access to services and facilities in rural areas • Address pockets of high deprivation • Housing affordability issues • High reliance on car travel within Borough • Avoid areas of Flood Risk. <p><i>*From Local Development Framework Core Strategy 2009</i></p>

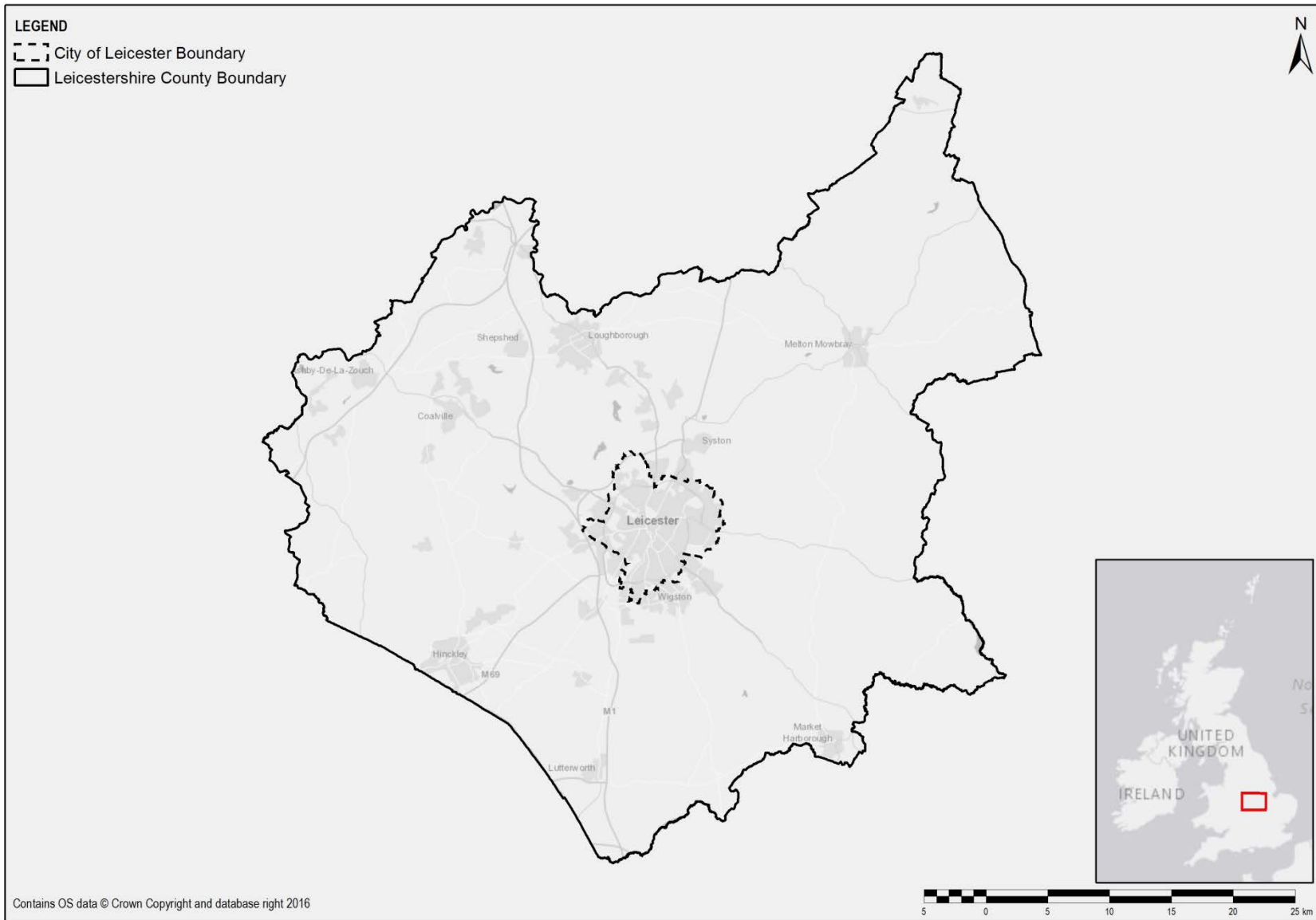


Figure 1.2: The Strategic Growth Plan area

2. Scoping

2.1 Introduction

2.1.1 This section introduces the reader to the scope of the SA. In particular, and as required by the Regulations, this Chapter answers the series of questions below:

- What’s the Plan seeking to achieve?
- What’s the sustainability ‘context’?
- What’s the sustainability ‘baseline’?
- What are the key issues that should be a focus of SA?

2.1.2 The scope of the SA for the Plan needs to be proportionate and relevant to the scope and spatial scale of the Plan. It should therefore be strategic in nature, but acknowledge that there are local issues for each constituent authority.

2.1.3 It is also important to note that scoping has already been undertaken by each authority in the preparation of their planning documents. The information collected as part of these scoping exercises may help to inform the scope of the growth strategy. However, we have not sought to duplicate information that has already been gathered, and have focused the evidence base on the strategic issues for Leicester and Leicestershire.

2.1.4 Table 2.1 lists each of the planning authorities and the date that scoping exercises have been most recently completed (*whether this be as part of a scoping report, or an SA Report*). It can be seen that six of the eight authorities have scoping information that is less than two years old, with only Blaby and Charnwood (who are currently undertaking new SA scoping) requiring a refresh of locally specific information.

Table 2.1: Scoping Report status for each authority

Authority	Latest Scoping Report/Update
Blaby District Council	2016
Charnwood Borough Council	2018*
Harborough District Council	2017
Hinckley and Bosworth Borough Council	2017
Melton Borough Council	2016
Leicester City Council	2016
North West Leicestershire District Council	2016
Oadby and Wigston Borough Council	2017

**at the time of writing, the report is yet to be submitted to the local authority.*

2.2 Methods / approach

2.2.1 Ten Sustainability topics have been established to give the scoping process structure and to present findings in a succinct way. The topics reflect those themes identified in the SEA Regulations, and are common to each local authority (within their own SA processes).

1. Biodiversity and Geodiversity
2. Health and wellbeing
3. Housing
4. Employment and economy
5. Transport and accessibility
6. Air quality and noise
7. Climate change
8. Landscape and land
9. Cultural heritage
10. Water
11. Waste and minerals

2.2.2 For each topic, the Scoping report sets out the following information:

- Policy context at a national, regional and local level.
- Common policy themes and principles within adopted and emerging Local Authority Plans.
- Strategic baseline position: Information taken from the Local Plan scoping reports, and other sources of data, is collated and analysed. This section seeks to identify the important issues and trends at a strategic level. A table of issues and trends is provided for each topic area. Where possible, current performance is identified as well as the broad trends.
- Projected baseline, key issues and opportunities: This section identifies the future baseline, cross boundary issues and strategic opportunities.

3. *Biodiversity and Geodiversity*

3.1 Policy context

National

- 3.1.1 Sites of European status are protected under the **Birds (79/409/EEC as amended) and Habitats (92/43/EEC) Directives**, while national legislation protects Sites of Special Scientific Interest (SSSI) and listed species.
- 3.1.2 The European Commission Guidance on **Integrating Climate Change and Biodiversity into Strategic Environmental Assessment (2013)** suggests that an SEA should focus on ensuring ‘no net-loss of biodiversity’ before considering mitigation and compensation. The assessment should also take account of ‘ecosystem services’ and the links between natural environment and economy.
- 3.1.3 **The Natural Environment White Paper** states that there is a need to halt the overall decline in biodiversity and the degradation of ecosystem services; and restore them in so far as feasible and seek to deliver net gains in biodiversity where possible¹. The **NPPF** also says that Local Plans should support healthy well-functioning ecosystems, encourage the ‘preservation, restoration and re-creation of priority habitats, ecological networks’ and promote the ‘protection and recovery of priority species’.
- 3.1.4 **Biodiversity 2020** is the Government’s Strategy for England’s wildlife and ecosystem services. It encapsulates the aims of the EU Biodiversity Strategy and seeks to achieve the following outcomes by 2020²:
- More, bigger and less fragmented areas for wildlife. No net loss of priority habitat and a net increase in priority habitats;
 - Restoring at least 15% of degraded ecosystems as a contribution to climate change mitigation and adaptation;
 - An overall improvement in the status of species and prevention of further human induced extinctions; and
 - Improved engagement in biodiversity issues.
- 3.1.5 The **UK Post-2010 Biodiversity Framework** (2012) is to provide an enabling structure for national action until 2020. The targets of the scheme include:
- To set out a shared vision and priorities for UK-scale activities, in a framework jointly owned by the four countries, and to which their own strategies will contribute.
 - To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK, where the four countries agree this will bring benefits compared to individual country work
 - To streamline governance arrangements for UK-scale activity

¹ Defra (2012) The Natural Choice: securing the value of nature (Natural Environment White Paper) [online] available at: <http://www.official-documents.gov.uk/document/cm80/8082/8082.pdf>

² Biodiversity Partnership (2006) A Biodiversity Strategy for the East Midlands [online] available at: <http://www.embiodiversity.org.uk/files/documents/documents/emrbs-may2006.pdf>

Regional

- 3.1.6 The Leicester, **Leicestershire and Rutland (LL&R) Biodiversity Action Plan (BAP)**³ sets the following three priorities:
- To promote the restoration, management and creation of BAP Priority Habitats;
 - To promote the creation of new wildlife habitat in the wider countryside; and
 - To survey, monitor and promote favourable management of existing good sites through the Local Wildlife Sites (LWS) system.
- 3.1.7 The **National Forest Biodiversity Action Plan** (2011) also helps to prioritise nature conservation objectives across the three counties which the National Forest is located.
- 3.1.8 The **6C’s Green Infrastructure Strategy** (2010) outlines a biodiversity specific objective (no.14) for the East Midlands region.

‘Reverse the decline in biodiversity by countering habitat fragmentation through investment in substantial habitat restoration and creation, informed by biodiversity opportunity mapping methods’.

Local

- 3.1.9 Table 3.1 below highlights the common messages, policy approaches and strategic priorities for biodiversity that are common to each of the eight authorities.

Table 3.1: Key messages for biodiversity and geodiversity

Key policies & principles	Source / Authorities
There is a need to conserve and enhance Protected Sites	Blaby District Council Local Plan Core Strategy (2013) - Policy CS19
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS13
	Harborough District Council Core Strategy (2011) - Policy CS8
	Leicester City Council Core Strategy (2014) - Policy CS17
	Leicester BAP 2011-2021 (November 2011)
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EN2
	North West Leicestershire District Council Local Plan (2017) - Policy EN1
Deliver the National Forest Strategy	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS12
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 21
	North West Leicestershire District Council Local Plan (2017) - Policy EN3

³ Space for Wildlife - Leicester, Leicestershire and Rutland (LLR) Biodiversity Action Plan (BAP) - 2016-2026 [online] available at: <https://www.leicestershire.gov.uk/environment-and-planning/planning/planning-and-ecology>

Key policies & principles	Source / Authorities
Maintain and enhance the function and character of Charnwood Forest	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS12
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 22
	North West Leicestershire District Council Local Plan (2017) - Policy EN4
Manage the River Mease Special Area of Conservation	North West Leicestershire District Council Local Plan (2017) - Policy EN2
Maintain and strengthen ecological networks	Blaby District Council Local Plan Core Strategy (2013) - Policy CS19
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS13
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 20
	Leicester City Council Core Strategy (2014) - Policy CS17
	Melton Borough Council Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EN3

3.2 Strategic baseline

- 3.2.1 Biodiversity within the wider East Midlands area is recorded as being the lowest level for any English region, having experienced a steady, long term decline over the previous 200 years. Leicestershire itself is deemed one of the most impoverished counties in the UK in terms of biodiversity resources.
- 3.2.2 Despite efforts to safeguard biodiversity, species across the County are under increasing threat from habitat loss and fragmentation.
- 3.2.3 Given the declining nature of biodiversity in many areas, the majority of local authorities express an intention to conserve and enhance these assets, and to strengthen connectivity.
- 3.2.4 The physical coverage of SSSI's in Leicestershire is below the national average, with individuals sites also smaller than the average size. As shown in Figure 3.1, the majority of these sites are clustered in the north west of Leicestershire. Aside from a small collection to the east of the County, the SSSIs are otherwise sparsely present.
- 3.2.5 The 76 SSSI (293 SSSI units) account for a total area of 2,861 hectares across Leicestershire. 85.2% of these are considered to be of a favourable or unfavourable recovering condition (Natural England, 2016). This is illustrated in table 3.2 which identified a positive baseline position in most local authorities with regard to the condition of SSSIs as well as a positive upward trend.
- 3.2.6 This is also true for many of the Regionally Important Geological Sites (RIGS) outside of Leicester City Centre, which are mostly in a stable or favourable state (Table 3.2). These sites

are predominantly located in the west, with a number of candidate sites allocated which could increase the quantity of such assets in the future (Figure 3.2).

- 3.2.7 Regionally important strategic wildlife corridors include the National Forest / Charnwood Forest, River Mease, River Soar, River Sence the Grand Union Canal, the Rothley Mainline Railway and Ivanhoe Railway. Locally important corridors are mainly centred on brooks and Green Wedges.
- 3.2.8 Table 3.2 below highlights water systems as being of a poor or moderate quality, with limited improvement occurring in the short term for most authorities. There is a need for improvement in quality as well as the general trends in quality (which are not all positive).
- 3.2.9 Both the Charnwood Forest and the National Forest are recognised as a valuable asset for biodiversity within the region, especially for those within the north-west of Leicestershire. The National Forest Strategy has been applied which has sought to protect the forest from potential threats, and has led to the relative stabilisation of this habitat.
- 3.2.10 A densely forested area also exists to the north east between the settlements of Stathern and Belvoir, and to the east between the settlements of Skeffington, Withcote and East Norton.
- 3.2.11 A number of river catchments are also important habitats for wildlife, and as such it is important that the management of these catchments is continued. The River Mease, which is a site of European Importance, is one such network that is under threat from development and management practices.

3.3 Future baseline, key issues and opportunities

- 3.3.1 Development poses a potential threat to biodiversity assets and their connectivity. However, planning policies should help to enable safeguarding of protected sites and habitats. There is a consistent approach across the County, with each authority seeking to conserve and enhance protected species and habitats. This should help to balance the threats of development and should allow for biodiversity assets to be protected and maintained.
- 3.3.2 Without intervention, it is likely that river and water quality would continue to decline. Many of the SA scoping documents examined highlight that the ecological health of rivers is recorded as being predominantly poor in their current state. This could be exacerbated with the onset of development. However, catchment management plans such as the River Mease Management Plan ought to help better manage development proposed in current and emerging local plans.
- 3.3.3 Geodiversity assets are likely to remain protected under national legislation. Their status as protected sites is not likely to change, and it should be possible to avoid damage due to their relatively small number across Leicestershire.
- 3.3.4 Key issues to consider into the future include protecting the existing biodiversity assets, many of which are already fragile and under threat, whilst also meeting the housing and employment needs of the region, and helping to improve biodiversity resilience to climate change by investing in strategic wildlife corridors.
- 3.3.5 Delivery of the National Forest Strategy, which seeks to increase forest cover and recover associated ecosystems, is highlighted amongst various local plan policies across the HMA. The strategy in itself is naturally cross-boundary, and with increased growth the forest is likely to improve access to green and open space for residents within the region.

- 3.3.6 There may also potential to capitalise upon other cross boundary spaces such as green infrastructure corridors along various river networks and from Leicester City through to Swadlincote. Many of the locally designated sites and habitats are located within the Soar Valley and are inherently linked to the hydrology of the river. These sites are therefore vulnerable to impacts on water quality from development and climate change effects on the river flow characteristics. Therefore, it has been recognised that the River Mease SAC and the Soar Valley River may be sensitive to development given their status and / or their flood, water and landscape constraints⁴.
- 3.3.7 In addition to river systems, green corridors and other recreational routes will be enhanced to enable species movement throughout Leicestershire.
- 3.3.8 Steps should be taken to enhance the 'Blue Corridors' approach with the aim of improving biodiversity value, water quality, public access, flood plain use and tree planting to restore connectivity and improvements to air quality in the long term.

⁴ Charnwood Local Plan Sustainability Appraisal Scoping Report (2017), Charnwood Borough Council.

Figure 3.1: Biodiversity Assets within Leicester and Leicestershire

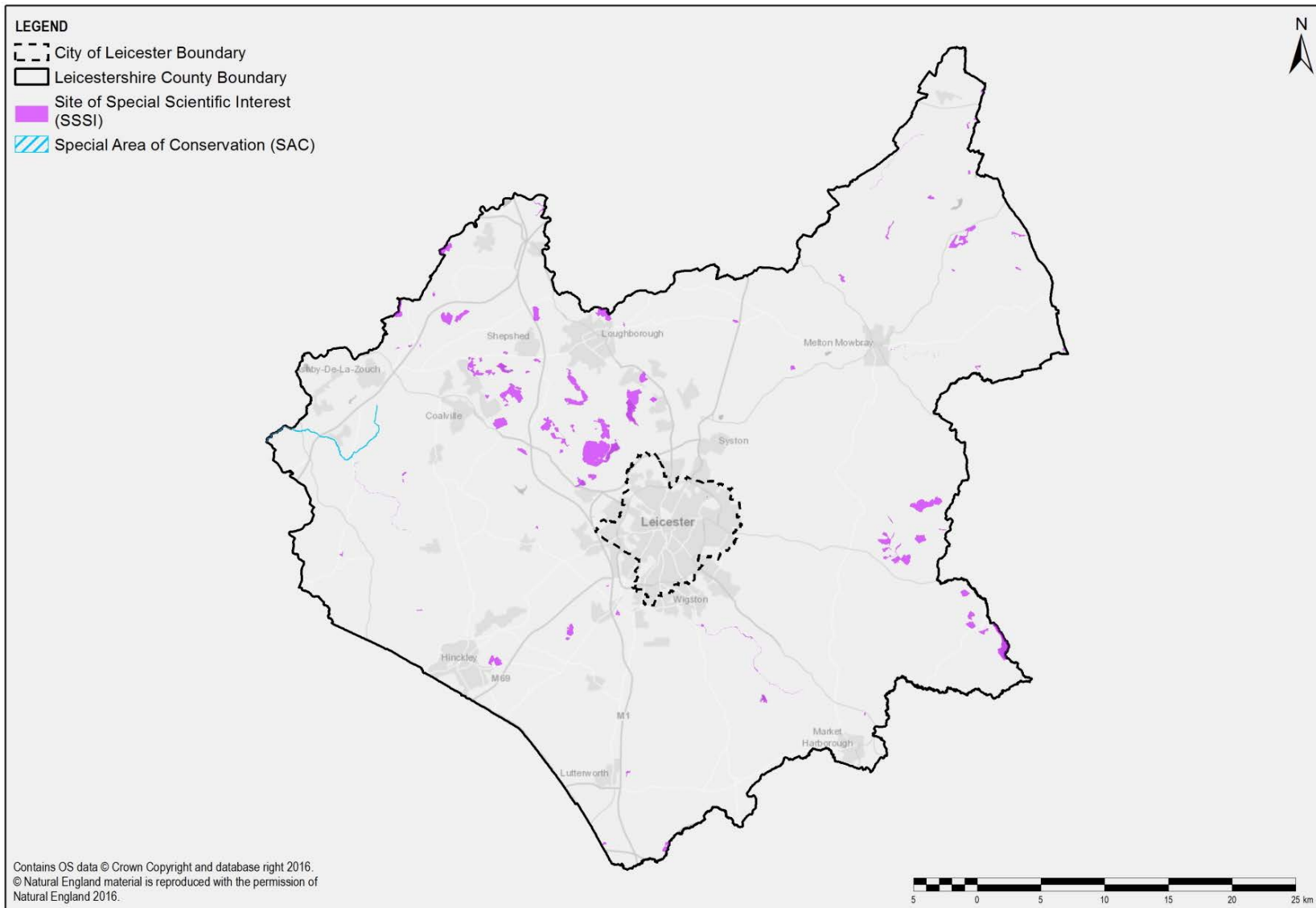


Figure 3.2: Geodiversity Assets within Leicester and Leicestershire

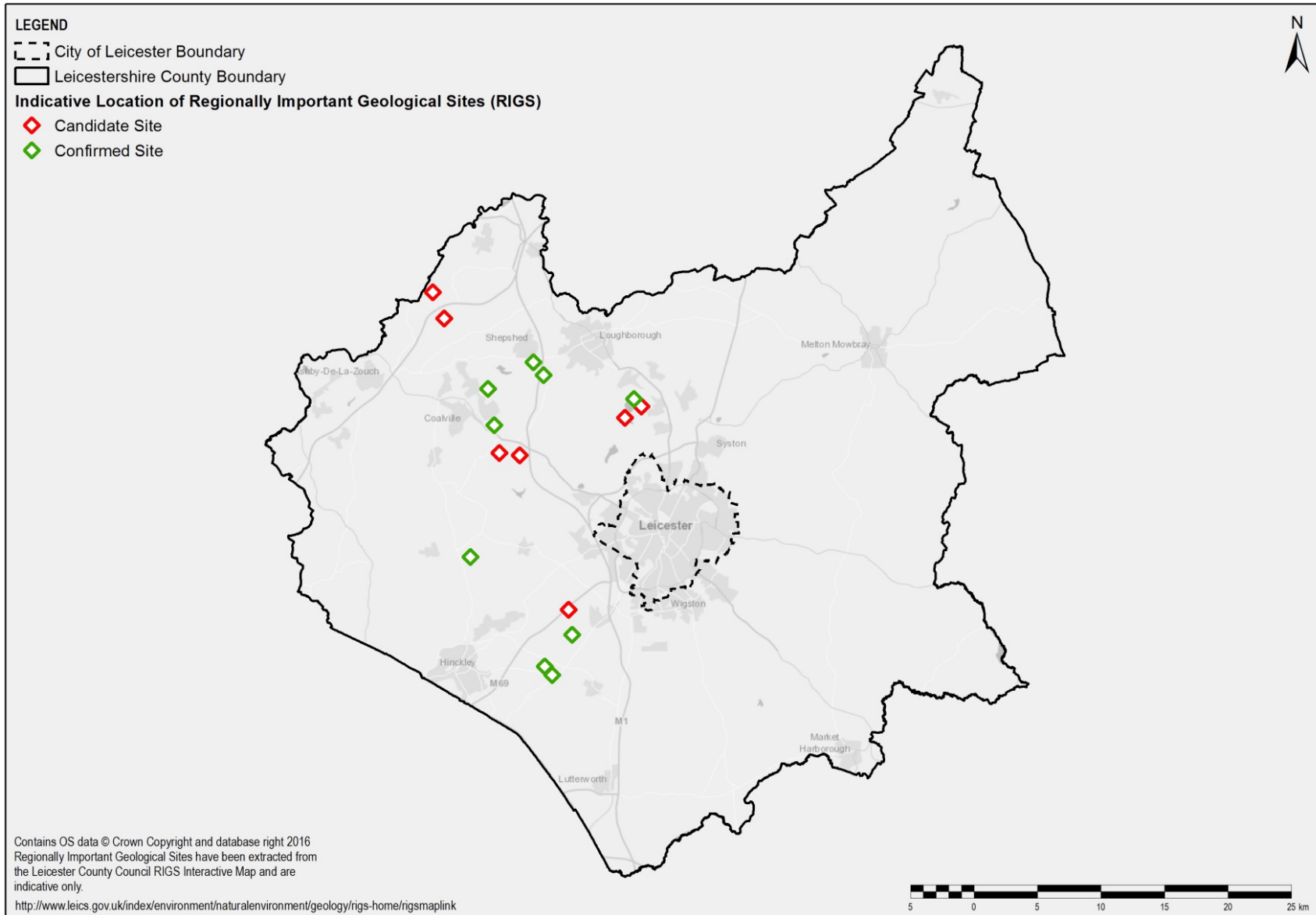
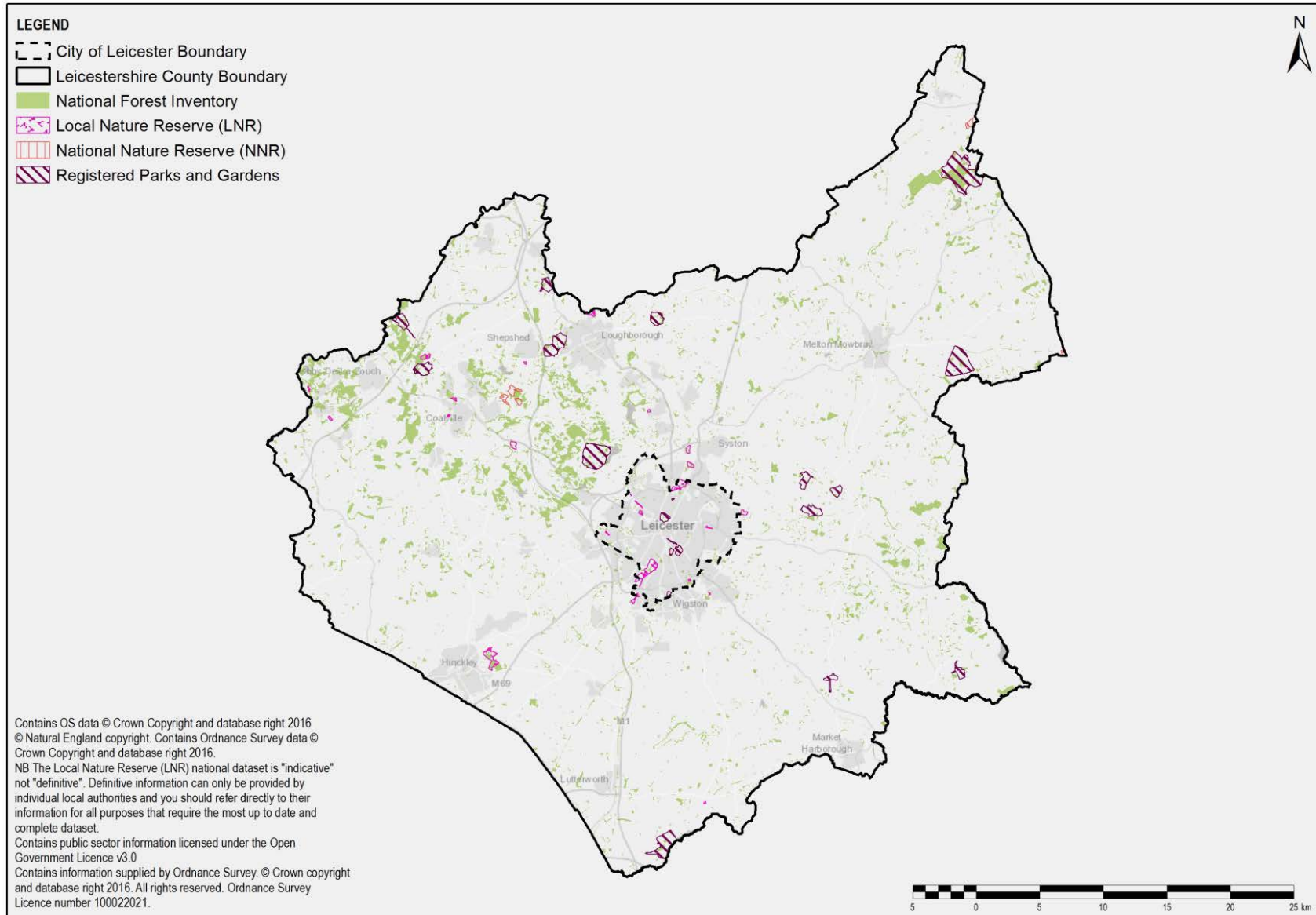


Figure 3.3: Strategic Green Infrastructure Assets within Leicester and Leicestershire



3.4 Strategic trends

3.4.1 Table 3.2 outlines the key biodiversity and geodiversity issues at a strategic level..

Table 3.2: Strategic Biodiversity and Geodiversity issues and trends across Leicester and Leicestershire

Key issues and trends				
Authority	Condition of SSSIs	River and water quality	Geodiversity Assets	Strategic assets
Leicester City	Gipsy Lane Pit is located approximately 2 miles to the north-west of the City Centre. Recorded as being in unfavorable and declining condition in 2016.	Quality of River Soar and the Grand Union Canal previously threatened. Now designated as Biodiversity Enhancement Site (2011).	One geological SSSI (Gipsy Lane Pit) 2miles to the north of the City, however this is of an unfavourable declining condition.	River Soar Corridor, Abbey Meadows, Castle Hill Country Park.
North West Leicestershire	Highest percentage area of SSSI land in a favourable condition in England (2009).	The River Mease is recorded as being of poor quality and is at risk from phosphate and waste pollution. A plan for the area ought to help improve trends, but there are threats from development.	3 RIGS sites, all in a favourable condition. These are not expected to deteriorate.	National Forest and Charnwood Forest covers part of Borough. River Mease SAC
Blaby District Council	4 biological SSSIs and 2 geological SSSIs. All sites in a favourable or unfavourable recovering (i.e. positive trend) condition (2016).	11 water bodies. None achieving 'good' ecological status (2016).	Two geological SSSIs and several RIGS (2016). No substantial changes recorded. Parts of the district contain Mineral Consultation Zones for sand and gravel and igneous rock.	River Soar valley, River Sence valley, Grand Union Canal and Rothley Brook provide wildlife and green infrastructure assets
Charnwood Borough Council	17 sites in the Borough. Majority of a favourable or unfavourable recovering condition (2013).	Water pollution potential threat. River Soar and River Wreake regionally significant wildlife corridors, and Black Brooke and Rothley Brook.	5 RIGS in the Borough of a favourable or unfavourable recovering condition (2013).	Charnwood Forest forms part of the eastern edge of the National Forest. Five RIGS.

	Condition of SSSIs	River and water quality	Geodiversity Assets	Strategic assets
Harborough District Council	The vast majority of the 14 sites are in an unfavourable (amber score) recovering (upwards trend) condition (2013).	Particular issues with phosphates and nitrates in the South (2014) resulting in an amber score. Quality improved since 1990. Most watercourses classified as 'bad' or 'moderate' (2014).	Geological SSSI. Tilton Railway in a favourable condition with unlikely threats (2013).	No National Nature Reserves (2015) Bitteswell Brook, River Swift, River Sence
Melton Borough Council	Most sites are in an unfavourable recovering condition. This results in a below average performing baseline (amber), but with an upward trend.	It has been highlighted as a priority to diffuse the pollution from agriculture and urban areas before entering the River Soar (2015).	Mineral Consultation Zones to east and west of Melton Mowbray. One designated RIGS.	2 National Nature Reserves.
Hinckley and Bosworth Borough Council	Seven SSSI – the majority are considered to be of a favourable or unfavourable recovering condition. Sheepy Meadows has been proposed but not yet confirmed as an additional SSSI. Baseline position is therefore a mix of good and average performance, but with positive trends.	River Sence at risk of increased pollutants from agricultural and urban sources (possible downward trend).	No designated RIGS or SSSI designated for their geological value.	National forest and Charnwood forest Covers part of Borough. Ashby Canal (SSSI) acts as a major recreational route and ecological source.
Oadby and Wigston Borough Council	Two SSSI of an unfavourable no-change condition.	River Sence has a 'moderate' ecological health (2009).	One RIG site at Kilby Bridge Pit (2010).	Kilby-Foxton Canal SSSI.
Summary	The condition of SSSIs is varied, with some districts displaying a strong baseline position of favourable units, but others experiencing several SSSIs in unfavorable condition. The general trend is positive though, with most SSSIs in an unfavorable condition showing recovery.	There is a need to improve water quality, with poor or moderate classifications being recorded for numerous watercourses. Catchments are at risk of pollution from diffuse sources, agriculture and development.	There are relatively few SSSI designated for their geological interest. There are several RIGs across the HMA, with broadly good condition.	

4. Health and Wellbeing

4.1 Policy context

National

4.1.1 National planning policy is clear that one of the roles of a development plan is to help create sustainable inclusive and mixed communities. The **NPPF** states that “The planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities” (paragraph 69). In particular there is a need to plan for a mix of housing based on current and future demographic trends (paragraph 50).

4.1.2 **Fair Society, Healthy Lives** ('The Marmot Review') (2010) investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health on the basis that there is: 'overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities'. To ensure that the built environment promotes health and reduces inequalities for all local populations there is a need to:

- Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality;
- Prioritise policies and interventions that both reduce health inequalities and mitigate climate change by improving active travel; good quality open and green spaces; the quality of food in local areas; and the energy efficiency of housing; and
- Support developments which provides high quality social infrastructure, including education, skills and sports facilities.

4.1.3 **The Public Health Outcomes Framework for England 2016-2019** builds upon these principles and seeks to achieve two key outcomes:

- Increased healthy life expectancy - Taking account of health quality as well as length of life; and
- Reduced differences in life expectancy and healthy life expectancy between communities - through greater improvements in more disadvantaged communities.

4.1.4 **The National Rural Proofing Guidelines** (2017) set out some important principles and actions for ensuring that rural areas are not disadvantaged including:

- Allow for higher rural unit delivery costs in funding formulae of allocations;
- Looking for alternative ways of delivering services in rural areas;
- Reducing the need to travel;
- Better integration and improvement of transport links;
- Allow local delivery bodies flexibility to find the best local solution(s);
- Make use of rural networks and meeting points such as post offices, parish halls, etc;
- Address the needs of smaller businesses;
- Use small area based data to identify issues and impacts; and

- Engage with rural stakeholders to identify the impact of proposals.

4.1.5 **Natural solutions for tackling health inequalities** (2014) sets out some important challenges and priorities for reducing health inequalities and childhood obesity, while improving mental health and the quality of life through interaction with the natural environment which include:

- Improving coordination and integration of delivery by ensuring interventions are user-led, through working in partnership with the public (education sector, health sector, public engagement);
- Building a stronger evidence base to ensure programmes are evidence-led;
- Proportionate and universal approaches to improving use of, and access to, the natural environment - ensuring sustainable delivery of services that use the natural environment; and
- Increasing the quality, quantity and use of natural environment assets that benefit people's health and help prevent ill health.

Regional

4.1.6 **Leicestershire Together** is a partnership made up of the county's major public service budget holders such as local councils, the police and the health service. It has been established for a number of years and as defined by the partnership itself, its aim is to work to improve the schools, colleges, businesses, shops, hospitals, roads, parks, homes, villages and towns in the county. The principle aim is to help make people in Leicestershire feel included, "richer, safer, better trained, healthier and happier".

4.1.7 **The Local Government and Public Involvement in Health Act** (2007) places a joint statutory duty on upper tier local authorities and local NHS to undertake a Joint Strategic Needs Assessment (JSNA) for their area. A JSNA was prepared in 2012 and updated in 2016 and was used to inform the Joint Health and Wellbeing Strategy.

4.1.8 This **Joint Health and Wellbeing Strategy** (2017-2022) aims to "add years of healthy life" by improving health throughout people's lives, reduce health inequalities and focus on the needs of the local population. Primarily this related to health service provision but includes objectives relevant to spatial land use planning. Including:

- Putting health and wellbeing at the centre of all public policy making by influencing other agendas such as economy, employment, housing, environment, planning and transport.
- Supporting the ageing population, including providing appropriate housing and adaptations to enable the frail elderly to live longer in their own homes.

4.1.9 The **Safer Leicestershire Partnership** brings together a number of agencies to reduce crime and disorder in Leicestershire including Leicestershire County Council, Leicestershire Police, Leicestershire Fire and Rescue Service, the Probation Service, local housing associations and others. The focus is on three key priorities:

- Tackling crime
- Focus on anti-social behaviour
- Supporting our communities.

4.1.10 The **Adult Social Care Accommodation strategy for older people 2016-2026** reflects the adult social care vision to prevent need, reduce need, delay need and meet the need for health and social care services within Leicestershire. It considers the demands of an increasingly older population and how accommodation can be provided in order to meet the demands and requirements of this demographic into the future.

Local

4.1.11 Within the adopted and emerging Local Plans across the HMA, there are a number of policies and principles relating to health and wellbeing. The common themes are drawn out and summarised in table 4.1 below.

Table 4.1: Key messages for Health and Wellbeing

Key policies & principles	Source / Authorities
Maintain and improve access to Green Infrastructure	Blaby District Council Local Plan Core Strategy (2013) - Policy CS14
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS12
	Harborough District Council Core Strategy (2011) - Policy CS8
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 19 and Policy 20
	Leicester City Council Core Strategy (2014) - Policy 13
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - EN3
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 8
Maximise Open Space, Sport and Recreation opportunities	Blaby District Council Local Plan Core Strategy (2013) - Policy CS15
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS15
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 19
	Leicester City Council Core Strategy (2014) - Policy 13
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EN7
	North West Leicestershire District Council Local Plan (2017) - Policy IF3
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 9
Develop Healthy Communities	All Local Authorities have recognised this as a key issue.
There is a need to plan for an ageing population	All Local Authorities have recognised this trend as a key issue.

4.2 Strategic baseline

- 4.2.1 According to the Leicestershire Health Profile⁵ (2015), the health of the population within Leicestershire is generally better than the England average, with a higher life expectancy for both men and women, and lower than average levels of deprivation. This applies to all Boroughs and Districts apart from Leicester City, as shown in Table 4.2.
- 4.2.2 The health profile shows that, in 2012, the rate of alcohol related harm hospital stays, self-harm hospital stays, smoking related deaths, and levels of adult physical activity within Leicestershire were all better than the England average. Likewise, the rates of hip fractures, sexually transmitted infections, people killed and seriously injured on the roads, and TB were better than average.
- 4.2.3 In terms of wellbeing, the Leicestershire Health Profile also shows that rates of statutory homelessness, long-term unemployment and drug misuse are also better than the England average⁵.
- 4.2.4 All districts across Leicestershire are experiencing an ageing population, and subsequently the demand on health care facilities over recent years has altered to reflect this demographic shift. Following the abolition of the Primary Care Trusts in April 2013, the East Leicestershire and Rutland Clinical Commissioning Group (ELR CCG) took on full responsibility for commissioning healthcare services for residents of East Leicestershire and Rutland, including Blaby District. Other local authority areas are covered by the West Leicestershire CCG, the Leicester City CCG⁶,
- 4.2.5 Obesity within Leicestershire fluctuates between Boroughs; however it is relatively aligned to the England average (Table 4.2). More specifically, obesity within children (Year 6) is slightly better than the England average, whilst obesity within adults is slightly worse.
- 4.2.6 Crime levels across Leicestershire are relatively low to those experienced across England, with six out of the eight LPAs recording steady decreases in crime over recent years. However this is not represented in Leicester City Centre, which has a predominantly higher crime rate than the England average and the surrounding districts (Table 4.2). In the administrative area of Leicester, perceptions of anti-social behaviour are also high with more people concerned by drug and alcohol related behaviour in their area than people nationally.
- 4.2.7 Access to open space and leisure facilities varies across Leicestershire, both in terms of its accessibility and its typology. Whilst there is a lack of formalised open space and sport ground provision in North West Leicestershire (Table 4.2), the National Forest is likely to offer green infrastructure which could be used for recreational purposes. Other local authority areas also suffer from unequal access to green infrastructure and open space. In Charnwood, this projects as an inadequate provision of parks in Loughborough and a lack of sports pitches for young people. Redundant quarry sites across Leicestershire, such as those in Blaby, offer recreational opportunities.

⁵ Leicestershire Health Profile (2015), Available: <http://psnc.org.uk/leicestershire-and-rutland-lpc/public-health-county/>

⁶ Sustainability Appraisal Main Report (2016) Blaby District Council, Available: <http://www.blaby.gov.uk/about-the-council/strategies-plans-policies/environment-and-planning/local-plan/local-plan-delivery-dpd/>

4.3 Future baseline, key Issues and opportunities

- 4.3.1 With population expected to both continue rising and ageing, the challenges associated with this demographic shift are likely to be exacerbated (such as increased pressure on services, providing adequate housing, and providing the health care required for this population). However, policies within the emerging and adopted local plans do make reference to the ageing population, with measures in place to help adapt to changes.
- 4.3.2 All local authorities express a desire to increase access to open space, sport and recreational facilities. With awareness and investment, increased provision could be delivered.
- 4.3.3 Whilst potential transport improvements could improve access to health services, population growth is likely to create additional pressure on health service provision. Discrepancies' of health across Leicestershire as a whole, but also within individual Boroughs, is therefore likely to be exacerbated unless accessibility is improved.
- 4.3.4 Accessibility within rural areas, housing affordability, and access to specialist housing for the elderly have been highlighted as potential concerns from several LPAs.

4.4 Strategic trends

- 4.4.1 The table below outlines strategic trends and issues relating to health and wellbeing across the Plan area.

Table 4.2: Key Health and Wellbeing issues across Leicester and Leicestershire.

Key issues / trends				
Authority	Health and Life Expectancy	Access to open space/ leisure facilities	Crime	Access to health facilities ⁷
Leicester City	Life expectancy lower than England average. Deprivation above England average. Disparity exists between the inner city areas and outer estates (2016).	District parks are accessible within the city; however there is a lack of public space serving the city centre (2016).	The city has a higher rate of domestic burglary, robbery, vehicle crime and violent crime than the national average (2016).	
North West Leicestershire	Shows an older population profile than national average putting certain demands on healthcare services (2016).	Shortfall in the provision of recreation grounds and open space (2007).	Crime is falling from a relatively low starting point (2016).	Majority of the district is within 2.5 miles of a GP (2012).
Blaby District Council	Life expectancy lower than England average. Deprivation is lower than average (IMD 2015) Health is generally good. 7.03% people stated that their health is 'Not Good' compared to 9.03% in England (2012).	There is an undersupply of children's and young persons-play space, informal open space and allotments (2015).	Reported crimes and anti-social behavior declined from 2007-2015. However, levels have risen slightly in 2016 and 2017 (2017).	Vast majority of district within 2.5 miles of GP (2012).
Charnwood Borough Council	Varied health across the Borough. Deprivation is lower than the England average (IMD 2015). Life expectancy above national average (2016).	Relatively good access to open space, but deficiency of access to natural green space sites across the Borough (2013).	Violent crime levels better than England average (2015). Antisocial behavior perceived as one of the main threats (2013).	Majority of Borough within 2.5 miles of GP. North east is less well served (2012).
Harborough District Council	Higher life expectancy than the national average (2011 Census). But lack of services in rural areas which could be exacerbated with an ageing population (2014 ⁸).	Has a higher percentage of green space than the national average. (2005). Deficiency in the provision of certain types of GI (Parks and Gardens, Allotments, children's).	District performs better than the violent crime levels as experienced compared to the England average.	Mixed access to facilities. Two small hospitals. Some reliance on Leicester and Kettering for healthcare services. Rural areas would struggle to support additional demand (2014).

⁷ Figure 3.7 Map of GP Practices (data taken from 2012), North West Leicestershire SA/ SEA Scoping Report (2016), North West Leicestershire District Council

⁸ Harborough Local Plan SA Scoping Report (2014)

	Health and Life Expectancy	Access to open space/ leisure facilities	Crime	Access to health facilities
Melton Borough Council	Health better than national average (2015).	Lack of open space for amenity and recreation in the north and east of Borough (2015). Slightly less satisfaction with facilities than the national rate.	Motor vehicle theft and records of violent crime have reduced from 2001-2011. Crime on the whole has remained stable from 2012-2017 (2017).	Maternity hospital with one ward for general rehabilitation. GPs in rural areas. Majority of areas located 5- 7.5 miles to services within Borough (2012).
Hinckley and Bosworth Borough Council	Mixed health compared to national average. Life expectancy higher for males and females. Mortality rates are lower than the England Average (2017).	Wide resource of recreational activities, including Market Bosworth Country Park. (2014).	Overall levels of crime reduced from 2006- 2010 and has fluctuated between 2012 and 2017, but fear of crime still identified as a significant issue (2017).	Access to facilities considered an issue particularly in rural areas. Some local services at risk of closure (2014).
Oadby and Wigston Borough Council	Health indicators are varied compared to the England average (2014), however life expectancy higher than England average.	There is a deficiency of various open space and recreational typologies (2013).	Violent crime levels significantly below England average (2013). Best performing district with regards to satisfaction with policing (2013).	Concentration of services within key settlement areas/ within 2.5 miles (2012).
Summary	Performance against indicators of health and wellbeing varies across the HMA. In broad terms, most authorities have relatively low levels of deprivation and higher than average life expectancy. Leicester City is the exception, as well as there being pockets of deprivation and poorer health across the County.	Though there are a range of recreational facilities, open space and leisure facilities, most authorities experience some shortage of open space of different typologies.	Levels of crime are broadly low across the County, with a general reduction in overall crime rates. However, the fear of crime remains a problem, and there are still areas of higher crime and anti-social behaviour such as Leicester City and other urban areas.	The majority of areas across the HMA are within 2.5 miles to a GP or health centre. However, accessibility in some rural areas is not as good.

5. Housing

5.1 Policy context

National

- 5.1.1 In February 2017, the Government published a housing white paper entitled “Fixing our broken housing market”. This establishes the government’s plans to reform the housing market and increase the supply of new homes in England through a series of four proposals. These include:
- Planning for the right homes in the right places
 - Building homes faster
 - Diversifying the Market
 - Helping people now
- 5.1.2 In November 2011 the Government launched a national housing strategy entitled ‘**Laying the Foundations: A Housing Strategy for England**’. This sets out measures to support the delivery of new homes and aspirations, support choice and quality for tenants, tackling empty homes and providing better quality homes, places and housing support. Actions include the following:
- Establishment of the Growing Places Fund to support infrastructure that unblocks stalled housing and economic growth;
 - Launch of ‘Get Britain Building’ investment fund to support building firms in need of development finance;
 - Support a new build indemnity scheme to provide up to 95 percent loan to value mortgages;
 - Putting in place incentives for housing growth through the New Homes Bonus, Community Infrastructure Levy and proposals for local business retention;
 - A simplified National Planning Policy Framework;
 - Supporting choice and quality for tenants through supporting growth and investment in the private rented housing market;
 - Reform of social housing through the Localism Act 2011;
 - Considering how to encourage more affordable housing; and
 - Support, protections and opportunities for struggling households, including prioritisation for the vulnerable.
- 5.1.3 One of the principle roles of the **NPPF** (2012) is to deliver housing, based on an evidence base to ensure that enough housing is identified for development that will meet housing needs, both for market and subsidised ‘affordable’ homes.
- 5.1.4 The NPPF focuses on sustainable development and the need for the planning system to perform a number of roles including a social role “supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations” (paragraph 7).

- 5.1.5 Section 6 of the NPPF relates to housing delivery, stating that: “To boost significantly the supply of housing, local planning authorities should:
- use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in this Framework, including identifying key sites which are critical to the delivery of the housing strategy over the plan period;
 - identify and update annually a supply of specific deliverable sites sufficient to provide five years’ worth of housing against their housing requirements with an additional buffer of 5% (moved forward from later in the plan period) to ensure choice and competition in the market for land. Where there has been a record of persistent under delivery of housing, local planning authorities should increase the buffer to 20% (moved forward from later in the plan period) to provide a realistic prospect of achieving the planned supply and to ensure choice and competition in the market for land;
 - Identify a supply of specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15;
 - For market and affordable housing, illustrate the expected rate of housing delivery through a housing trajectory for the plan period and set out a housing implementation strategy for the full range of housing describing how they will maintain delivery of a five-year supply of housing land to meet their housing target; and
 - Set out their own approach to housing density to reflect local circumstances.”
- 5.1.6 Paragraph 50 relates to the type of housing that should be delivered, identifying that “to deliver a wide choice of high quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities, local planning authorities should:
- Plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes);
 - Identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand; and
 - Where they have identified that affordable housing is needed, set policies for meeting this need.”
- 5.1.7 NPPF is also clear that to promote sustainable development in rural areas, housing should be located where it will enhance the vitality of rural communities, although isolated dwellings in the countryside are only permitted subject to certain circumstances (paragraph 55).
- Regional
- 5.1.8 The **Housing and Economic Development Needs Assessment (HEDNA) for Leicester and Leicestershire** (2017) provides an integrated assessment of future housing needs, the scale of future economic growth and the quantity of land and floorspace required for B-class employment development across the various authority areas for the period between 2011 and 2031/36.
- 5.1.9 The **Joint Strategic Needs Assessment for Leicestershire** (2015) identifies that local housing strategies across the Leicestershire county have identified the following issues affecting the housing needs of vulnerable people:

- A need to identify non-decent homes occupied by vulnerable people;
- Higher demand for disabled adaptations to homes in the private sector;
- Unsuitable housing due to special needs / mobility needs;
- An increased need for smaller, suitable units of accommodation to meet the national trend of an increasing proportion of older households and to meet the accommodation needs of young single people – especially relevant with proposed benefit changes;
- A lack of move-on accommodation and tenancy support; and
- It is anticipated that with the proposed reforms for welfare benefits coupled with the impacts of the Localism Act 2011 there will be a much greater need for on-going housing advice and support coupled with financial inclusion initiatives.

5.1.10 **The Strategic Housing Market Assessment (SHMA)** (2014) sets the housing need recommendations for the Leicester and Leicestershire Housing Market Area (HMA). The HMA covers all the authorities of Leicestershire County.

Local

5.1.11 Table 5.1 below highlights the common messages, policy approaches and strategic priorities for housing across the HMA.

Table 5.1: Key messages for housing

Strategic approaches	Source / Authorities
Sustainable Urban Extensions	Blaby District Council Local Plan Core Strategy (2013) - Policy CS3 (land west of the M1, Lubbethorpe SUE 4,250 new homes)
Strategic Regeneration Area / Ashton Green SUE	Charnwood Borough Council Local Plan Core Strategy (2015) - Policies CS19, CS20, CS21 and CS22 (propose several urban extensions to accommodate housing growth)
Strategic Development Areas	Harborough District Council Core Strategy (2011) (Potential Strategic Development Areas for large scale housing development (at least 1000 homes) at Market Harborough, Lutterworth and Scraptoft)
Sustainable Neighbourhoods	<p>Leicester City Council Core Strategy (2014) - Policy CS4 and CS5 (mixed use led redevelopment guided by masterplans and SPDs. The Waterside is to be a large residential development close to the city centre. Plans for 3,500 new homes at Ashton Green, Leicester)</p> <p>Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy SS4 and Policy SS5 (details the South Melton Mowbray Neighbourhood, 2000 new homes and Mowbray North, 1700 new homes of which 1500 will be delivered before 2036)</p> <p>North West Leicestershire District Council Local Plan (2017) - Policy H3 (details land north of Ashby de la Zouch for around 2,050 homes and large scale residential development in Coalville, Measham and Kegworth)</p>

Strategic approaches	Source / Authorities
<p>Housing distribution: The distribution of housing is based on the ability of settlements to accommodate additional growth.</p>	<p>Blaby District Council Local Plan Core Strategy (2013) - Policy CS5 (Strategy of 5750 across principal urban areas including a new SUE and proportion of dwellings to individual or groups of settlements by type)</p> <p>Hinckley and Bosworth Borough Council Core Strategy (2009) - Policies 6-13 (outlines requirements for individual settlements from key urban areas to rural hamlets)</p> <p>Melton (Policy SS2 outlines the development strategy including the proportion each settlement type).</p> <p>North West Leicestershire (Policy S2 Settlement Hierarchy sets out the best serviced settlements which will be the focus of growth).</p>
<p>Affordable housing: - To optimise the provision of affordable housing to meet local needs;</p>	<p>Blaby District Council Local Plan Core Strategy (2013) - Policy CS7 (25% on sites of 15+ dwellings).</p> <p>Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS3 (target 20-40%)</p> <p>Harborough District Council Core Strategy (2011) - Policy H2 (target 40% on sites with 10+ dwellings)</p> <p>Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 15 (target urban 20% and rural 40%)</p> <p>Leicester City Council Core Strategy (2014) - Policy CS7 (target from 15% to 30% on sites of 15+ dwellings)</p> <p>Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy C4 (target of 37% on sites of 11+ units or where floorspace exceeds 1000m²)</p> <p>North West Leicestershire District Council Local Plan (2017) - Policy H4 (target 5%-30%)</p> <p>Oadby and Wigston Pre-Submission Draft Local Plan (2017) - (target 10%-30%)</p>
<p>Mix of housing: - To provide the appropriate quantity and mix of housing;</p>	<p>Blaby District Council Local Plan Core Strategy (2013) - Policy CS8</p> <p>Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS3</p> <p>Harborough District Council Core Strategy (2011) - Policy H5</p> <p>Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 16</p> <p>Leicester City Council Core Strategy (2014) - Policy CS6</p> <p>Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy C2</p> <p>North West Leicestershire District Council Local Plan (2017) - Policy H6</p> <p>Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 12</p>

Strategic approaches	Source / Authorities
Deliver appropriate Gypsy and Traveller Provision	All authorities include policy on Gypsy and Traveller pitch provision.

5.2 Strategic baseline

5.2.1 The whole of Leicester and Leicestershire has been defined a 'housing market area' (HMA), across which people travel to work and move house. The 8 local authorities have worked together alongside the Local Economic Partnership to commission a 'Housing and Economic Development Needs Assessment'⁹ (HEDNA) (2017) which addresses elements of the 'Duty to Cooperate'. The HEDNA calculates the 'objectively assessed needs' (OAN) for housing both up to 2031 and to 2036. Overall, the HEDNA identifies an objectively assessed need for 117,900 dwellings across the area between 2011 and 2036.

5.2.2 Table 5.2 shows the OAN of additional housing needed until 2031 and 2036 for each area as set out in the HEDNA.

Table 5.2 Objectively assessed housing need (2017) Housing and Economic Development Needs Assessment

Area	Number of houses 2011 to 2031	Number of houses 2011 to 2036
Blaby	7400	9025
Charnwood	20620	24850
Harborough	10640	12850
Hinckley and Bosworth	9420	11350
Leicester City	33840	41700
Melton	3720	4250
North West Leicestershire	9620	11200
Oadby and Wigston	2960	3875
HMA TOTAL ¹⁰	96580	117900

5.2.3 According to the 2017 HEDNA for Leicester and Leicestershire, the median house price within the HMA was £166,500 in 2015. The following table lists the median house price for all the partner local authorities.

Table 5.3 Median House Price 2015

Local Authority	Median House Price 2015
Leicester City	£132,000
Blaby	£171,500

⁹ Housing and Economic Development Needs Assessment , Main Report Leicester and Leicestershire Authorities and the Leicester and Leicestershire Enterprise Partnership, Final Report, January 2017

¹⁰ The Total received OAN for the HMA is lower than the sum of the OAN for individual authorities because the OAN for Melton BC and North West Leicestershire DC has been increased to meet economic needs locally.

Local Authority	Median House Price 2015
Charnwood	£175,000
Harborough	£228,995
Hinckley & Bosworth	£169,995
Melton	£172,000
NW Leicestershire	£165,000
Oadby & Wigston	£166,000

Source: HEDNA 2017, GLH Analysis, Land Registry Price Paid Data

- 5.2.4 As can be seen from the house price table above, Harborough, Charnwood, Melton, Blaby, and Hinckley & Bosworth are noted as having comparatively higher median prices than the overall HMA median value.
- 5.2.5 Delivery of annual housing targets fluctuates between the local authorities, and on an annual basis. **Table 5.4** illustrates the latest available information with regards to housing completions by local authority. Various sites are highlighted as development opportunities by each LPA, with particular mention to the Leicester Principal Urban Area (PUA).

5.3 Projected baseline, Issues and opportunities

- 5.3.1 For the period 2006-2036, there is a projected household increase of 20.7% within Leicester and Leicestershire, totalling 106,625 dwellings¹¹. The projections indicate a need for an average of 4,265 dwellings per annum to 2036 across the county.
- 5.3.2 In order to ensure that all households who require financial support are able to meet their housing need, in the period 2011 to 2036, 2,238 affordable homes per annum will also need to be developed. The evidence presented in the 2017 HEDNA highlights delivery of affordable housing as particularly necessary in Oadby and Wigston and Blaby, where the need for this housing tenure is considered to be acute.
- 5.3.3 There is also expected to be a significant increase of older person headed households to 2036. The HEDNA predicts that between 2011 and 2036, the total number of people aged 65 or more will increase by 75%. Housing units will therefore need to be delivered both in terms of quantity and also in terms of specialist requirements, in order to cater to these demographic forecasts.
- 5.3.4 As currently exists, there is variance across the local authorities in terms of completions and their ability to meet the housing requirements of their administrative areas. There is potential scope to absorb housing development across local authority borders.
- 5.3.5 Absorbing unmet need into neighbouring local authorities would need to be complemented with cross-border infrastructure improvements, such as highways development, in order to serve the population distribution.

5.3.6

¹¹ Housing and Economic Development Needs Assessment , Main Report Leicester and Leicestershire Authorities and the Leicester and Leicestershire Enterprise Partnership, Final Report, January 2017

- 5.3.7 Housing developments should value watercourses as an asset to the development as they provide multiple benefits if incorporated into local green spaces with adequate space and appropriate enhancements. This can raise the value of the housing, build resilience for flooding, provide space for sustainable transport routes, increase biodiversity and provide important recreational spaces for residents which can also benefit the health of the residents.

Table 5.4: Key issues and trends for housing

Key issues / trends				
Authority	Current housing target	Delivery of housing target	Indicative supply	Key developments
<i>Leicester City</i>	Target of 1280 per annum.	Unlikely to be able to meet its housing need; the extent of which will be identified through the plan making process. Net completions in 2010/11 were 977, in 2015/16 this had increased to 1,131.	21,462 built and committed 2011-2016 3,018 (SHLAA) capacity 2036	Strategic Regeneration Area, including Leicester Waterside. Ashton Green SUE
<i>North West Leicestershire</i>	Target of 520 per annum.	Increase in completions from 2010/11 (186) to 2016/17 (731).	12,015 built and committed 2011-2016 14,286 (SHLAA) capacity 2036	South East Coalville Urban Extension (3,500 dwelling units) Urban extensions at Coalville and Ashby
<i>Blaby District Council</i>	Target of 380 per annum.	Consistent increase in annual completions since 2008/09 (218) to 2016/17 (743).	8064 built and committed 2011-2016 15,682 (SHLAA) capacity 2036	Lubbesthorpe SUE under construction along the A47 (4,250 dwellings), with the first completions expected in the 2016/17 monitoring year 12 PUA - Glenfield, Kirby Muxloe, Leicester Forest East, Braunstone Town and Glen Parva
<i>Charnwood Borough Council</i>	Target of 820 per annum.	Housing completions have increased from 697 in 2011/12, to 903 in 2016/17.	17,146 built and committed 2011-2016 16,435 (SHLAA) capacity 2036	SUE 4,500 dwellings to north east of Leicester (delayed), SUE 3,000 to west of Loughborough (delayed), Focus dev in PUA, Loughborough and Shepshed (market towns) + Service Centres considered appropriate. Smaller settlements not considered appropriate for development.

¹² Blaby District Council Site Selection Paper – Site Assessments for Housing September 2016.

Key issues / trends				
Authority	Current housing target	Delivery of housing target	Indicative supply	Key developments
<i>Harborough District Council</i>	Target of 475 per annum.	Consistently not delivered housing target in the period 2011/12- 2013/14. Delivered above the target for 2014/15 and 2015/16. Average annual completions of 398 units between 2011/12 and 2015/16.	7,103 built and committed 2011-2016 23,350 (SHLAA) capacity 2036	Areas adjoining the PUA (Thurnby/ Bushby, Scraptoft). Potential Scraptoft SDA (1,202 units) Lutterworth East SDA Market Harborough
<i>Melton Borough Council</i>	Target of 245 per annum.	Housing completions have increased from 2012/13 (64) to 2016/17 (147). However, a considerable shortfall means that 282 dwellings per annum are needed to meet the local plan target within the plan period.	1,518 built and committed 2011-2016 35,132 (SHLAA) capacity 2036	Melton North and South Sustainable Neighbourhoods as mentioned earlier in the report to meet the major bulk of need within the Plan period. The completion rate is significantly lower than the rate provisionally set by the Council. The new Melton Local Plan will release additional sites to meet the strategic housing requirement to 2036.
<i>Hinckley and Bosworth Borough Council</i>	Target of 450 per annum.	Fluctuations over previous year. Significant increase in completions between 2012/13 (227) to 2016/17 (556).	9,334 built and committed 2011-2016 15,984 (SHLAA) capacity 2036	Barwell SUE (2500 dwellings) East Shilton (1,550 dwellings) The latest RLA (2015/16) states that initial completions on both sites are anticipated to be in the monitoring year 2018/19.
<i>Oadby and Wigston Borough Council</i>	Target of 90 per annum.	Delivered under target in the period 2010/11 to 2013/14, however in the last three years of monitoring the delivery has been in excess of the target. 175 units were delivered in 2016/17.	1,425 built and committed 2011-2016. 1,384 (SHLAA) capacity 2036	Local Plan Preferred Options propose a number of key sites including Oadby Sewage Treatment Works, and the Wigston Direction for Growth Area which is carried over from the existing Core Strategy.

6. *Employment and the Economy*

6.1 Policy context

National

- 6.1.1 The importance of the economy in achieving sustainable development is reflected in the **NPPF**. At paragraph 7, it states the economic role of the planning system is:
- 6.1.2 “Contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure”.
- 6.1.3 A key theme of the **NPPF** is ‘Building a strong, competitive economy’. This makes clear the role of the planning system in delivering sustainable economic growth. This includes setting criteria for the delivery of strategic employment sites and support of existing business sectors (paragraph 21).
- 6.1.4 The NPPF also supports the role of town centres in securing economic growth and as the focus community activity. Town centres should be promoted to provide a diverse retail offer and should be the focus of retail activity (paragraph 23). Office development should also be focused in town centres.
- 6.1.5 Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development (paragraph 28). To promote a strong rural economy, local and neighbourhood plans should:
- Support the sustainable growth and expansion of all types of business and enterprise in rural areas
 - Promote the development and diversification of agricultural and other land-based rural businesses;
 - Support sustainable rural tourism and leisure developments that benefit businesses in rural areas; and
 - Promote the retention and development of local services and community facilities in villages.
- 6.1.6 Building our Industrial Strategy (Green Paper, 2017) makes it clear that we need a modern industrial strategy. Its prime objective is to improve living standards and economic growth by increasing productivity and driving growth across the whole country. The paper sets out 10 pillars for the economy; investing in science, research and innovation, developing skills, upgrading infrastructure, supporting businesses to start and grow, improving procurement, encouraging trade and inward investment, delivering affordable energy and clean growth, cultivating world-leading sectors, driving growth across the whole country, creating the right institutions. The strategy mentions regionally important schemes such as Midlands Rail Hub, and outlines that transport projects will be more closely linked to economic growth and priorities.
- 6.1.7 The **UK Broadband Impacts Study** addresses what economic, social and environmental impacts are likely to be seen from improvements in broadband performance and what return is likely to be seen from substantial public funds going into upgrading the UK’s broadband infrastructure. The report finds that these interventions are likely to yield:

- A projected return of approximately £20 in net economic impact for every £1 of public investment;
- A total net employment impacts from faster broadband to rise to about 56,000 jobs at the UK level by 2024, with about 20,000 jobs are attributable to the publicly funded intervention;
- A material impact on reducing the digital divide for both households and businesses;
- 60 million hours of leisure time through teleworking facilitated by faster broadband per annum in the UK with total household savings rising to £270 million p.a. by 2024 by avoiding commuting costs (£45 million of which are attributable to intervention); and
- 1.6 million tonnes of carbon dioxide equivalent (CO2e) savings per annum, by 2024, through reduction in predominant car usage due to increased telework, video and online collaboration tools, and more energy efficient public cloud platform data storage.

Regional

- 6.1.8 The **Leicestershire Local Economic Partnership (LLEP)** has been established to provide vision and strategic leadership to drive economic growth. The LLEP prepared the Strategic Economic Plan 2014-2020 (SEP). This contains the vision to “create a vibrant, attractive and distinctive place with highly skilled people making Leicester and Leicestershire the destination of choice for successful businesses. It identifies growth areas including the East Midlands Enterprise Gateway, the Coalville Growth Corridor, Loughborough, South West Leicestershire and the Leicester Urban Area. It also identifies the potential for the Strategic Rail Freight Interchange, identified as a 250 acre distribution and logistics development.
- 6.1.9 The LLEP is currently in the process of refreshing its strategic economic plan.
- 6.1.10 The LLEP is currently consulting on a Strategic Growth Plan that outlines a shared vision for housing, employment and economic growth throughout Leicestershire. It proposes a need for infrastructure investments and reaffirms the importance of strengthening Leicester as the central core city for the region.
- 6.1.11 The **Midlands Engine for Growth Propectus (2016)** sets out how the east and west midlands will come together to achieve a collective approach to the delivery of 300,000 jobs and £34 billion of growth in the next 15 years. There is a focus on five key themes; promotion for inward investment, Midland Connect for improving transport infrastructure, research and innovation growth, providing finance for business, developing skills.

Local

- 6.1.12 Table 6.1 below highlights the common messages, policy approaches and strategic priorities for biodiversity within the adopted and emerging local plans across the HMA.

Table 6.1: Key messages for employment and economy

Key policies & principles	Source / Authorities
Promote quality, quantity and mix of employment opportunities	All authorities
Support appropriate education and training opportunities.	All authorities

Key policies & principles	Source / Authorities
Support city / town centre regeneration	Blaby District Council Local Plan Core Strategy (2013) - Policy CS13
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS9
	Harborough District Council Core Strategy (2011) - Policy RT1 and RT2
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 1, 2 and 3
	Leicester City Council Core Strategy (2014) - Policy CS1 and CS4
	North West Leicestershire District Council Local Plan (2017) - Policy EC8 - EC12
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 27 and 28
Support rural economic development – diversification, leisure, tourism	Blaby District Council Local Plan Core Strategy (2013) - Policy CS6
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS10
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 7
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EC2 and Policy EC8 (which is specifically for 'sustainable tourism')
Support and promote tourism	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS7
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 22, Policy 23 and Policy 27
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EC8
	North West Leicestershire District Council Local Plan (2017) - Policy EC13
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 17

6.2 Strategic baseline

6.2.1 Across Leicester and Leicestershire there are notable percentage shares for manufacturing, education, transport and storage and mining and quarrying which exceed the average for

England. Growth in the economy in these and other priority sectors is encouraged through the Strategic Economic Plan.

- 6.2.2 In terms of economic activity, the Leicester and Leicestershire Enterprise Partnership (LLEP) is a strategic body which operates in the area led by a board made up of local government and business leaders as well as senior education and third sector representatives.
- 6.2.3 The LLEP covers the City of Leicester and County of Leicestershire which together, make up the largest economy in the East Midlands. This economy is *“Worth £19.4bn a year...is central to the prosperity of the Midlands, providing 435,000 jobs and hosting 33,000 trading businesses – many of which are in the manufacturing and logistics sectors”*¹³.
- 6.2.4 Between November 2014 and January 2015, the LLEP undertook a business survey¹⁴. The headlines included that business confidence in both profitability and turnover has remained at the high levels seen previously, with a net of 55% of respondents expecting profits to rise over the following year and a net 65% predicting an increase in turnover.
- 6.2.5 It also found that 64% of the business in the LLEP had recruited in 2013-2014 and also that 31% of workforces had grown over the same period.
- 6.2.6 Whilst there are strong performances in some areas, there are also issues of lack of job opportunities (for skilled workers) in some of the authorities outside of Leicester. This is partly because it is difficult to retain some types of skills given the range of jobs and salaries available in Leicester City or other larger settlements in the Midlands such as Northampton or Nottingham.
- 6.2.7 The occupational structure of Leicester and Leicestershire is dominated by manufacturing, public administration, defence, health and educational employment. In particular, transport and storage, mining, and quarrying activities exceed the England average. With regards to the East Midlands, the Leicester and Leicestershire economy is the largest of the surrounding counties.
- 6.2.8 Some authorities (For example, Hinckley and Bosworth) have expressed that there is an over reliance on manufacturing, particularly in the urban areas. This could present issues should there be a decline on certain manufacturing sectors. Diversifying the economy and developing the role of certain ‘growth sectors,’ such as high value manufacturing, service and creative industries, and tourism, is therefore desirable.
- 6.2.9 In terms of employment, there have been positive trends in all authorities, with a reduction of unemployment across the board (ONS, 2011-2016). This has led to a relatively good position in all authorities, though levels remain higher in Leicester City compared to the other authorities.
- 6.2.10 In terms of qualifications and skills, there is considerable variation across the local authority areas. Notably, graduate retention in the region is low following the completion of undergraduate and postgraduate courses.
- 6.2.11 Various strategic employment locations are highlighted within Table 6.2, notably the East Midlands Gateway, Magna Park, Meridian Business Park, Grove Park, the Watermead regeneration corridor, Optimus Point, the proposed Lubbethorpe SES, and several of the larger settlement areas. The table also shows that unemployment figures across Leicestershire are falling from their 2011 levels whilst more people are gaining qualifications within the same period. Such trends have the ability to affect future employment patterns.

¹³ LLEP (2016) About us - <https://www.llep.org.uk/about-us/>

¹⁴ DNLCC, Quarterly Economic Review, Quarter 2, 2014

6.2.12 Blaby District is now being marketed as one of the prime locations for manufacturing industries, distribution warehouses and offices in Leicestershire. New economic development is centred mainly around the M1 and M69 junction¹⁵.

6.3 Projected baseline, key issues and opportunities

- 6.3.1 Many of the major economic generators are located on the periphery of the Leicester and Leicestershire area, and as such may not be considered accessible or particularly sustainable sites for local employment within the county. This is particularly the case with East Midlands Airport, strategic logistics and distributions at Magna Park, and the Horiba MIRA (Motor Industry Research Association) enterprise park. Public transport links to these areas could improve with investment, but they are likely to remain car-dominated without substantial intervention and investment.
- 6.3.2 Given the central location of Leicester and Leicestershire within the 'Golden Triangle', and competitive daily-drive times to the majority of the UK population, the county is particularly catered to the strategic and logistics sector. There is potential to capitalise on this offering and to distribute the benefits of these services across the Leicester and Leicestershire area.
- 6.3.3 With this in mind, several authorities have highlighted the need to deliver land for rail and non-rail strategic distribution across the HMA. Development of this kind could also offer an opportunity to develop cross-border relations with surrounding areas (such as Coventry and Warwickshire). The area around the East Midlands Airport is particularly attractive to logistics operators.
- 6.3.4 The M1 corridor and associated junctions intersects Leicestershire from the north to the south, acting as a key transport route which is attractive to economic development. The A5 trunk road also holds economic appeal as it runs along the southern border of Leicestershire, through Harborough, Blaby and Hinckley and Bosworth.
- 6.3.5 Development of strategic distribution interchanges (both rail and non-rail served) could also offer an opportunity to develop cross-border relations with surrounding areas (such as Coventry and Warwickshire).
- 6.3.6 The majority of local authorities support the growth of the Leicester Principal Urban Area (PUA) and larger service centres, whilst seeking to protect and maintain the character of rural centres by safeguarding them from development which exceeds their need (urban expansion, rural restraint). Sites for smaller employment uses or the expansion of existing businesses are also supported in sustainable locations.
- 6.3.7 New business development should value watercourses as an asset to the development as they provide multiple benefits if incorporated into local green spaces with adequate space and appropriate enhancements. This can raise the appeal of the development as place to work by providing important outside space for workers; improving their health & wellbeing. Such design would also improve the sustainability credentials of the business by building resilience for flooding, supporting local biodiversity and providing space for sustainable transport routes.

¹⁵ Sustainability Appraisal Main Report (2016) Blaby District Council, Available: <http://www.blaby.gov.uk/about-the-council/strategies-plans-policies/environment-and-planning/local-plan/local-plan-delivery-dpd/>

Table 6.2: Strategic issues and trends for economy and employment across Leicester and Leicestershire

Key issues / trends			
Authority	Unemployment ¹⁶	Education	Key employment locations
Leicester City	Falling, unemployment figure now at 5.2% (Jun 2017). (For reference: 11.4% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 38% to 28%), and more with Level 4 Qualifications (from 16% to 21%) (2011).	City Centre and regeneration areas. Leicester and De Montfort University Global Space Technologies Hub
North West Leicestershire	Falling, unemployment figure now at 3.5% (Jun 2017). (For reference: 5.5% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 33% to 26%), and more with Level 4 Qualifications (from 16% to 24%) (2011).	East Midlands Gateway. Regeneration of Coalville Urban Area.
Blaby District Council	Falling, unemployment figure now at 3% (Jun 2017). (For reference: 4.8% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 27% to 22%), and more with Level 4 Qualifications (from 17% to 24%) (2011).	Meridian Business Park, Grove Park at J21. Optimus Point, Glenfield Proposed Lubbesthorpe SES
Charnwood Borough Council	Falling, unemployment figure now at 3.6% (Jun 2017). (For reference: 6.7% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 22% to 18%), and more with Level 4 Qualifications (from 19% to 26%) (2011).	Watermead Regeneration corridor. Loughborough Science and Enterprise Park. Sustainable Urban Extensions North of Birstall, West of Loughborough, Northeast of Leicester.
Harborough District Council	Falling, unemployment figure now at 3% (Jun 2017). (For reference: 4.4% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 33% to 26%), and more with Level 4 Qualifications (from 23% to 31%) (2011)	Magna Park, Lutterworth Market Harborough Strategic Development Areas
Melton Borough Council	Falling, unemployment figure now at 4.2% (Jun 2017). (For reference: 5% Jun 2011)	Improving, fewer people with no qualifications in 2011 than 2001 (from 27% to 21%), and more with Level 4 Qualifications (from 18% to 26%) (2011)	Agri-food and drink processing at Melton Mowbray

¹⁶ Taken from ONS Annual Population Survey

Key issues / trends			
Authority	Unemployment	Education	Key employment locations
Hinckley and Bosworth Borough Council	Falling, unemployment figure now at 3.5% (Jun 2017). (For reference: 6.4% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 30% to 24%), and more with Level 4 Qualifications (from 15% to 24%) (2011)	Horiba MIRA enterprise park, Hinckley Centre for Connected Autonomous Vehicles
Oadby and Wigston Borough Council	Falling, unemployment figure now at 3.3% (Jun 2017). (For reference: 6.7% Jun 2011).	Improving, fewer people with no qualifications in 2011 than 2001 (from 28% to 22%), and more with Level 4 Qualifications (from 17% to 24%) (2011)	Leicester Principal Urban Area Oadby, Wigston and South Wigston
Summary	Unemployment is relatively low across the HMA with rates falling in all authorities between 2011 and 2017. Although, a closer inspection of the results reveals a small increase in most authority areas between 2016 and 2017.	Between 2001 and 2011 there has been a reduction in the number of people with no qualifications across each of the authorities. There has also been an increase in the number of people with Level 4 qualifications in each of the authorities over the same time period.	Key employment locations include the City Centre, market towns, regeneration corridors and strategic business parks linked to the road and rail networks.

7. *Transport and Access*

7.1 Policy context

National

- 7.1.1 The **NPPF** identifies that: “Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel.” (Paragraph 29)
- 7.1.2 The NPPF (paragraph 30) is clear that there is not only the need to find transport solutions that support reductions in greenhouse gas emissions and reduce congestion, but also in preparing Local Plans that support a pattern of development which facilitates the use of sustainable modes of transport.
- 7.1.3 All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure.
- 7.1.4 Paragraph 35 states that: “Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should:
- Be located and designed where practical to accommodate the efficient delivery of goods and supplies;
 - Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
 - Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
 - Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
 - Consider the needs of people with disabilities by all modes of transport.”
- 7.1.5 There are plans to bring the new High Speed 2 (HS2) route through the county as part of the Phase 2 Eastern leg connecting the East Midlands, South Yorkshire, Leeds and the North East.

Regional

- 7.1.6 The **Leicestershire County Council Local Transport Plan 3** (LTP3) covers the period 2011 to 2026. The LTP3 is the key mechanism for delivering integrated transport at a local level, and they help to promote transport as an enabler of other things, such as economic growth. LTP3 follows the earlier plans of LTP1 and LTP2.

The long-term vision for the transport system over the course of LTP3 incorporates six goals.

Goal 1: A transport system that supports a prosperous economy and provides successfully for population growth

Goal 2: An efficient, resilient and sustainable transport system that is well managed and maintained

Goal 3: A transport system that helps reduce the carbon footprint of Leicestershire

Goal 4: An accessible and integrated transport system that helps promote equality of opportunity for all our residents.

Goal 5: A transport system that improves the safety, health and security of our residents.

Goal 6: A transport system that helps to improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work and visit.

- 7.1.7 It states “Leicestershire [is] to be recognised as a place that has, with the help of its residents and businesses, a first class transport system that enables economic and social travel in ways that improve people’s health, safety and prosperity, as well as their environment and their quality of life.”
- 7.1.8 The **Leicester Local Transport Plan** (2011) also covers the period from 2011 to 2026, and offers a strategy for the administrative area of Leicester City Council rather than the County. It sets a transport vision which seeks to *‘help transform Leicester into Britain’s sustainable city that will be a great and prosperous place to live but also somewhere that does not place a burden on the planet in future years.*
- 7.1.9 To achieve this vision, the Leicester Local Transport Plan has established the following goals:
- Economic Growth Supported – Leicester is more prosperous
 - Carbon Emissions Reduced – Leicester’ carbon footprint is reduced
 - Equality of Opportunity Promoted – Leicester’s people are more confident
 - Better Safety, Security and Health – Leicester’s people are more healthy, safe and secure
 - Population Growth is supported – Leicester’s Population is increased in a sustainable manner
 - Overarching Goal - Quality of Life and a Healthy Natural Environment are Improved - Leicester is a more attractive place
- 7.1.10 The **Midlands Connect Strategy** (March 2017), outlines the vision for the midlands to become an engine for growth through investment in transport infrastructure. The strategy identifies four strategic economic hubs of which Leicester-Coventry is one. It also identified intensive growth corridors including Nottingham – Leicester – Coventry – Warwick and Thames Valley, and includes connections from Leicester to Birmingham. Targeting investment to these areas aims to tackle congestion, support housing growth and improve the transport user experience.
- 7.1.11 The **East Midlands Airport Sustainable Development Plan** (2015) acts as an update to the airport masterplan. It sets out the strategic context for the long term development of East Midlands Airport, and addresses the economic and governmental changes which have occurred since 2006. The objectives of the plan are:
- Set out the long-term opportunities for the growth of East Midlands Airport, and the vision for the development of the site
 - Inform the plans and strategies of others across Nottinghamshire, Leicestershire and Derbyshire
 - Identify the land, the uses and facilities required to support the operation of an airport capable of handling 10 million passengers annually and 1.2 million tonnes of cargo;

- Set out a policy for the use and the development of the airport land that is integrated with the Community Economy and Saracen Access and North West Leicestershire [Local Plan];
- A substantial increase capacity and redevelopment of the passenger terminal and new buildings and extensions to the cargo facilities; and
- Proposals for the Pegasus Business Park.

7.1.12 The **Leicester and Leicestershire Rail Strategy** (2016) sets four priorities for the Leicester and Leicestershire area with regards to its rail network. These will help to guide development going forward, and are:

- To maximise the benefit from the Midland Main Line services.
- To achieve the best result from the implementation of HS2 Phase 2
- To radically improve direct fast connectivity to key regional and national destinations.
- To ensure that rail access and economic development are planned together.

7.1.13 Local

7.1.14 Table 7.1 below highlights the common messages, policy approaches and strategic priorities for transport and access.

Table 7.1: Key messages for transport and access

Key policies & principles	Source / Authorities
Locate development to existing higher order settlements / centres where there is better access to services and existing infrastructure.	Blaby District Council Local Plan Core Strategy (2013) - Policy CS1, CS5, CS6, CS10 and CS13
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS1
	Harborough District Council Core Strategy (2011) - Policy CS5
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policies 2, 3 and 4
	Leicester City Council Core Strategy (2014) - Policy CS1 and CS12
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy SS2
	North West Leicestershire District Council Local Plan (2017) - Policy S2 and Ec8
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 1, 2 and 16
Encouraging Sustainable and public Travel	Blaby District Council Local Plan Core Strategy (2013) - Policy CS10
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS17
	Harborough District Council Core Strategy (2011) - Policy CS5
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policies 1, 5 and 14

Key policies & principles	Source / Authorities
	Leicester City Council Core Strategy (2014) - Policy CS1, CS2, CS14 and CS15
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy IN1
	North West Leicestershire District Council Local Plan (2017) - Policies H3, IF1 and IF4
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 4 and 12
Secure transport Network Improvements	Blaby District Council Local Plan Core Strategy (2013) - Policies CS3, CS10 and CS13
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS18
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 5 and Policy 14
	Leicester City Council Core Strategy (2014) - Policy CS14 and Policy CS13
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policies IN1, IN2 and EN3
	North West Leicestershire District Council Local Plan (2017) - Policies S3, IF4 and EN4
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 4 and Policy 6
Enhancement of multi-user access routes	Blaby District Council Local Plan Core Strategy (2013) - Policy CS10
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 20 and Policy 22
Strategic allocation sites (employment and housing) with transport commitments included as part of delivery).	Blaby District Council Local Plan Core Strategy (2013) - Policy CS3 and Policy CS4
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS19, CS20, CS21 CS22 and CS23
	Harborough District Council Core Strategy (2011) - Policy CS13, CS14, CS15 and CS16
	Leicester City Council Core Strategy (2014) - Policy CS6 and Policy CS10
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy SS4 and SS5
	North West Leicestershire District Council Local Plan (2017) - Policy Ec2, Ec4 and Ec7
Requirement for transport assessment / travel plan to support	Blaby District Council Local Plan Core Strategy (2013) - Policy CS10
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policies CS17, CS18, CS19, CS22 and CS23

Key policies & principles	Source / Authorities
significant proposals	Hinckley and Bosworth Borough Council Core Strategy (2009) - Spatial Objective 13
	Leicester City Council Core Strategy (2014) - Policy 15
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy IN1
	North West Leicestershire District Council Local Plan (2017) - Policy IF4
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 4

7.2 Strategic baseline

- 7.2.1 According to the Leicester and Leicestershire Rail Strategy (2016), Leicester and Leicestershire have relatively poor rail connectivity compared with similar areas. Whilst the service to London is frequent from Leicester, the strategic connectivity to regional and national centres of economic activity is weak. Travelling from north to south is relatively easy, though congested at times, but links from east to west are slow and unreliable.
- 7.2.2 The rural character of the majority of the authorities across much of Leicestershire represents significant issues with regards to accessibility to key services and facilities. Adding to this situation, within rural areas public transport is more likely to be less frequent, and so forcing the need for community transport services. Figure 7.2 shows the key transport infrastructure in the region.
- 7.2.3 Whilst car ownership rates are generally high throughout Leicestershire for those households without or with limited car availability, access to basic services and facilities, particularly within rural areas is poor.
- 7.2.4 Leicestershire as a whole is well connected to the national transport network. Besides motorways, there is a network of A-roads cross the County including well used routes such as the A45 and A46; the M1 divides the County north to south and the M69 enters the County to the south at Hinckley. The East Midlands Airport is located in North West Leicestershire and East Midlands Trains operate through North West Leicester (although no stations are located here) and Hinckley, the Midland Mainline passes through the Leicester City Centre north to south and links to London, Loughborough, Nottingham and Derby there are 10 rail stations within the County.

7.3 Projected baseline, key issues and opportunities

- 7.3.1 There is heavy reliance on the private car for commuting and travel across many parts of the County. Consequently, there are opportunities to expand the role of public transport, walking and cycling.
- 7.3.2 The Leicester Travel to Work Area, defined by the Office for National Statistics (ONS) based on 2011 Census data, extends across much of Leicestershire and includes all of the main towns within the County supporting the definition of common housing and functional economic market

areas. Around 78% of commuting flows are contained within the Leicester and Leicestershire authorities.¹⁷

- 7.3.3 Congestion is an ongoing issue in certain parts of the Plan area with known hotspots identified in some areas (Leicester City and the PUA for example). Congestion can have knock-on effects on the environment, the health of the local population and on the economy. The increased levels of emissions will have negative effects on local air quality and in turn effecting human health; congestion could also deter inward investment from an area.
- 7.3.4 In response to this there is a consistent ambition across the Authorities to encourage the reduction in reliance on the private car as the preferred transport mode. Public transport and active transport modes (i.e. cycling and walking) are encouraged throughout the County.
- 7.3.5 Infrastructure improvements are likely to be secured through new development, particularly for strategic development which requires substantial upgrades to the system.
- 7.3.6 Throughout the County the Authorities are each concentrating development towards the main centres and then local centres, with the aim that these centres will be more accessible to wider communities.
- 7.3.7 There is heavy reliance on the private car for commuting and travel across many parts of the County. Consequently, there are opportunities to expand the role of public transport, walking and cycling.
- 7.3.8 Several authorities (Harborough, Oadby and Wigston, Charwood) have highlighted that there may be constraints to the amount of development that can be accommodated on the edge or near the Leicester urban area in light of a poor orbital road network. This could exacerbate Congestion along A6 / A453 (Ring Road) for example.
- 7.3.9 The M1 will be the subject of a major programme of works to the strategic highways, including the M1 and motorway junctions. This is associated with the Roxhill development.
- 7.3.10 At the same time as the Roxhill motorway works, the Highways Agency will be undertaking SMART motorway works, so the area around East Midlands Airport will be experiencing roadworks for a number of years.
- 7.3.11 The route of the High Speed 2 will also run across the area, and will need to be factored into future growth strategies. In particular, there will be a new station at Toton, which will bring growth opportunities and improved connectivity close to the East Midlands Airport.
- 7.3.12 Rail travel is strong through Leicester and Leicestershire in a north south direction; however, it is much weaker in an east west direction and scope exists to strengthen rail connectivity in this east west direction to support the delivery of future growth. There are planned improvements to the Midland Main Line, including electrification.

¹⁷ Housing and Economic Development Needs Assessment , Main Report Leicester and Leicestershire Authorities and the Leicester and Leicestershire Enterprise Partnership, Final Report, January 2017

Figure 7.1: Transport infrastructure across Leicester and Leicestershire

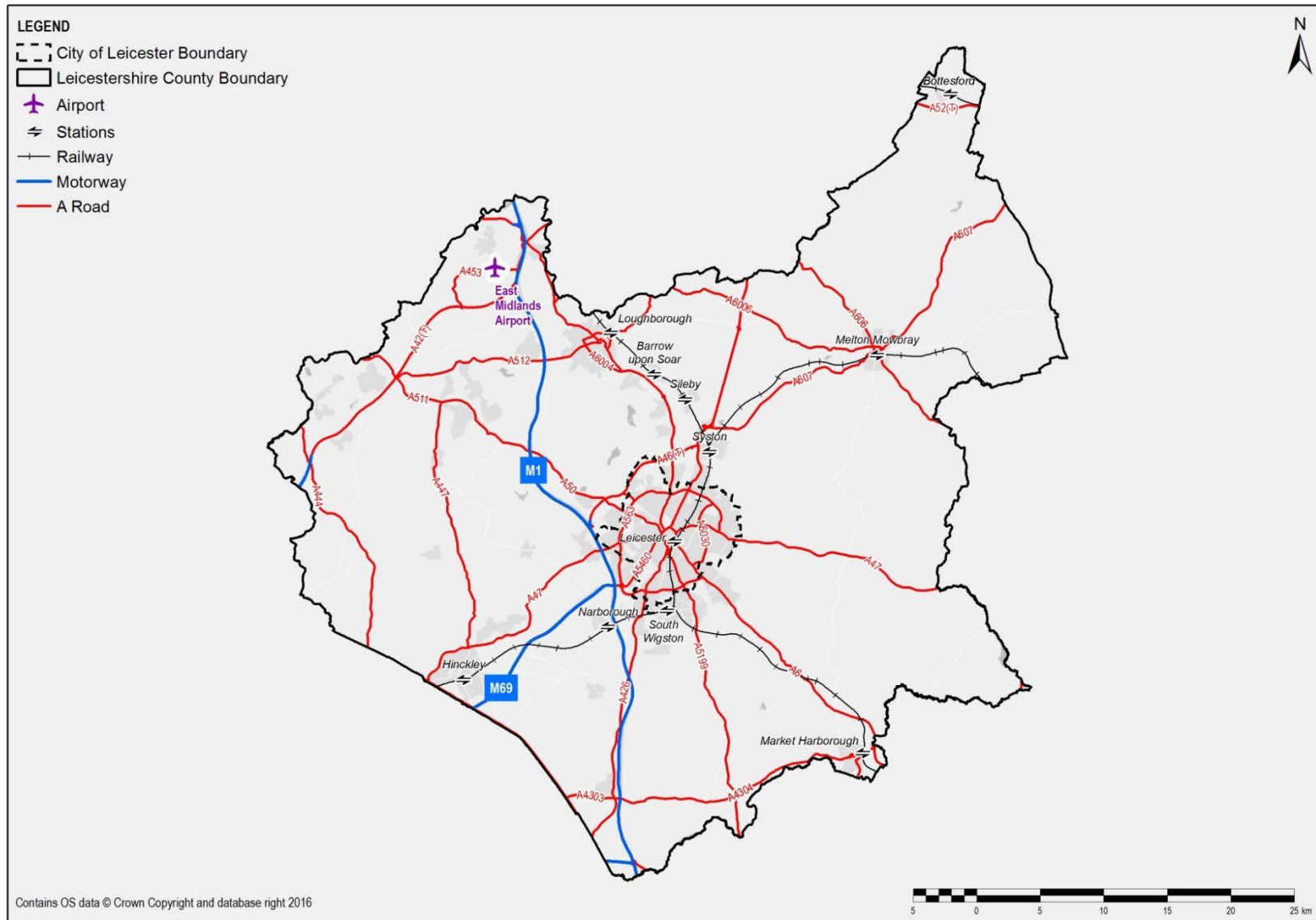


Table 7.2: Strategic issues and trends for Transport

Key issues / trends			
Authority	Accessibility to jobs, retail and services	Sustainable/public transport use	Networks, traffic and congestion
Leicester City	The city centre is very accessible by bus, with 96% of Leicester’s population living within 400m of a bus stop. Accessibility likely to remain good.	Whilst the city is well served by bus and rail, areas outside the centre are not as well served by public transport.	Congestion on roads in the urban area is worse than most comparator cities in England.
North West Leicestershire	Predominantly rural with the majority of the population in rural/semi-rural areas with more limited access to services by non-car means.	Larger settlements are best served by public transport service, though rail links are lacking. 74% of the District travel to work by car – higher than the national average.	Congestion is noted on roads surrounding Donnington Park
Blaby District Council	Fewer services / facilities available in smaller settlements in south-west leading to accessibility issues for those without transport.	Car ownership in Blaby is significantly higher than the East Midlands average. 87% of households have at least one car.	Key road links include M1, M69 and A46. The M1 junction 21 has significant congestion problems
Charnwood	Roads and public transport is good for larger settlements; accessibility poor in rural areas, with a reliance on private car.	42% (2011) of Charnwood households are car owners.	Traffic levels in Charnwood are predicted to increase by 19% by 2026 and congestion by 120%.
Harborough	Poor IMD scores indicate rural access to key services / facilities remains an issue. Trends indicate that this remains an ongoing issue.	Car ownership is higher (88% in 2010) than the regional average. Infrequent bus services with reliance on support services in rural areas. Rail links from Market Harborough are good, but there are no other stations in the borough.	Harborough has good road and rail links (from Market Harborough). Congestion presents issues in Lutterworth town centre and M6 Junction 21.
Melton	Access to services/facilities is limited in the more rural areas of the Borough.	Access to bus services is an issue for many in the Borough. There are rail links from Melton.	Melton Mowbray town centre has congestion problems.
Hinckley and Bosworth	Bosworth Community Plan (2007-2012) identifies access to facilities/services to be a problem particularly in rural areas.	Car ownership is significantly higher than the East Midlands average. Frequency of public transport in the rural areas is a problem.	Road links including the M1, M69 and M42. Congestion is an issue within the Borough.
Oadby and Wigston	Smaller settlements have more limited access to services and facilities.	Accessibility within the Borough via public transport is an issue.	Good transport links including M1 and M69, direct rail services and bus links. However, congestion is an issue at peak times.
Summary	Though access to services, jobs and facilities is good in the City Centre and for larger towns, it is generally more limited in rural areas (though high levels of car ownership mean that facilities ought to be accessible by this mode of transport).	There are generally high levels of car ownership, and access to public transport is an issue, particular in rural areas.	There are strong road networks, but some locations experience peak congestion issues, particularly town centres and key motorway junctions.

8. *Air Quality and noise*

8.1 Policy context

National

- 8.1.1 The **Air Quality Strategy** (2007) establishes the policy framework for ambient air quality management and assessment in the UK. The primary objective is to ensure that everyone can enjoy a level of ambient air quality which poses no significant risk to health or quality of life. The Strategy sets out the National Air Quality Objectives (NAQOs) and government policy on achieving these objectives.
- 8.1.2 Part IV of the **Environment Act** (1995) introduced a system of Local Air Quality Management (LAQM). This requires local authorities to regularly and systematically review and assess air quality within their boundary, and appraise development and transport plans against these assessments. The relevant NAQOs for LAQM are prescribed in the Air Quality (England) Regulations 2000 and the Air Quality (Amendment) (England) Regulations 2002.
- 8.1.3 Where an objective is unlikely to be met, the local authority must designate an Air Quality Management Area (AQMA) and draw up an Air Quality Action Plan (AQAP) setting out the measures it intends to introduce in pursuit of the objectives within its AQMA.
- 8.1.4 The **Local Air Quality Management Technical Guidance** (2009) (LAQM.TG (09)) issued by Defra for Local Authorities provides advice as to where the NAQOs apply. These include outdoor locations where members of the public are likely to be regularly present for the averaging period of the objective (which vary from 15 minutes to a year). Thus, for example, annual mean objectives apply at the façades of residential properties, whilst the 24-hour objective (for PM10) would also apply within garden areas. They do not apply to occupational, indoor or in-vehicle exposure.
- 8.1.5 The NPPF in relation to conserving and enhancing the natural environment states in Paragraph 17 that: “Within the overarching roles that the planning system ought to play, a set of core land-use planning principles should underpin both plan-making and decision-taking. These 12 principles are that planning should.....contribute to conserving and enhancing the natural environment and reducing pollution.”
- 8.1.6 Paragraph 109 states that: “The planning system should contribute to and enhance the natural and local environment by... preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.”
- 8.1.7 Paragraph 124 states that: “Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan.”
- 8.1.8 The NPPF goes on to advise at paragraph 123 that: “Planning policies and decisions should aim to:
- Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
 - Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;

- Recognise that development will often create some noise and existing businesses wanting to development in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and
- Identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.”

8.1.9 The NPPF indicates that the Noise Policy Statement for England (NPSE) should be used to define the “significant adverse impacts”.

Local

8.1.10 The ‘**Healthier Air for Leicester**’ Action Plan is Leicester’s Air Quality Action Plan (2015-2026). The Action Plan contains “far reaching actions over the period to 2026 intended to significantly reduce air pollution to a level lower than we are required to achieve by law.” This will be done by committing to four themes:

- Theme 1: Reducing Transport Emissions;
- Theme 2: Promoting Sustainable Transport;
- Theme 3: Improving Traffic Management; and
- Theme 4: Enhancing Planning and the Environment.

8.1.11 **Lutterworth Air Quality Action Plan (2013)** - Measures still considered as ongoing with the aim to achieve:

- Cleaner vehicles in the town centre with Low Emission Zone
- Planning controls to reduce traffic impact of new development on AQMA
- Land Use Planning for no unnecessary additional traffic through the town centre.

8.1.12 In North West Leicestershire, there is an **Air Quality Action Plan Framework (2014)** for all 5 AQMA’s. There is ongoing assessment of progress against action plan objectives:

- Reducing Vehicle emissions
- Improving the Road Network to reduce congestion
- Using Area Planning Measures to Reduce Traffic Volumes;
- Reducing Air Pollution from Industry /Commerce and Residential Areas;
- Changing Levels of Travel Demand / Promotion of Alternative Modes of Transport

8.1.13 **Blaby Air Quality Annual Status Report (2016)** sets out a number of measures to improve air quality.

- Traffic Management
 - Smart Motorways
 - Painted Chevrons
 - Traffic Management Methods;
- Vehicle Fleet Efficiency
 - Eco Driving training for Blaby District Council Staff
- Policy Guidance

- o Integration of Air Quality into planning policy

8.1.14 Table 8.1 below highlights the common messages, policy approaches and strategic priorities for air quality within the adopted and emerging local plans across the HMA.

Table 8.1: Air quality policies

Key policies & principles	Source / Authorities
Promoting Green Infrastructure	All authorities have identified this as a key policy principle and have developed policies in response.
Combatting Climate Change	All authorities have identified this as a key issue and have developed policies in response.
Managing the transport network	All authorities have identified this as a key issue and have developed policies in response.
Managing demand for car use	Blaby District Council Local Plan Core Strategy (2013) - Policy CS10
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 5 and Spatial Objective 13
	Leicester City Council Core Strategy (2014) - Policy CS15
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy CS2
Air quality management	Blaby District Council emerging Local Plan Delivery DPD - Policy on land Contamination and Pollution
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 8
	Leicester City Council Core Strategy (2014) - Policies CS12, CS15 and CS14
	North West Leicestershire District Council Local Plan (2017) - Policy En6

8.2 Strategic baseline

8.2.1 Air quality is a major environmental factor which can affect health and ecosystems. Several factors contribute to air pollution with a particular issue being with emissions relating to transport and subsequent pollutants. The Government’s National Air Quality Strategy outlines a major role for local authorities in helping to tackle local pollution areas of concern caused by road transport, known as Air Quality Management Areas (AQMAs). Councils undertake AQMA assessments annually.

8.2.2 There are various AQMAs across Leicester and Leicestershire. There are none in Oadby and Wigston, Hinckley and Bosworth and Melton, with two in Harborough (Lutterworth and Kibworth). North West Leicestershire has five, whilst Charnwood and Blaby have four. Leicester has a large section of the City Centre and along a number of radial roads and sections of the ring road.

8.2.3 There are contributors to noise pollution throughout Leicester and Leicestershire including large sources such the East Midlands Airport, and more localised sources such as industrial sites, housing developments and roads.

8.3 Projected baseline, issues and opportunities

- 8.3.1 Improvements to transport infrastructure are likely to reduce exposure to poor air quality within the County. In particular, the introduction of rail lines, investment in public transport, and improvements to green infrastructure should help to reduce congestion and traffic levels. However, population increase is likely to counter such efforts, and whilst per capita emissions may decrease, total emissions may still contribute to poor overall air quality in some areas.
- 8.3.2 The development of large scale employment sites and logistics development may also contribute to poor localised air quality in some areas.
- 8.3.3 Given the cross boundary nature of air quality, there is a need for strategic approaches to the management of air quality.

Table 8.2: Strategic issues and trends for air quality and noise

Key issues / trends		
Authority	Air quality trends and management areas	Congestion and noise causing pollution
Leicester City	Exceeds the NO ₂ target levels in a number of areas within the administrative boundary (2016). The outer ring road and radial routes into the city centre are concentrations for congestion and poor air quality (2016).	The outer ring road and radial routes into the city centre are concentrations for congestion.
North West Leicestershire	Five AQMAs identified, all related to exceedance on NO ₂ ; M1 Mole Hill Kegworth, High Street Kegworth, Stephonson Way/ Bardon Road Coalville, High Street/ Bondgate Castle Donington and Copt Oak Road (2017). The performance of these AQMAs is mixed.	Noise pollution concentrated around the motorways, major trunk roads and East Midlands Airport. Donnington Park also a source of noise during seasonal events (2016).
Blaby District Council	Four AQMAs declared. In all cases the major source of emissions of NO ₂ is traffic on roads close to the AQMAs. Concentrations of pollutants generally decreasing except for AQMA 3 (M1 corridor). Mill Hill, Enderby also found to have high concentrations of NO ₂ (2017).	Noise pollution associated with road traffic.
Charnwood Borough Council	Four AQMAs within the Borough at Loughborough, Syston, Great Central Railway Area, and Mountsorrel (2017). Congestion and traffic appeared to be getting worse in 2013, however the opening of the Loughborough Inner Relief Road saw a significant reduction in NO ₂ levels in 2014 (2016). Work at Mountsorrel Quarry is expected to have a positive effect on air quality in this area (2016).	The highest levels of disturbance (noise and other) are likely to be experienced within the main urban centres of Loughborough, Shepshed, the Leicester fringe and the Soar Valley, and also along the M1 corridor 18.
Hinckley and Bosworth Borough Council	No AQMAs and The National Forest contributes towards improving local air quality (2017). Diffusion tube monitoring of local developments and existing sources has not identified any impacts on air quality which requires further action (2017).	The A5 corridor is considered a particular problem area for congestion which could contribute to noise pollution.

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¹⁸ Charnwood Local Plan Sustainability Appraisal Scoping Report (2017), Charnwood Borough Council.

Key issues / trends		
Authority	Air quality trends and management areas	Congestion and noise causing pollution
Harborough District Council	<p>Very good air quality with the exception of Lutterworth and Kibworth where it exceeds the national air quality objective for NO₂. (2017).</p> <p>Some improvement may be expected in Lutterworth resulting from priorities in AQMA Action Plan (2013).</p>	<p>Lutterworth town centre presents congestion issues. Proposals for an SDA would deliver a strategic bypass that could alleviate congestion. Magna Park remains a major source of traffic and this is likely to increase. Poor air quality in Kibworth is derived from traffic on a small section of the A6.</p>
Melton Borough Council	<p>The air quality is currently not exceeding limits (2017). Relatively low population density and low concentrations of development has resulted in good air quality (2017).</p> <p>There is potential for changes to occur depending on future development patterns, but trends are uncertain.</p>	<p>Significant levels of congestion experienced within Melton Town Centre, leading to higher levels of delay per mile than any other area in the County (2016).</p>
Oadby and Wigston Borough Council	<p>There are no AQMAs and concentrations at relevant receptors are all consistently below the nationally recognized thresholds (2017).</p> <p>Previous AQMAs were revoked in 2008 and there have been no developments since which are considered to have had a significant effect upon air quality (2017).</p>	<p>A lack of joined up transport infrastructure has had a detrimental impact upon congestion on the roads (2015).</p>
Summary	<p>Air quality performance is mixed across the district. In some areas, air quality is very good, and there have been improvements. However, there remain hotspots of poor air quality associated with exceedances in NO₂ relating to traffic and congestion.</p>	<p>Transport corridors, large scale employment sites and town centres are the main sources of congestion and noise pollution across the HMA.</p>

9. Climate Change and Energy

9.1 Policy context

National

9.1.1 In its 2007 strategy on climate change, the **European Commission** assesses the costs and benefits of combating climate change and recommends a package of measures to limit global warming to 2° Celsius. On energy, the Commission recommends that the EU's energy efficiency improves by 20% and the share of renewable energy grows to 20% by 2020. This was followed up by the 2011 report 'A Roadmap for moving to a competitive low carbon economy in 2050'.

9.1.2 Key messages from the **NPPF** include:

- Support transition to a low carbon future in a changing climate as a 'core principle'.
- There is a key role for planning in meeting the targets set out in the Climate Change Act 2008. Specifically, policy should support the move to a low carbon future through:
 - Planning for new development in locations and ways which reduce GHG emissions;
 - Actively supporting energy efficiency improvements to existing buildings;
 - Setting local requirements for building's sustainability in a way that is consistent with the Government's zero carbon buildings policy;
 - Positively promoting renewable energy technologies and considering identifying suitable areas for their construction; and
 - Encouraging those transport solutions that support reductions in greenhouse gas emissions and reducing congestion.

9.1.3 To help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:

- Have a positive strategy to promote energy from renewable and low carbon sources;
- Design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;
- Consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;
- Support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and
- Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

9.1.4 The **NPPF** states that Local Plans are to take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development is to be planned to avoid increased vulnerability to the impacts arising from climate change. New development in areas vulnerable is to have adaptation measures, including green infrastructure to manage the risks.

9.1.5 With regards to energy, local authorities are to:

- Have a positive strategy to promote energy from renewable and low carbon sources;
- Design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;
- Consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;
- Support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and
- Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

9.1.6 With regards to low-carbon district heating networks, the **DECC** report the ‘**Future of Heating**’ states that around half (46%) of the final energy consumed in the UK is used to provide heat. The Government’s vision is one of: buildings benefiting from a combination of renewable heat in individual buildings, particularly heat pumps, and heat networks distributing low carbon heat to communities.

Regional

9.1.7 The Carbon Reduction Target for Leicestershire, as set out in the **Carbon Reduction Strategy for Leicestershire 2013-2020** is to reduce emissions by 23% between 2005 and 2020 as measured by the Department of Energy and Climate Change.

Local

9.1.8 Table 9.1 below highlights the common messages, policy approaches and strategic priorities for climate change within the adopted and emerging local plans across the HMA.

Table 9.1: Key messages for climate change

Key messages	Source / Authorities
Development to incorporate sustainable design; i.e. well located, sustainable design principles,	All authorities have identified this as a key issue and developed relevant policies accordingly.
Encourage an increase in renewable and low carbon energy.	All authorities have identified this as a key issue and developed relevant policies accordingly.

9.2 Strategic baseline

- 9.2.1 Climate refers to the average weather experienced over a long period. This includes temperature, wind and rainfall patterns. The climate of the Earth is not static, and has changed many times in response to a variety of natural causes. The Earth has warmed by 0.74°C over the last hundred years. Around 0.4°C of this warming has occurred since the 1970s. In general, the UK climate is expected to become hotter and drier in the summer and warmer and wetter in the winter.
- 9.2.2 According to climate change predictions (DEFRA), key changes include:
- Average UK annual temperatures may rise by 2 to 3.5°C by the 2080s.
 - Annual average precipitation across the UK may decrease slightly, by between 0 and 15% by the 2080s. However the seasonal distribution of precipitation will change significantly, with winters becoming wetter and summers drier.
 - Increase in the prevalence of extreme weather events. High summer temperatures and dry conditions will become more common. Very cold winters will become increasingly rare and extreme winter precipitation will become more frequent. The summer heat wave experienced in 2003 is likely to become a normal event by the 2040s and considered cool by the 2060s.
- 9.2.3 With regards to renewable and low carbon energy generation, the current installed capacity varies across the County, but generally holds room for increased development. There is mainly a trend upwards in terms of the number and capacity of renewable/low carbon energy schemes being delivered across the County, though there is some way to go to meet ambitious energy and carbon emissions targets (see table 9.2).
- 9.2.4 Overall levels of carbon emissions per capita vary across the County, with per capita emissions recorded as the lowest in Oadby and Wigston and Leicester City. Higher levels are recorded in North West Leicestershire for example, with 10.4 tonnes in 2015. Such differences in emissions do not necessarily mean that residents and businesses are performing less well in some areas compared to others. Rather, large differences in emissions are reflective of certain industrial activities.
- 9.2.5 Overall, there is a continuing positive trend across all authorities in the Plan area that CO² emissions are reducing.

9.3 Future baseline, Issues and opportunities

- 9.3.1 Co2 emissions are likely to continue falling with the continuation and introduction of more stringent energy efficiency policies at a national and local level. Policies important to this include requiring sustainable design and encouraging renewable energy development.
- 9.3.2 In terms of possible renewable energy development, this is likely to be more prominent in Charnwood, Harborough, Melton and Hinckley where feasibility studies have shown the greatest potential. Where wind potential areas have been identified (such as in North West Leicestershire, these areas may also experience a more rapid implementation of low carbon energy schemes.
- 9.3.3 It would be beneficial to identify strategic opportunities for energy development, making links with planned development and existing infrastructure.

Table 9.2: Strategic issues and trends for climate change across Leicester and Leicestershire

Key issues / trends		
Authority	Potential for renewable energy development	Carbon Emissions
Leicester City	Potential for using renewable through passive solar design and solar technologies. Also likely to extend green heat networks within the city after winning government funding (2016).	Per capita CO ² emissions reduced from 6.9t in 2005 to 4.1t in 2015.
North West Leicestershire	There is little renewable energy generated in the District currently (2016). Potential for this to increase with identification of wind opportunity areas in the Local Plan.	Per capita CO ² emissions reduced from 14.2t (2005) to 10.4t (2015).
Blaby	Some small scale potential is possible; however wind energy is limited given the settlement spread of the District (2016).	Per capita CO ² emissions reduced from 8.9t (2005) to 6.9t (2015).
Charnwood	Feasibility study suggests the greatest technical potential for renewable energy is for large scale wind (2011 Land Use Consultants).	Per capita CO ² emissions reduced from 7.8t (2005) to 5.1t (2015).
Harborough	District offers the greatest potential for wind energy out of Leicestershire. 32 applications for wind turbines (2006-2013). Some potential for short rotation coppice and other energy crops (2014).	Road emissions account for 48% of total emissions. Per capita CO ² emissions reduced from 10.1t (2005) to 7.3t (2015).
Melton Borough Council	Wind energy generation increased to 278kw in 2012/13. Opportunities, installation and demand for wind energy exceed the demand and installation of biomass and hydro sources significantly in the Borough.	Per capita CO ² emissions reduced from 9.3t (2005) to 6.9t (2015).
Hinckley and Bosworth	Based on technical potential, there are substantial opportunities for renewable and low carbon energy especially with regards to wind, solar PV and heat pumps for electrical generation (2014).	Per capita CO ² emissions reduced from 9.0t (2005) to 6.3t (2015).
Oadby and Wigston	There may be some small wind development possible at the edge of settlements (2015)	Per capita CO ² emissions reduced from 5.4t (2005) to 3.7t (2015).
Summary	Opportunities to increase installed capacity of renewable and low carbon energy generation exist; but levels of implementation remain relatively low.	Per capita CO ² emissions are falling in every Local Authority area.

10. Landscape and Land

10.1 Policy context

National

- 10.1.1 **Local Green Infrastructure: Helping Communities Make the Most of their Landscape** (2011) provides suggestions and guidance for local authorities on how they can contribute to a multi-functional green infrastructure network.
- 10.1.2 The **European Landscape Convention (ELC)** (2000) promotes the planning, management and protection of landscapes, and is the first international convention with a specific focus on landscape.
- 10.1.3 The **NPPF** states that Local Planning Authorities should set out strategic policies within the Local Plan for the “*conservation and enhancement of the natural and historic environment, including landscape*” (paragraph 156).
- 10.1.4 The **NPPF** states that the planning system should protect and enhance valued soils and prevent the adverse effects of unacceptable levels of pollution. This is because soil is an essential finite resource that provides important ‘ecosystem services’, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. Also, the NPPF expects local planning authorities to take into account the economic and other benefits of the best and most versatile agricultural land. This is particularly important in plan making when decisions are made on which land should be allocated for development. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality
- 10.1.5 **Safeguarding our Soils: A strategy for England** (2009) sets out a vision for the future of soils in England. This is:
- “By 2030, all of England’s soils will be managed sustainably and degradation threats tackled successfully. This will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations”.
- 10.1.6 Planning decisions need to take sufficient account of soil quality in particular in cases where significant areas of the best and most versatile agricultural land may be lost to development.
- 10.1.7 **Nature Nearby, Accessible Green space Guidance** (March 2010) sets guidance on how to provide high quality access to the natural environment in green spaces close to home, providing example sites for parks and greenspace practitioners, visitor service and quality standards to meet:
- An Accessibility and Quantity Standard – to ensure equitable provision both close to home and within sustainable transport distances;
 - Service Standards – for core services and facilities for each site type
 - A national Quality Standard – i.e. the Green Flag Award scheme.
- 10.1.8 The **Government Forestry and Woodlands Statement** 2013 seeks to maximise the environmental, economic and social benefits of trees and woodland forests across the country by:

- Ensuring that trees, woods and forests are resilient to, and mitigate the impacts of climate change;
- Protecting and enhancing the environmental resources of water, soil, air, biodiversity and landscapes;
- Protecting and enhancing the cultural and amenity values of trees and woodlands;
- Increasing the contribution that trees, woods and forests make to the quality of life; Improving the competitiveness of woodland businesses and promote the development of new or improved markets for sustainable woodland products.

10.1.9 The **National Forest Strategy 2014-2024** sets to protect and secure the future of the Forest through:

- Sensitive achievement of the landscape change, with increased targeting to get the greatest benefits;
- Making on the most of forest sites (woodlands and other habitats, attractions, connections and views)
- Increasing engagement, enjoyment and well-being by the widest range of people
- Effective partnership taking the forest to the next stage
- Bringing new income and investment
- The national exemplar role, research, and being a centre of excellence

Regional

10.1.10 At a regional level, objective 12 of the **East Midlands 6C’s Green Infrastructure (GI) Strategy** (2010) states:

“Promote the protection and management of landscape character to provide enhanced landscape settings for the built environment and to ensure that new development and GI relates to landscape character, place and context.”

Local

10.1.11 Table 10.1 below highlights the common messages, policy approaches and strategic priorities for landscape and land.

Table 10.1: Key messages for Landscape and Land

Strategic policies / priorities	Source / Authorities
Areas protected to maintain separation between settlements	Blaby District Council Local Plan Core Strategy (2013) - Policy CS16 and Policy CS17
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS11
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 6
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EN4 and Policy EN5

Strategic policies / priorities	Source / Authorities
	North West Leicestershire District Council Local Plan (2017) - Policy EN5
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 6
Enhance and maintain local landscape character and quality	Blaby District Council Local Plan Core Strategy (2013) - Policy CS18
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS11
	Harborough District Council Core Strategy (2011) - Policy CS17
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Spatial Objective 10
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EN1 and Policy EN6
	North West Leicestershire District Council Local Plan (2017) - Policy EN6
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 7 and Policy 15

10.2 Strategic baseline

- 10.2.1 There are a variety of landscape character areas within the Leicester and Leicestershire boundary (Figure 10.2). The most prominent of these is the Leicestershire Vales, located in the south, but also High Leicestershire in the east, and the Leicestershire and Nottinghamshire Wolds to the north-east. More variance occurs to the north-west of the county, as the Mease/Sence Lowlands adjoins the Leicestershire and South Derbyshire Coalfield, which itself is adjacent to Charnwood and the Melbourne Parklands. The Trent Valley Washlands intersects the north of the county. Charnwood Forest also straddles Charnwood Borough Council, Hinckley and Bosworth and North West Leicestershire.
- 10.2.2 The Leicestershire and East Midlands region has a long history of coal mining linked to its extensive coal reserves. Given the major contraction of this industry since the early 1990s, a legacy of infrastructure and dereliction is present across the landscape, such as mines, bell-pits, and railway yards, especially in the north west. The establishment of The National Forest is considered to be linked to the wider regeneration of some of these former colliery sites and communities¹⁹.
- 10.2.3 Between 1960’s and 2007, the proportion of areas which suffered from visual and noise disturbance within the East Midlands increased by approximately 48%, from 674km² to 1239km²²⁰. Leicestershire itself was shown to have 59.45% of its total area disturbed by noise and visual intrusion, ranking it 27th out of England’s Counties and Unitary Authorities.
- 10.2.4 The East Midland region previously had a low proportion of woodland cover (5%) compared to the national average of 12% (LDA, 2010). However, since 1995, several hundred hectares of new woodland planting has taken place as part of The National Forest initiative, located

¹⁹ East Midlands Region Landscape Character Assessment (2010), Natural England , Available: <http://publications.naturalengland.org.uk/publication/5635681403535360>

²⁰ Campaign to Protect Rural England (2007) East Midlands Fragmented Countryside: East Midlands- intrusion statistics. Available: <http://www.cpre.org.uk/resources/countryside/tranquil-places/item/1762-englands-fragmented-countryside-east-midlands-intrusion-statistics>

between Walton-on-Trent (Derbyshire) and Bradgate Park / The Outwoods (Charnwood). This is thought to have added considerably to the wooded character of the landscape, increasing woodland cover to 20% in 2014 (National Forest, 2014).

- 10.2.5 Charnwood Forest Regional Park is an area within the east of the National Forest. This park is considered to have a distinctive upland landscape, with geology of international importance and a rich biodiversity.
- 10.2.6 The National Forest also acts as a popular tourist attraction alongside other landscape parks such as Bradgate Park country houses and reservoirs at Thornton, Swithland, Cropston and Blackbrook.
- 10.2.7 There are areas of sensitive landscape identified in some authorities that perform an important role in managing the coalescence of settlements. As such, parcels of land have been designated as/ or proposed for allocation as 'Areas of Separation' or 'Green Wedges' by Local Planning Authorities. This includes land between Coalville and Whitwick, land between Scraftoft, Thurnby and Bushby. Settlement separation is also an issue for Charnwood – particularly those towns and villages along the River Soar and River Wreake valleys.
- 10.2.8 Leicester city's Green Wedges provide important strategic open space links between the city and the surrounding areas. District parks provide much of the public open space in the city and are reasonably accessible by most of the population. However, there is a lack of public open space serving the city centre, which with increasing numbers of population living in the city centre is becoming an issue.
- 10.2.9 As shown in Figure 5.1, the majority of land within Leicestershire falls under Agricultural Land Classification (ALC) Grade 3. Concentrations of ALC Grade 1 and Grade 2 are located in the north and the north-west of the county alongside intermittent dispersal of ALC Grade 4. Urban settlements are clearly shown within the figure, most notably being the Leicester City boundary within which there is little land of agricultural value.
- 10.2.10 The total net residential completions in Leicester, Leicestershire and Rutland between 1996 and 2008, 56% (23,645 dwellings) were located on previously developed land (PDL) compared to 44% (18,414 dwellings) on greenfield land in the area²¹. This rate improved in the year 2009/10 with 63% of housing completions on PDL. However, during 2011/12, the rate of housing completed on PDL had fallen to 36%.

10.3 Future baseline, issues and opportunities

- 10.3.1 Climate change is likely to have an effect on the use of land for agricultural purposes in the future. With population growth, pressure for land resources may rise, and variations in climate conditions could also have an effect on growing seasons, and disrupt agricultural activities as a result of increased erosion, changing pest loads, and changes in vegetation growth. Warmer weather may also present opportunities to grow different crops and improve yields. These are likely to influence the use of land across Leicestershire, and may exacerbate, or reduce, threats to available land supply depending on the circumstances.
- 10.3.2 Villages and towns may be under increasing pressure from development. Infill development on available land within these areas, and development on settlement margins, has the potential to affect the character of these spaces, create visual intrusion, and extend the urban fringe into the surrounding countryside.

²¹ Leicester, Leicestershire and Rutland Residential Land Availability Monitoring Report (2008), Available: [http://www.lsr-online.org/uploads/residential-report-2007-2008-\(web\).pdf](http://www.lsr-online.org/uploads/residential-report-2007-2008-(web).pdf), Accessed: 30/11/16

- 10.3.3 The landscape parks and reservoirs of Leicestershire may experience increased visitor pressure and demand for associated infrastructure such as car parks and access. Growth could result in damage, loss and fragmentation of natural features, whilst additional visitor facilities could create visual intrusions and reduce the sense of tranquillity. Conversely, increased growth could bring with it the ability to enhance the landscape and improve accessibility to the countryside.
- 10.3.4 Each of the local authorities have specific policies with regards to the designation and maintenance of countryside and rural areas. Likewise, the majority of Boroughs and Districts have adopted an approach which safeguards the rural areas from dispersed development, and which instead supports development located around the Leicester Principal Urban Area (PUA), and other key settlements, helping to contain growth and restrict sprawl.

Figure 10.1 Agricultural Land Classification within Leicester and Leicestershire

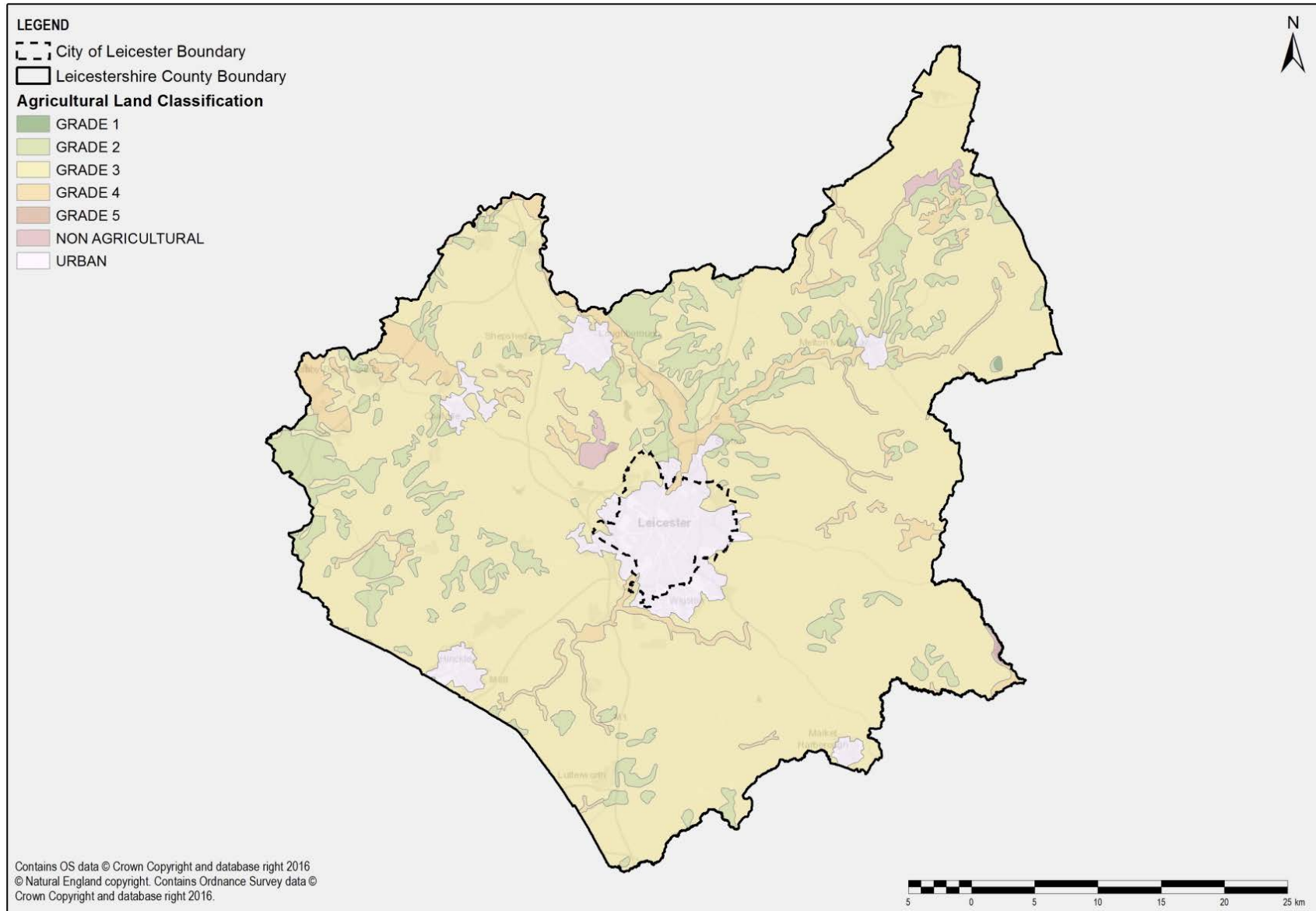


Figure 10.2 Landscape Character Area within Leicester and Leicestershire

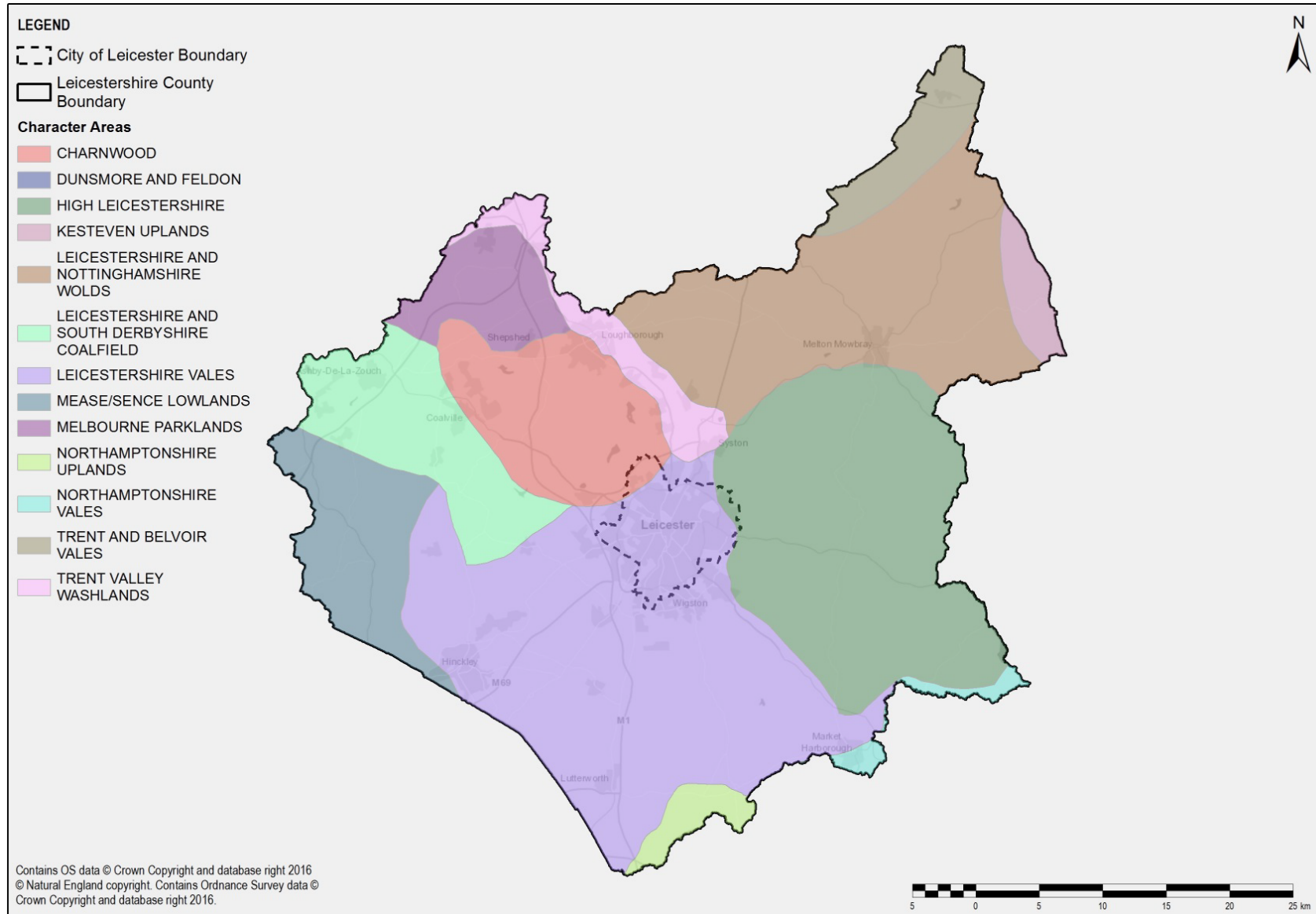


Table 10.2: Key Landscape and Land issues and trends across Leicester and Leicestershire

Key issues / trends			
Authority	Land pressures	Agricultural land classification	Character, sites and features
Leicester City	Nearly 90% of all new dwellings, and the majority of employment development, has been built on PDL in recent years (2016). However, there may be pressure to encroach on land with landscape value to meet increasing requirements for development.	The majority of the city is classified as ALC Urban. There is a slight overlap with ALC Grade 3 and ALC Grade 4 in the northern reaches of the authority area (2016).	Predominantly reflects the Leicestershire Vales landscape type.
North West Leicestershire	The presence and protection of sensitive landscapes across the borough helps to maintain a rural feel to the countryside. The National Forest Strategy should help to improve landscape character and function.	The majority of agricultural land in the district is Grade 3. Small areas of grade 2 (in the south west) which may need protecting, and grade 4 (centrally) (2016).	Two Areas of 'Particularly Attractive Countryside' in the west and the east of the district (locally designated) (2002). Five character areas within NWL. (2016).
Blaby	North and east of the District is predominantly urban and the south is more rural. Areas of urban fringe are at risk from development. A high proportion of the district is within a countryside or is Green Wedge.	The vast majority of agricultural land in Blaby is classified as Grade 3.	Within the Leicestershire Vales Landscape character area Quarrying is evident and offers potential recreational qualities Croft Hill is an important landscape feature (60m above surrounding land).
Charnwood	In 2011/12 100% of completed dwellings in Charnwood were built at densities of over 30 dwellings per hectare (2012), helping to contain development pressures on land. Charnwood identified as a target Higher Level Stewardship (HLS) area (2013).	The majority of agricultural land is classified as Grade 3 (15,800ha) with some Grade 2 (6,200ha) and some Grade 4 (3,300ha). There is no Grade 1 land.	4 National Character Areas within Borough. 6 different landscape character areas. No National Parks. No AONB. 6 Designated Green Wedges and 13 areas of Local Separation. Charnwood Forest likely to be the most tranquil area.
Oadby and Wigston	Predominantly urban land. Diverse range of landscapes. Green Wedges help to prevent coalescence.	Two thirds of Borough is urban land. Agricultural land is mainly classified as Grade 3	Within Leicestershire Vales LCA. Diverse landscapes. Influenced by the River Sence

	Land pressures	Agricultural land classification	Character, sites and features
Harborough District Council	Eastern countryside is recognized as being particularly high quality. Due to previous uses a lot of the land may potentially pose a health risk due to contamination. (2014). Eastern countryside designated as an 'Area of Particularly Attractive Countryside'. Most villages in visually sensitive locations.	Predominantly Grade 3 agricultural land, small areas of Grade 2 (around the A47 and A6) and grade 4.	2 National Character Areas (High Leicestershire' and 'Leicestershire Vales'. 5 LCA. No National Parks or AONB. Areas of Separation between Market Harborough and Great Bowden, Scraftoft, Thurnby and Bushby.
Melton Borough Council	Percentage of homes provided on PDL fell from 50.3% in 2011/2012 to 15.6% in 2012/13 (2015). Main changes in landscape in Melton Farmland Fringe LCA and fringe areas around Melton Mowbray.	Mostly Grade 3 quality with pockets of Grade 2, mostly in the north. May be difficult to avoid the loss of high quality agricultural land due to its extent across the borough and limited availability of brownfield sites.	Important views identified at Belvoir Castle and Burrough Hill. Escarpments on the southern edge of the Vale of Belvoir. 20 LCA identified. (2015)
Hinckley and Bosworth Borough Council	Predominantly rural landscape bound to the east by the urban fringe of Leicester city centre. Potential threat from the westward expansion of this fringe. Quality of some degraded land areas improving under National Forest Strategy (2014).	Majority of agricultural land classified as Grade 3. Pockets of Grade 2. Small area of Grade 4.	Open cast mining of the coal field has influenced landscape character. (2014)
Summary	Development on previously developed land has typically been at a high level across the County and within the City. However, as demand for housing and employment land continues, the availability of such land is reducing, and therefore pressure on greenfield land has increased.	There is very little Grade 1 agricultural land across the HMA, some pockets of Grade 2 agricultural land and larger swathes of Grade 3 land. It is unclear the extent to which Grade 3 land is best and most versatile (3a) or not (3b).	There are a variety of diverse landscapes across the HMA, including areas designated locally for their importance to settlement character.

11. Cultural Heritage

11.1 Policy context

National

- 11.1.1 Section 12 of the **NPPF** details measures for ‘Conserving and Enhancing the Historic Environment’. In particular paragraph 126 states:
- “Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance.”*
- 11.1.2 The Government’s **Heritage Statement** (2017) sets out its vision for the historic environment. It calls for those who have the power to shape the historic environment to recognise its value and to manage it in an intelligent manner in light of the contribution that it can make to social, economic and cultural life. It also outlines plans to develop an action plan to address issues in relation to heritage.
- 11.1.3 **English Heritage Cooperation Plan** (2011) helps to identify and protect the most important heritage assets in the country.
- 11.1.4 **Understanding Place: Conservation Area Designation, Appraisal and Management** (English Heritage 2011) identifies the key aspects of good practice that need to be taken into account by local authorities in managing their conservation areas.

Regional

- 11.1.5 At a regional level, objective 13 of the **East Midlands 6C’s Green Infrastructure (GI) Strategy** (2010) states:
- “Promote the protection and management of natural and cultural heritage, including archaeological sites, historic landscapes, geodiversity and industrial heritage;”
- 11.1.6 **Leicestershire Historic Landscape Characterisation Project** maps and describes the present day landscape of Leicestershire and records significant changes that can be observed through the study of historic mapping and aerial photography. The project has equipped Leicestershire County Council’s archaeological planning service with a detailed framework to aid the understanding of the landscape as a whole and provide an important tool that will contribute to the decision making process especially where issues affecting the landscape, both rural and urban are to be considered.

Local

- 11.1.7 There are a number of cultural heritage policies within Local Plans and strategies that have common approaches to the protection and enhancement of cultural heritage. These are summarised in Table 11.1.

Table 11.1: Key messages for Cultural Heritage

Strategic policies / priorities	Source / Authorities
Conservation and enhancement of Heritage Assets is a key objective	Blaby District Council Local Plan Core Strategy (2013) - Policy CS20
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS14
	Harborough District Council Core Strategy (2011) - Policy CS11
	Leicester City Council Core Strategy (2014) - CS Policy 18
	Melton Borough Council Pre-Submission Draft Local Plan (Nov 2016)-EN13
	North West Leicestershire District Council Local Plan (2017) - Policy He1
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 15
Secure high quality Design in new developments	Blaby District Council Local Plan Core Strategy (2013) - Policy CS2
	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS2
	Hinckley and Bosworth Borough Council Core Strategy (2009) - CS11
	Leicester City Council Core Strategy (2014) - Policy CS3
	North West Leicestershire District Council Local Plan (2017) - Policy D1
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 14
Develop Cultural Facilities	Leicester City Council Core Strategy (2014) - CS Policy 16
	North West Leicestershire District Council Local Plan (2017) - Policy IF2
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 16
Ensure effective conservation and management of the Grand Union Canal	Charnwood Borough Council Local Plan Core Strategy (2015) - Policy CS12
	Harborough District Council Core Strategy (2011) - Policy RT4
	Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 15

11.2 Strategic baseline

11.2.1 As shown in Table 11.2, there are many heritage assets located within Leicestershire as a whole. In 2015, the County contained 186 Scheduled Ancient Monuments and 14 Registered Parks and Gardens²². The numbers of designated assets have since increased to 378 Scheduled Monuments and 20 Registered Parks and Gardens in 2017²³.

²² Leicestershire County Council (July 2015) Minerals and Waste Local Plan Consultation Draft, Available: http://www.leics.gov.uk/minerals_and_waste_local_plan_consultation_draft_july_2015.pdf

²³ Listed heritage assets www.historicengland.org.uk (accessed 2018)

- 11.2.2 There is also a variety of non-designated buildings and features that contribute to the setting of settlements across the Plan area.
- 11.2.3 Whilst no World Heritage Sites are designated, a registered battlefield (Battle of Bosworth 1485) is located to the south-west, and is considered to be both a heritage, educational and tourist attraction for the whole county.
- 11.2.4 Various assets bridge across the local authority boundaries of the county. Most notably of these is the Grand Union Canal, which connects London to Birmingham. Within the Leicester section, the canal stretches for 66 miles, with 59 locks and two tunnel passages. Although shorter in length, the Ashby Canal and the Grantham canal are also present within Leicestershire.
- 11.2.5 The settlement pattern of the county reflects both its old and recent history. Leicestershire, particularly in the east, is considered to have a settlement pattern of medieval origin, namely one which is dominated by nucleated clusters which are compact and have a regular plan to their arrangement. This is a reflection of the agricultural regime of the time. Whilst much of the settlement in the west of Leicestershire is also nucleated, there are also a significant number of dispersed settlements which are attributed to the modern coal industry²⁴.
- 11.2.6 Leicester city has a clearly defined historic core. This is the area within the town defences that were first established in the Roman period and adopted in the medieval period, along with areas outside those defences in which it is known that there were Roman cemeteries, Roman and medieval suburbs and medieval religious houses and hospitals.
- 11.2.7 Both the urban settlements and the natural landscape of Leicestershire highlight its rich and varied heritage, and its journey from medieval society to the more recent industrial development. The coalmining industry in particular has left a strong legacy in the north and the west of the County.
- 11.2.8 There were 46 assets recorded on the Heritage at Risk Register in 2017, many of which are in a 'Poor' or 'Very Bad' condition (Table 11.2). This is a reduction in the number of buildings at risk since 2015 (52) suggesting that there has been some improvement in the management of heritage assets identified at risk.
- 11.2.9 With regards to the built environment, many of the villages of Leicestershire are characterised by red-brick terraces and slate roofed houses. The skylines of older village settlements in particular are often defined by church spires.

11.3 Future baseline, issues and opportunities

- 11.3.1 Whilst various local and national policies act to protect cultural heritage assets, there is a threat that increased growth and development within Leicestershire, unless managed, could reduce the quality of the built environment, and may adversely affect the setting or condition of various cultural assets. This would particularly be a threat to assets where open landscapes at the edge of settlements form an important element of their character/setting.

A small number of assets are listed on the Heritage at Risk Register, and recognition on this platform could help in their safeguarding. However, further assets at risk which are yet to be analysed or have their value recognised could be at risk for decline (without proactive management).

²⁴ Leicestershire, Leicester and Rutland Historic Landscape Characterisation Project (2010), Available: [https://www.charnwood.gov.uk/files/documents/the_leicestershire_leicester_and_rutland_historic_landscape_characterisation_project_2010/EB-ENV-24+-+The+Leicestershire+Leicester+%26+Rutland+Historic+Landscape+Characterisation+Project+\(2010\).pdf](https://www.charnwood.gov.uk/files/documents/the_leicestershire_leicester_and_rutland_historic_landscape_characterisation_project_2010/EB-ENV-24+-+The+Leicestershire+Leicester+%26+Rutland+Historic+Landscape+Characterisation+Project+(2010).pdf)

Key issues / trends				
Authority	Protection of settlement character	Archaeological and cultural heritage assets ²⁵	Heritage at Risk (<i>numbers and condition</i>) ²⁶	Key assets and features
Leicester City	24 Conservation Areas covering approximately 322 ha. Green Wedges are important for the protection of settlement character.	401 Listed Buildings; 9 Scheduled Monuments; 6 Registered Historic Parks and Gardens (2017).	14 at-risk sites (4 Conservation Areas; 8 Listed Buildings or Structure; 4 Places of Worship). Of these, 5 are considered to be in a 'Very Bad' condition, 5 in a 'Fair' condition, and 3 in a 'Poor' condition (2017).	Clearly defined historic core to the city centre.
North West Leicestershire	23 Conservation Areas representative of rural, agricultural areas. Legacy of Coalmining and Industrial Revolution.	641 Listed Buildings; 23 Scheduled Monuments; 3 Registered Historic Parks and Gardens (2017). Considerable Archaeological potential across the district (2017).	5 assets recorded at risk in 2015 (3 Churches, 1 Colliery and 1 Railway Station). The Churches are all in 'Poor' condition with slow decay. Rest in a 'Fair' condition and under repair (2016).	Mix of urban and rural settlements. Listed Buildings predominantly located along settlement high streets. Many Scheduled Monuments are remnants of the coal mining industry.
Blaby District Council	10 Conservation Areas.	186 Listed Buildings; 16 Scheduled Monuments; 0 Registered Historic Parks and Gardens (2017).	In 2016, there was 1 asset at risk (Church) with a 'Fair' condition and repair scheme in progress. This asset has since been removed from the heritage at risk register (2017).	Large settlements around the south westerly border of Leicester, and a scattering of smaller settlements throughout the rest of the district. Quarrying heritage, Croft Hill. Grand Union Canal.
Charnwood Borough Council	39 Conservation Areas.	785 Listed Buildings; 22 Scheduled Monuments; 3 Registered Historic Parks and Gardens (2017).	11 at risk assets (various types). 6 in 'Poor' condition with slow decay or deteriorating. 2 'Fair' condition in slow decay, 1 'Very Bad' in slow decay, 1 'Satisfactory' and declining, 1 'Extensive Significant Problems' and declining. (2017)	Concentrations of assets around urban settlements. Loughborough is the largest settlement with majority of Listed Buildings, Assets run in a north-west/ south-eastern trajectory across the centre of the borough. Quite urbanised compared to other districts within Leicestershire.

²⁵ Listed heritage assets www.historicengland.org.uk (accessed 2018)

²⁶ Heritage at risk register online: www.historicengland.org.uk (accessed 2018).

Table 11.2: Key Cultural Heritage issues and trends across Leicester and Leicestershire

	Protection of settlement character	Archaeological and cultural heritage assets/ Numbers	Heritage at Risk (numbers and condition)	Key assets and features
Harborough District Council	62 Conservation Areas Areas of Separation between Lutterworth and Magna Park, and Scraptoft within the Leicester urban area.	1,270 Listed Buildings; 64 Scheduled Monuments; 6 Registered Historic Parks and Gardens (2017).	6 assets recorded at risk (4 churches, 1 moated site and 1 Hall). 3 churches in a 'Very Bad' condition with immediate risk or slow decay, 1 church in a 'Poor' condition with immediate risk, Moated site has 'Extensive Significant Problems' and is declining (2017).	Nevill Holt Conservation Area parish church spires considered an important landmark. Grand Union Canal significant asset. Views of interest from Hallaton Road into East Norton. (2014)
Melton Borough Council	44 Conservation Areas. Fringe landscapes around town under increasing pressure from development.	707 Listed Buildings; 34 Scheduled Monuments; 2 Registered Historic Parks and Gardens (2017).	4 churches recorded at risk (3 very bad condition, with slow decay or immediate risk, 1 in fair condition with slow decay). There has been a reduction in assets recorded at risk from 2015 - 2017.	Melton Heritage trail through Melton Mowbray within the Town Centre. Grantham Canal
Hinckley and Bosworth Borough Council	28 designated Conservation Areas	338 Listed Buildings; 21 Scheduled Monuments; 0 Registered Historic Parks and Gardens; and 1 registered Historic Battlefield (Battle of Bosworth 1485) (2017).	5 at risk (3 conservation areas, 1 church and 1 stable). 2 are 'Very Bad' and 3 are in a 'Poor' condition (2017).	Bosworth Battlefield registered as a Historic battlefield. Entire length of Ashby Canal is a Conservation Area.
Oadby and Wigston Borough Council	10 Conservation Areas	37 Listed Buildings; 0 Scheduled Monuments; 0 Registered Historic Parks and Gardens (2017).	No heritage assets recorded at risk (2017).	Grand Union Canal Conservation Area.
Summary	There is a rich diversity of cultural heritage across the HMA, exemplified by a number of historic market towns, Leicester City's historic core, rural settlements and linear features such as the Grand Union Canal.			

12. Water

12.1 Policy context

European and National

- 12.1.1 The EU's **'Blueprint to Safeguard Europe's Water Resources'** promotes the use of green infrastructure, such as wetlands, floodplains and buffer strips along watercourses to reduce vulnerability to floods and droughts. It also emphasises the role water efficiency can play in reducing scarcity and water stress.
- 12.1.2 The **European Water Framework Directive** (WFD) (2000/60/EC) promotes an integrated and coordinated approach to water management at the river basin scale. One of its key objectives is the requirement to prevent deterioration in status and achieve at least Good Ecological Status in inland and coastal waters following deadlines ranging from 2015 to 2027. The WFD also requires all Artificial or Heavily Modified Water Bodies to achieve Good Ecological Potential.
- 12.1.3 In response to the Water Framework Directive (WFD), England and Wales are divided into 10 River Basin Districts, each of which is managed through a River Basin Management Plan. Leicestershire is situated within the Humber River Basin District.
- 12.1.4 The **NPPF** states that:
- Local Planning Authorities should set out strategic policies to provide infrastructure for water supply, waste water and flood risk (paragraph 156);
 - New development should be strategically located away from areas of high flood risk, not act to increase flood risk elsewhere and seek opportunities to reduce flood risk where possible (paragraph 100);
 - Local Plans should take into consideration climate change and the implication of this for flood risk, coastal change and water supply, with risk managed for development in vulnerable areas through appropriate adaptation measures (paragraph 99); and
 - New and existing development should be prevented from contributing to water pollution (Paragraph 109), and that Development should give "priority to the use of sustainable drainage systems" (Paragraph 103).
- 12.1.5 The **Flood and Water Management Act** sets out the following objectives regarding flood risk:
- Incorporate greater resilience measures into the design of new buildings, and retro-fit at risk properties (including historic buildings);
 - Utilise the environment, e.g. utilise land to reduce runoff and harness wetlands to store water; and
 - Identify areas suitable for inundation and water storage.
- 12.1.6 The act also introduces the requirement for developers to utilise Sustainable Drainage Systems (SUDS), which can have multiple benefits for the water environment. Lead Local Authorities are responsible for establishing a SUDS Approving Body, which will have a duty to adopt and maintain SUDS once completed.
- 12.1.7 The **Climate Change Risk Assessment for 2017** report prepared for the Committee on Climate Change set out the following key messages:

- Business as usual in managing flood risk: A 50% increase in expected annual damage (EAD) is projected under a 2°C climate change projection and 150% with a 4°C change with further increases due to population growth.
- Flood sources most important for risk today and in the future: Fluvial (river), contributing £560m (40%) of total UK EAD. Future change in groundwater flooding is dominated by flooding from permeable superficial deposits.
- Current levels of adaptation will not be sufficient to completely offset all of the projected increases under either a 2°C or 4°C climate change projection.
- Significant increases in flood risk are projected to occur as early as the 2020s. The need for early adaptation also reflects the long lead time required to implement policy change and the long lived nature of the decisions made today that influence future risk.

12.1.8 The UK strategy **Future Water** (2011) seeks to achieve a secure supply of water resources whilst protecting the water environment. This means greater efficiency in water use, application of Sustainable Urban Drainage Systems (SuDS), managing diffuse pollution from agriculture, tackling flood risk and reducing greenhouse gas emissions.

12.1.9 The **Water White Paper** sets out the Government's vision for a more resilient water sector, where water is valued as a precious resource. Measures must address poorly performing ecosystems and the combined impacts of climate change and population growth on stressed water resources. Measures are put in place to encourage and incentivise water efficiency, with the aspiration to reduce average demand to 130 litres per head, per day by 2030.

12.1.10 Environment Agency's **Groundwater Protection: Principals and Practice** (GP3) is intended to be used by anyone interested in groundwater and particularly by those proposing or carrying out an activity that may cause groundwater impacts, providing information on general requirements for groundwater protection including technical approaches to its management and protection, the EA position and approach to the application of relevant legislation, and technical guidance for groundwater specialists. The EA aims and objectives for groundwater include:

- Acting to reduce climate change and its consequences;
- Protecting and improving water, land and air;
- Working with people and communities to create better places; and
- Working with businesses and other organisations to use resources wisely.

Regional

12.1.11 The key issues identified in the **Humber River Basin Management Plan** (2015) include:

- Point source pollution from water industry sewage works;
- Diffuse pollution from agricultural activities;
- Diffuse pollution from urban sources;
- Physical modification of water bodies; and
- Disused mines; point and/or diffuse pollution source.

12.1.12 The **River Trent Catchment Flood Management Plan** sets an overview of the current flood risk and how it is currently managed, looking to the impact of climate change and future

direction of flood risk management. Proposed actions to implement the preferred policy for each sub area in the Trent catchment are mapped and listed, which include key messages such as:

- To work with others to minimise disruption to people and communities caused by flooding, taking into account future climate change, and urban growth in the policy unit area;
- To aim to minimise the increase in the cost of flood damage, which may occur as a result of future climate change.
- To sustain and increase the amount of BAP habitat in catchments; and
- Working with land managers and farmers to reduce soil erosion from intensively farmed land.

12.1.13 **Strategic Flood Risk Assessments (SFRA)** across Leicester and Leicestershire also inform the planning context in relation to flood risk and development within the area and outlines the responsibilities of those involved with future development.

12.1.14 Leicester City Council is currently in the process of updating the Strategic Flood Risk Assessment for Leicester City. The baseline information and findings will need to be considered.

12.1.15 The **Leicestershire Local Flood Risk Management Strategy (2015)** sets out seven objectives for managing local flood risk across the County. These are listed below:

- Work collaboratively
- Improve understanding and awareness
- Enhance the natural and historic environment
- Improve resilience
- Encourage sustainable development
- Uses resources efficiently
- Promote riparian responsibilities.

Local

12.1.16 There are a number of policies relating to water contained within Local Plans and strategies that have common approaches to flood risk and the protection and enhancement water. These are summarised in Table 12.1.

Table 12.1: Key messages for Water

Strategic policies / priorities	Source / Authorities
Increasing implementation of Sustainable Urban Drainage systems (SUDs).	Blaby District Council Local Plan Core Strategy (2013) - Policy CS22
	Leicester City Council Core Strategy (2014) - Policy CS2
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy EN12
	North West Leicestershire District Council Local Plan (2017) - Policy CC3
Limit impact on water resources with new development	Blaby District Council Local Plan Core Strategy (2013) - Policy CS22
	Blaby District Council emerging Local Plan Delivery DPD - Policy on Land Contamination and Pollution
	Charnwood Borough Council Local Plan Core Strategy (2015) – Policy CS2 and Policy CS16
	Hinckley and Bosworth Borough Council Core Strategy (2009) - Policy 20
	Leicester City Council Core Strategy (2014) - Policy CS2
	Melton Borough Council Pre-Submission Draft Local Plan (2016) - Policy E11
	North West Leicestershire District Council Local Plan (2017) - Policy CC2 and Policy CC3
Oadby and Wigston Pre-Submission Draft Local Plan (2017) - Policy 9	

12.2 Strategic baseline

- 12.2.1 Leicestershire County Council is the Lead Local Flood Authority for Leicestershire. In that role, Leicestershire County Council is responsible for managing the risk of flooding from surface water, groundwater and ordinary watercourses for all Local Authorities in the District, aside from Leicester City Council (which is also a Lead Flood Risk Authority). The Environment Agency is responsible for managing the risk of flooding from Main Rivers, reservoirs and estuaries.
- 12.2.2 Local Flood Risk is defined as surface water flooding, ordinary watercourse flooding, main river flooding and groundwater flooding.
- 12.2.3 There is a history of flooding within Leicestershire, with the most significant and recent events occurred in 2012 and 2013²⁷. Flood zones are illustrated in figure 12.1.
- 12.2.4 The Leicestershire Local Flood Risk Strategy (2015), Strategy has identified that any settlement that has more 100 properties shown to be at risk of Surface Water Flooding have been classed as a 'Priority Settlement'. There are forty areas that have been classed as a priority settlement

²⁷ Leicestershire Local Flood Risk Strategy (2015)

across Leicestershire²⁸. This includes the following settlements in the ‘top ten’: Loughborough (as the most at risk), Blaby, Narborough and Whetstone, Market Harborough, Wigston, Melton Mowbray, Hinckley and Burbage and Oadby.

- 12.2.5 The whole of the Leicester and Leicestershire county area is designated as a nitrate vulnerable zone for surface water. Groundwater Nitrate Vulnerable zones are also present in parts of Melton Mowbray, North West Leicestershire, and an area of Eutrophic Nitrate Vulnerable Zone is allocated to the North West of the Leicester City urban area.
- 12.2.6 Water supply is generally good²⁹, with some capacity to expand, but in some areas this is only at low flows. With regards to water resources, Severn Trent Water identifies that several areas across the HMA are under ‘moderate water stress’. In the longer term, Severn Trent Water recognise that, future supply/demand pressures will lead to a need for additional water resources and treatment capacity.

12.3 Future baseline, issues and opportunities

- 12.3.1 Climate change is likely to increase the risk of flooding within low-lying areas of Leicester and Leicestershire, and may also affect availability during warm and dry periods. There is therefore a need to maintain and upgrade flood defences, especially in areas which are currently susceptible to flood events, and to adopt sustainable drainage systems into new developments. There is also a need to ensure future developments will be safe for the lifetime of the development taking into account the effects of climate change.
- 12.3.2 Trends suggest that authorities are experiencing moderate stress to water supply. This is likely to be exacerbated in the future under predicted population growth and the additional demand on supplies. There is a need to increase the capacity of waste water treatment plants and sewers in order to cater to this additional demand. Stress on water resources is likely to further increase due to increased demand from a growing population and potential lower river flows during dry periods as a result of climate change

²⁸ Leicestershire Flood Risk Management Plan (2015)

http://www.leicestershire.gov.uk/sites/default/files/field/pdf/2015/12/8/flooding_strategy_plan.pdf

²⁹ Severn Trent Water (2014) Final Water Resources Management Plan 2014

Figure 12.1: Flood Risk in Leicester and Leicestershire

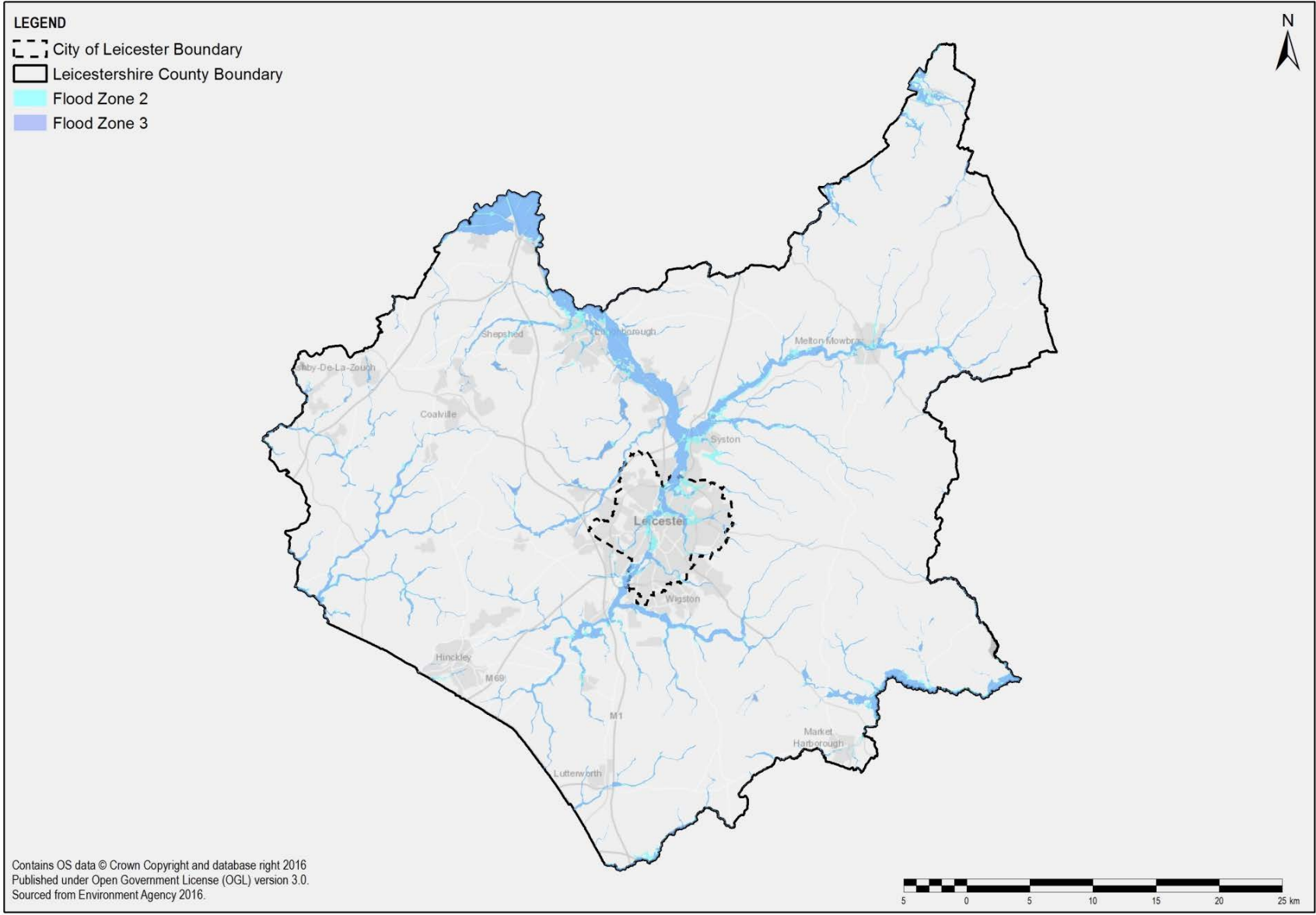


Table 12.2: Key water issues across Leicester and Leicestershire

Key issues / trends		
Authority	Flooding ³⁰	Water quality ³¹
Leicester	<p>Climate predictions indicate a potential increase of flood events (2016).</p> <p>Areas at risk of fluvial flooding include the River Soar, which is susceptible to flooding in parts of the City. Infrastructure needs to be assessed against demand (2016).</p>	<p>Biological river quality classified as good in 2009, which was an improvement from 2006.</p> <p>Chemical river quality classified as fair in 2009, with no change from 2006</p>
North West Leicestershire	<p>Areas at particular risk of fluvial flooding include Castle Donnington and Kegworth.</p> <p>There are 1028 properties in Flood Zone 3 within Castle Donnington, Lockington & Hemington.</p>	<p>The majority of watercourses continue to have poor to moderate ecological status (2010).</p> <p>A management plan has been prepared to tackle water quality issues in the River Mease which ought to improve quality and function over time.</p>
Blaby	<p>There are areas at risk of fluvial flooding associated with Rivers Soar and Sence, Rothley Brook.</p> <p>Blaby, Narborough and Whetstone identified as a 'priority settlement' with 646 properties at risk from fluvial flooding and 1702 from 1 in 100 surface water flooding (which is within the top 5 in Leicestershire).</p>	<p>2009 data demonstrated that 7 of 11 watercourses had 'poor' ecological status and four had 'moderate' status.</p>
Charnwood	<p>Areas at particular risk of fluvial flooding include Mountsorrel, Barrow upon Soar and Loughborough.</p> <p>There are 4461 properties in Charnwood located in Flood Zone 3a. Loughborough is in the top 5 priority settlements in Leicestershire for surface water flooding with 2743 properties at risk (1 in 100).</p> <p>No planning permissions were granted in flood risk areas (2012).</p>	<p>Most rivers in Charnwood are of good or moderate quality. There are some poor and one bad (2013).</p>
Hinckley and Bosworth	<p>Hinckley and Burbage identified as a 'priority settlement' with 54 properties at risk from fluvial flooding and 1496 from 1 in 100 surface water flooding (which is within the top 5 in Leicestershire).</p>	<p>In 2013, the Water Framework Directive status of watercourses in Hinckley was mixed. Normanton Brook was classified as bad along large parts of its length, and the River Sence classified as poor along much of its length. Markfield Brook on the other hand is classified as moderate.</p>

³⁰ 'Priority settlements' identified in Leicestershire Local Flood Risk Management Strategy (2015)

³¹ Unless stated otherwise, data is from the Environment Agency (2009) – this data is no longer collected in the same format though.

Key issues / trends		
Authority	Flooding ³⁰	Water quality ³¹
Harborough	Frequent incidences of flooding have the potential to continue with current climate trends (2014). Market Harborough is in the top 5 'priority settlements' for surface water flooding with 2310 properties at risk (1 in 100).	Environment Agency data (2014) demonstrates that there are only two watercourses with good ecological status, both of which are canals. 10 watercourses have a 'moderate' status, 9 'poor' and 7 'bad'.
Melton	Flood zones 2 and 3 cover approximately 60 ha of the borough which could have the potential for further flooding incidences with current climate trends (2014). Melton Mowbray has 1081 properties at risk of surface water flooding (1 in 100) and 530 properties within flood zone 3.	River Wreake had very high levels of phosphates and nitrates (2009)
Oadby and Wigston	Flood plains particularly concentrated around the River Sence (2014). Wigston is identified as a 'priority settlement' with 320 properties at risk (within Flood Zone 3) from fluvial flooding and 1849 from 1 in 100 surface water flooding (which is within the top 5 in Leicestershire).	The main length of the River Sence From Burton Brook to Countesthorpe Brook has 'moderate' overall physico chemical quality (2009).
Summary	Flood risk presents an issue on floodplains as well as surface water flooding presenting an issue in particular settlements identified as 'priority settlements'.	Though there were exceptions, a large number of watercourses were classified as having poor biological / ecological status in 2009. Though this data is somewhat old, it suggests that there is a need for continued protection and enhancement of water resources.

13. Waste and Minerals

13.1 Policy context

National

- 13.1.1 **Waste:** Most UK legislation impacting on waste management is now implemented as a result of European Directives. The European Union's waste legislation includes:
- Directives providing frameworks for managing wastes, including the Directive on Waste (“the **Waste Framework Directive**”), as amended (and includes the European Waste Catalogue), and the Directive on Hazardous Waste, as amended;
 - Directives on the treatment of wastes, including the Directive in **Integrated Pollution Prevention and Control**, the Directive on Landfill of Waste and the Directive on Incineration of Waste;
 - The **EU Landfill Directive** sets a target to reduce the proportion of biodegradable municipal waste landfilled by 75% by 2035 compared to 1995, in England a commitment is made to meeting this target through the Waste Management Plan for England, 2013.
- 13.1.2 The Waste Framework Directive is transposed in England largely through the **Waste (England and Wales) Regulations 2011**, amongst others, which places emphasis on the waste hierarchy (**Figure 13.1**) to ensure that waste is dealt with in the priority order of: prevention, preparing for re-use, recycling, other recovery and lastly disposal.
- 13.1.3 The **NPPF** does not contain specific waste policies as waste.
- 13.1.4 The **Waste Strategy 2007** contains aims including:
- To decouple waste growth (in all sectors) from economic growth and put more emphasis on waste prevention and re-use (Figure 13.1);
 - Meet and exceed the Landfill Directive diversion targets for biodegradable municipal waste;
 - Increased diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste;
 - Secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste;
 - Get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.
 - To recycle or compost at least 45% of household waste by 2015 and 50% by 2020.
- 13.1.5 The **National Planning Policy for Waste 2014** provides the planning framework to enable Local Authorities to put forward strategies which identify sites as being appropriate for new or enhanced facilities for waste management.
- 13.1.6 **Minerals:** In England, national minerals policies are set out in Minerals Planning Statements (MPS) and Mineral Policy Guidance Notes (MPG), although these are largely revoked as a result of the NPPG.
- 13.1.7 Minerals Planning Guidance Notes (MPGs) and their replacements, **Minerals Policy Statements** (MPSs), set out the Government's policy on minerals and planning issues and provide advice and guidance to local authorities and the minerals industry on policies and the operation of the planning system with regard to minerals.

13.1.8 Mineral planning authorities (MPAs) must take their contents into account in preparing their development plans. The guidance may also be material to decisions on individual planning applications and appeals. Leicestershire County Council is the MPA for all the Districts of Leicestershire aside from Leicester, which has its own MPA.

13.1.9 The **NPPF** Section 13 includes advice in respect of ‘Facilitating the sustainable use of minerals’. This identifies the importance of ensuring there is sufficient supply of material to provide for development and the economy. Paragraph 143 sets out detail of minerals considerations in preparing Local Plans, including:

- Policies for extraction of mineral resource of local and national importance;
- To take account of the potential for secondary and recycled materials before primary extraction;
- To define Mineral Safeguarding Areas and protection policies.

13.1.10 The NPPG also sets out the role of the Minerals Planning Authorities and the LPAs

Regional

13.1.11 Leicestershire County Council is in the process of reviewing its Minerals and Waste Local Plan. The **Minerals and Waste Local Plan Pre-Submission Draft (2016)** will replace various other documents which until now have dictated the approach of Leicestershire. Once reviewed, the new Waste and Minerals Local Plan will offer a spatial vision, strategy and objectives to guide the future working of minerals within the County of Leicestershire to the period until 2031.

13.1.12 The spatial vision of this plan is to ‘enable the provision of sufficient minerals and waste facilities within Leicestershire in locations that meet the economic and social needs of present and future generations whilst seeking to protect and enhance the environment’

13.1.13 Leicester City Council as a unitary authority (and therefore waste planning authority and minerals planning authority) is responsible for planning policies for waste and minerals. The authority will be producing its own waste plan.

Local

13.1.14 The **Leicester and Leicestershire Waste Development Framework Core Strategy and Development Management DPD** sets out a vision up to 2021 with three key elements:

- encouraging waste reduction;
- increasing the reuse and recycling of waste; and
- less reliance on landfill by increased energy recovery.

13.1.15 Table 13.1 below highlights the common messages, policy approaches and strategic priorities for waste and minerals.

13.1.16 The majority of policies which relate to waste and minerals, however, are covered in the Leicestershire Minerals and Waste Local Plan Pre-Submission Draft (2016) which is currently emerging, and which offers a strategy for the whole of Leicestershire.

Table 13.1: Key planning policy messages for waste and Minerals

Emerging strategic policies	Source / Authorities
Encourage waste minimisation	All Local Authorities
Encourage renewable energy / less use of fossil fuels	All Local Authorities

13.2 Strategic baseline

- 13.2.1 Leicestershire is considered to be a mineral rich county, and one of the principal producers of minerals within England, particularly with regards to igneous rock. Many of the active mineral extraction sites are located, or have previously been located, within the north-western areas of the County as governed by naturally occurring geology. There are also areas of active and previously active mineral sites in the south west of Leicestershire.
- 13.2.2 Igneous rocks are currently extensively worked in and around Charnwood Forest in Leicestershire, producing in excess of 10 million tonnes of aggregate each year. The quarry at Mountsorrel is one of the largest aggregate quarries in the UK. Rocks quarried also include intrusive igneous rocks and Charnian volcanoclastic sediments, much of which is then exported around England³².
- 13.2.3 Small quarries which extract Carboniferous Limestone are located in the north- west of Leicestershire at Breedon Hill and Cloud Hill. The Marlstone Rock Formation has been extensively quarried for Iron ore in the area surrounding Holwell, also north of the county. Concentrations of red and green mudstones, siltstones and sandstones are found in west Leicestershire, where associated brick quarrying takes place.
- 13.2.4 There is a continuing demand for open-cast coal mining, although this has significantly declined since the 1990s. There are relatively few applications for deep-cast coal mining within the region. No safeguarded minerals sites have yet been identified in the County, although work is progressing on this for the County.
- 13.2.5 Various facilities are available within the County for the management of waste. These include materials recovery facilities (MRFs) at Whetstone and Melton; a mechanical biological treatment (MBT) facility at Cotesbach; anaerobic digestion plant at Wanlip and Huncote; 8 composting sites,;8 transfer sites; approximately 43 commercial and industrial (C&I) recycling operations; 14 Recycling and Household Waste Sites and landfills for non-hazardous waste and inert waste dispersed at various locations³³. A cluster of waste transfer and recycling sites are located to the south west of Leicester city. Beyond this point, sites tend to be concentrated in the north east of the Leicester city boundary, and surrounding the Hinckley and Loughborough areas.

³² East Midlands Region Landscape Character Assessment (2010), Natural England, Available: <http://publications.naturalengland.org.uk/publication/5635681403535360>

³³ Leicestershire County Council (July 2015) Minerals and Waste Local Plan Consultation Draft, Available: http://www.leics.gov.uk/minerals_and_waste_local_plan_consultation_draft_july_2015.pdf

13.2.6 As recorded in 2013/14, the total municipal waste arisings in Leicestershire was 344,558 tonnes³⁴ with 48.1% (165,595 tonnes) sent for reuse, recycling or composting. Table 13.2 outlines the key strategic trends regarding waste and minerals across the Plan area.

13.3 Future baseline, Issues and opportunities

13.3.1 The emerging Leicestershire County Council Minerals and Waste Local Plan seeks to provide adequate waste management and mineral extraction/ processing facilities within Leicestershire to meet identified and predicted need. With the adoption and implementation of this plan, it is likely that increased waste services will be provided, enabling for more efficient waste management and increased recycling. Similarly, as a unitary authority, Leicester City will be preparing waste and minerals plans for the City, which will help to ensure that growth can be accommodated. These plans will need to be aligned to planned growth in housing and the economy, as identified within the Growth Strategy.

13.3.2 Whilst more efficient management of waste is likely to be achieved with technological improvements and ongoing behaviour changes, the volume of waste is expected to increase in line with population growth. By 2031, it is expected that the county will produce around 3.5 million tonnes of waste per year, and as such waste volume is likely to remain similar to current proportions.

13.3.3 Over the next 15 years, there should be sufficient reserves to meet demand for 231 million tonnes of crushed rock. Specific demand for minerals by type, however, remains unknown, as consumer and commercial trends in the energy sector may fluctuate under wider trends towards fossil fuels or, alternatively, to greener sources of energy. These issues would be dealt with in the waste and minerals Local Plans.

³⁴ Local authority collected and household waste statistics 2013 to 2014 (2014), Available: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>

Table 13.2: Strategic trends for Waste and Minerals

	Key issues / trends		
Authority	Waste arisings and recycling ³⁵	Household recycling centers	Mineral resources
Leicester City	40.7% of municipal waste sent for reuse, recycling or composting in 2016-2017.	Two household waste recycling centre's within the City with good accessibility for residents. Kerbside recycling throughout the District	Small areas of sand and gravel remain in the city but are considered commercially unviable for extraction. Limited potential sites of Gypsum and brick-clay also render these as unviable.
North West Leicestershire	46.7% of waste sent for reuse, recycling or composting in 2016-2017.	Two Recycling and Household Waste Sites.(RHWS) Kerbside recycling throughout the District	Many igneous rock resources within NWL. Bardon is an extraction site within NWL (2014).
Blaby District Council	47.9% of municipal waste sent for reuse, recycling or composting in 2016-2017.	One household waste disposal and recycling centre. Kerbside recycling throughout the District.	Potential for River Soar and Sence valleys to contain sand and gravel. Likewise, potential for Igneous Rock deposits in the central area. Potential development restrictions. A number of disused quarries some of which are used for landfill but many remain derelict.
Charnwood Borough Council	48.4% of municipal waste sent for reuse, recycling or composting in 2016-2017. Have adopted a 'Zero Waste' Strategy.	Three recycling and waste disposal sites. Kerbside recycling throughout the District	Sand and gravel deposits in River Soar and River Wreake valleys which intersect the borough- used as aggregates. Also oil reserves. Mountsorrel Quarry in the Borough.
Harborough District Council	53.6% of waste sent for reuse, recycling or composting in 2016-2017.	Three household waste and recycling facilities in Harborough . Kerbside recycling throughout the District	Two operational minerals sites and one extra permitted site (2013). Significant sand and gravel resources around Lutterworth.
Melton Borough Council	47.7% of municipal waste sent for reuse, recycling or composting in 2016-2017.	Melton Mowbray Recycling and Household Waste site. Kerbside recycling throughout the District	Mineral Consultation Areas are spread throughout the borough and development will likely be close to them. Sterilisation could be an issue.
Hinckley and Bosworth Borough Council	49.4% of waste sent for reuse, recycling or composting in 2016-2017.	One household waste disposal and recycling centre. Kerbside recycling throughout the District	Existing sand and gravel extraction sites in proximity to transport and infrastructure links.

³⁵ Waste Data Flow (2018)

	Key issues / trends		
Authority	Waste arisings and recycling ³⁵	Household recycling centers	Mineral resources
Oadby and Wigston Borough Council	48.3% of municipal waste sent for reuse, recycling or composting in 2016-2017.	One household waste disposal and recycling centre. Six safeguarded waste sites.	A sand and gravel mineral safeguarding site has been designated along the southern edge of the district (2016).
Summary	Waste generation and recycling rates vary across the County, some authorities are experiencing a recent decline but there is a general trend of improvement.	There are a range of household waste recycling centres that serve the population across the County. Accessibility is broadly good.	There are important mineral reserves across the HMA, some of which could overlap with potential development areas.

14. Key strategic issues

14.1 Introduction

14.1.1 This section establishes a series of key issues, drawn from the baseline position and contextual review presented throughout this Scoping Report.

14.1.2 The key issues provide the context for the sustainability appraisal and have helped to inform the Sustainability Appraisal Framework.

14.2 Sustainability appraisal framework

14.2.1 The SA Framework consists of a series of objectives and supporting criteria that form the basis for assessing the Plan policies and any reasonable alternatives.

14.2.2 The framework is deliberately focused on strategic sustainability issues, as this is appropriate to the nature and scale of the Strategic Growth Plan. However, the sustainability issues identified through each Local Authorities SA processes have been acknowledged, particularly where there are common themes.

14.3 Appraisal of the Growth Strategy

14.3.1 The SA will involve the appraisal of the growth strategy (quantum and distribution), including policies, allocations and any reasonable alternatives.

14.3.2 There is a need to present a transparent appraisal that clearly sets out how the significance of effects has been determined consistently in the appraisal of the Growth Strategy and any reasonable alternatives. At the same time the appraisal needs to remain accessible and should therefore be succinct and proportionate.

14.3.3 An example of how the findings for each SA objective could be presented below.

Figure 14.1: Example of how alternatives will be appraised and findings presented

Biodiversity	Alternative 1	xxx	Alternative 2	✓ x	Alternative 3	✓✓
Nature of effects						
Sensitivity of receptors						
Likelihood of effects						
Significance						

Major negative effect	xxx	Minor positive effect	✓
Moderate negative effect	xx	Moderate positive effect	✓✓
Minor negative effect	x	Major positive effect	✓✓✓
Neutral effect	-	Effects are unclear	?

Table 14.1: The SA Framework and corresponding key issues.

Key issues	SA Objective	Sub objectives / guiding questions
<p>Biodiversity and geodiversity</p> <p>The County has a relatively low level of designated biodiversity sites. However, these are in a mostly favourable or recovering position. Opportunities to strengthen ecological networks should therefore be taken advantage of.</p> <p>The quality of water could affect a range of biodiversity habitats and species across the County, making strategic river networks an important feature to protect, maintain and enhance.</p>	<p>1. Create new, protect, maintain and enhance habitats, species and ecological networks.</p>	<p>How will water environments be affected?</p> <p>How will the quality and connectivity of ecological networks be affected?</p> <p>Will there be a net increase in biodiversity?</p>
<p>Health and wellbeing</p> <p>The population is aging, with impacts for the delivery of health services.</p> <p>Also key issue due to rising ageing population is provision of sufficient and appropriate housing within the HMA / districts.</p>	<p>2. Maintain and improve levels of health, whilst reducing health inequalities</p>	<p>How will the health and wellbeing of an older population be affected?</p> <p>How will health inequalities be affected?</p> <p>Will good levels of health and wellbeing be maintained?</p> <p>How will access to open spaces be affected?</p>
<p>Housing</p> <p>There is a need to meet needs for housing as identified in the HEDNA (2017). In some districts it may be difficult to meet full needs 'locally' (i.e. within the district it arises). This could necessitate housing needs for some districts being met in other parts of the HMA.</p> <p>Housing affordability is an issue across the HMA. There is an increasing need to provide housing suitable for an ageing population.</p>	<p>3. Secure the delivery of high quality, market and affordable homes, to meet Objectively Assessed Need.</p>	<p>How will the delivery of housing be affected?</p> <p>What is OAN for HMA and for each district / borough?</p> <p>How does OAN relate to land availability and to likely delivery rates?</p> <p>How will issues of affordability be tackled?</p> <p>Will affordability issues in rural areas be tackled?</p>

Key issues	SA Objective	Sub objectives / guiding questions
		To what extent will housing be well related to employment opportunities and key services?
<p>Employment and economy</p> <p>The County is well positioned for growth in the strategic distribution sector; though there is a need to identify the appropriate distribution of growth opportunities.</p> <p>Unemployment rates are falling across the HMA, though remain the highest within the city.</p>	4. Support the continued growth and diversification of the economy.	<p>How will the rural economy be affected?</p> <p>Is there support for the growth of strategic distribution centres in accessible locations?</p> <p>How will levels of unemployment be affected, particularly in the City and pockets of deprivation?</p>
<p>Transport and travel</p> <p>Accessibility to services, facilities and jobs is poor in rural areas.</p> <p>Access to strategic employment sites by public transport is not ideal.</p> <p>There may be constraints to the amount of development that can be accommodated on the edge or near the Leicester urban area in light of congestion along parts of the orbital road network.</p>	5. Improve accessibility to services, jobs and facilities by reducing the need to travel, promoting sustainable modes of transport and securing strategic infrastructure improvements.	<p>Will development contribute to strategic infrastructure improvements?</p> <p>Will development help to tackle accessibility issues, particularly in rural areas?</p> <p>Will development contribute to a reduction in congestion along key routes into, out and around Leicester?</p> <p>Will developments reduce the need to travel, especially by car?</p>
<p>Though generally good, air pollution presents an issue in some parts of the County, typically within areas that suffer from higher levels of traffic and congestion.</p>	6. Minimise exposure to poor air quality, whilst managing contributing sources.	<p>Will development reduce the number/amount of receptors that are affected by poor air quality?</p> <p>Will development lead to increased or decreased exposure to poor air quality for new and existing communities?</p>

Key issues	SA Objective	Sub objectives / guiding questions
<p>Climate change</p> <p>There are opportunities to increase the amount of low carbon and renewable sources of energy above the relatively low baseline position</p>	<p>7. Contribute to a reduction in greenhouse gas emissions and an increase in the use of low carbon energy</p>	<p>Is there potential for the development of low carbon and renewable energy schemes to be implemented?</p> <p>Will development lead to the ‘sterilisation’ of energy opportunities?</p>
<p>Landscape and land</p> <p>There are parcels of high quality agricultural land throughout the district that should be protected given the relatively low amount of Grade 1 and 2 land present.</p> <p>No nationally designated landscapes are present. But there are a variety of important landscapes which are important to the character of the countryside, preventing urban sprawl and supporting the natural environment. Whilst these are in relatively good condition, there are increasing pressures for from development that need to be managed.</p>	<p>8. Protect, maintain and enhance landscapes whilst promoting their value to sustainable growth.</p> <p>9. Protect high quality agricultural land from permanent development.</p>	<p>How will the rural and tranquil nature of the countryside be affected?</p> <p>Will access to the countryside be improved in a sustainable manner?</p> <p>Are there alternative locations for development on agricultural land of lower quality?</p> <p>Will topsoil be preserved?</p>
<p>Cultural heritage</p> <p>There is a wealth and variety of heritage features, many of which are designated for their heritage value. It will be important to protect the condition and setting of these assets.</p> <p>There may be cross border heritage assets.</p> <p>Though the number of ‘at risk heritage assets has decreased slightly from 2015-2017, the majority of heritage assets that remain on the ‘at risk’ register are declining in condition.</p>	<p>10. Conserve and enhance the historic environment, heritage assets and their settings.</p>	<p>How will the character of settlements be affected, particularly urban fringes?</p> <p>Will opportunities to enhance the fabric, function and setting of heritage assets and their settings be realised?</p>

Key issues	SA Objective	Sub objectives / guiding questions
<p>Water</p> <p>The quality of many water resources across the County is in need of improvement, yet could come under increased pressure from new development.</p> <p>SUDs should be encouraged to support the natural and sustainable management of water resources.</p> <p>There are areas across the County that are sensitive to and at risk of flooding (which could be exacerbated by climate change). There is a need to ensure that future development does not put more people at risk of flooding whilst ensuring that overall levels of flooding do not increase. This could/should constrain development in some areas, such as the flood plains of the River Soar and watercourses leading to and through Leicester City.</p>	<p>11. Steer development away from the areas at the greatest risk of flooding, whilst supporting schemes that reduce the risk and impacts of flooding.</p> <p>12. Protect, maintain and enhance the quality of water resources.</p>	<p>Has development been sited in accordance with the NPPF sequential and exception tests?</p> <p>Are there opportunities to secure strategic flood management and improvement schemes as part of development?</p> <p>Are there any opportunities to reduce flood risk downstream?</p> <p>Do the schemes combine flood risk management with delivering biodiversity and amenity benefits.</p> <p>Will development help to fund improvement and management schemes for water quality?</p> <p>Can development be accommodated by existing and planned water treatment facilities?</p>
<p>Waste and minerals</p> <p>Levels of recycling, reuse and composting are relatively high, and rates continue to improve. There has also been a general decrease in the amount of waste per capita.</p> <p>Growth in housing and employment is likely to generate more waste in terms of the overall volume. However, improved efficiency and continued drives to reduce the amount of waste sent to landfill should help to reduce the amount of waste generated per capita.</p> <p>There are mineral resources across the County, some of which could be sterilised by development. It is important to protect such reserves from sterilisation.</p>	<p>Waste – Scoped out. The trends are generally positive, and the planning for growth ought to be managed through the Leicester and Leicestershire Waste Plan.</p> <p>13. Protect mineral resources from sterilisation, and support their sustainable extraction.</p>	<p>Will mineral resources be sterilised as a result of housing or employment land allocations?</p> <p>Will development be located on land that could be used for future minerals extraction or transport (for example freight terminals, disused rail lines etc.)</p> <p>Will development be located close to sources of building materials?</p>

15. *Next steps*

15.1 **Consulting on the scope of the SA**

15.1.1 Consultation on the Scoping Report provides the opportunity for statutory bodies and other stakeholders to influence the scope of the SA.

15.1.2 Formal consultation was undertaken with the statutory consultation bodies and other stakeholders between August 25th 2017 and September 29th 2017.

15.1.3 A series of questions were posed to help prompt responses to the Scoping Report.

- Have we captured the relevant baseline information?
- Have we captured the relevant policies, plans and programmes?
- Have we identified the relevant key issues?
- Are the SA Framework and proposed methodologies robust and appropriate?

15.2 **'Finalising' the scoping report**

15.2.1 Following the consultation period on the draft Scoping Report, updates were made in light of comments and feedback received (See Appendix A). These changes are presented in this 'final' version of the Scoping Report, which informed the appraisal of the Growth Strategy.

15.2.2 It is important to note that the scope of the SA is not fixed and will be updated over time to reflect new evidence and feedback from stakeholders. Ultimately, the scope of the SA must be presented as part of the SA Report.

APPENDIX A: Consultation feedback and responses

Comments received	Response
<p>Historic England: There is insufficient reference to baseline data for heritage. Particularly relevant to site allocations and designations could include:</p> <ul style="list-style-type: none"> • Updating conservation areas appraisals • Undertaking characterisation studies • Producing setting studies • Local Lists • Leicestershire Stone Study • Assessment of landscape sensitivity. 	<p>No sites are being allocated in the growth strategy.</p> <p>As a strategic piece of work, the SA ought to focus on the pertinent issues at the correct geographical scale.</p> <p>The suggested updates / studies would be useful to assist in the appraisal process. However, undertaking the specific studies identified goes beyond the scope of the SA. Available information from emerging studies will be incorporated into the SA as appropriate if possible.</p>
<p>Historic England: Reference to non-designated heritage assets and archaeology should be included in Section 11.</p>	<p>Section 11 updated to include references.</p>
<p>Historic England: The SA Objective related to heritage should be reworded as follows:</p> <p><i>Conserve and enhance the historic environment, heritage assets and their settings</i></p>	<p>Objective amended as suggested.</p>
<p>Historic England: What methodologies are to be used?</p>	<p>The SA Framework provides the basis for appraising the draft Plan and any reasonable alternatives</p>
<p>Historic England: Detailed site assessment criteria is required to comply with the NPPF and ensure a sound plan</p>	<p>No sites are being allocated in the growth strategy.</p>
<p>Environment Agency: Section 3 – suggested wording changes to 3.3.7</p> <p><i>In addition to river systems, green corridors and other recreational routes <u>will be</u> enhanced to enable species movement throughout Leicestershire.</i></p> <p>We propose a new paragraph, 3.3.8:</p> <p><i>Steps should be taken to enhance the ‘Blue Corridors’ approach with the aim of improving biodiversity value, water quality, public access, flood plain use and tree planting to restore connectivity and improvements to air quality in the long term.</i></p>	<p>Suggested amendments / additions incorporated into Scoping Report.</p>
<p>Environment Agency: Section 12 – suggested wording changes are made to clarify flood management responsibilities.</p>	<p>Suggestions incorporated into the Scoping Report.</p>

<p>Environment Agency: The following documents are suggested as part of the contextual review.</p> <ul style="list-style-type: none"> • The UK National Ecosystem Assessment (June 2011) • The Natural Choice: Securing the value of nature (June 2011) • Biodiversity 2020: A strategy for England's wildlife and ecosystem services (Aug, 2011) • Making Space for Nature (2010) • Climate Change Allowances (2016) • National Flood and Coastal Erosion Risk Management Strategy for England (2011) • Future Water – The Government's water strategy for England (2011) • Sustainable drainage systems: non statutory technical standards (2015) • Flood Risk Management Plan for the Humber • CAMS: Soar Abstraction licensing strategy (2013) • Severn Trent Water's (STW's) Water Resource Management Plan 2015-40 • Severn Trent Waters Area Drought Plan (Leicester) Riverside Environmental Strategy • Leicestershire Municipal Waste Management Strategy 	<p>Documents included as deemed necessary.</p>
<p>Environment Agency: New paragraphs should be added to the future baseline, issues and opportunities for housing and employment to highlight the value watercourses have as an asset to new developments.</p>	<p>Suggested paragraphs added at section 5.3.6 and 6.3.7.</p>
<p>Environment Agency: We would advise that for those Local Planning Authority's containing significant amount of Flood Zone (Flood Zones 2 and 3) flood risk should be cited (bullet-pointed) as a Key Issue. This will be particularly pertinent during the Sequential Testing of proposed Allocation sites.</p>	<p>Flood risk included as a key issue at Table 1.1</p>
<p>Environment Agency: Table 12.2 - Climate change and its impacts is a key issue across all Local Planning Authorities (LPA) as well as the potential flood risk. Some authorities have listed the Rivers (such as Blaby) but others are very broad. A statement such as 'Areas at risk of fluvial flooding associated with Rivers....' should be included for each LPA to give an overview of the fluvial flood risk.</p>	<p>Suggestions incorporated into Scoping Report.</p>
<p>Environment Agency: Footnote 30 states data is from the Environment Agency (2009) (unless stated otherwise). It should be noted that the RBMP's published in 2009 have since been updated, in 2015. We acknowledge this is mentioned elsewhere (para 12.1.11).</p>	<p>Noted.</p>
<p>Environment Agency: SA Framework wording changes are suggested:</p> <p><u>Biodiversity</u></p>	<p>Suggested changes made.</p>

Create new and protect, maintain and enhance habitats, species and ecological networks.

Water

Climate change should be listed as a Key issue.

The following wording should be added to the 2nd Sub objectives / guiding questions, as follows:

Are there opportunities to secure strategic flood management and improvement schemes as part of development?

Are there any opportunities to reduce flood risk downstream?

Do the schemes combine flood risk management with delivering biodiversity and amenity benefits.



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A report to Charnwood Borough Council on the suitability of proposed new cemetery at Allendale Road as part of an Environment Agency T2 Audit

September 2017
D1.0



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Charnwood Borough Council

**An Environment Agency T2 Assessment for a proposed new
cemetery off Allendale Road, Loughborough, Leicestershire.**

LE11 2HU.

Grid Ref: 454048; 317358

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1.0 Executive summary

The site is considered to be **high risk** with the risk mainly attributed to the high predicted burial numbers.

Given that burials are likely to be into either the superficial deposits or the weathered bedrock, and given that these materials are only moderately or slowly permeable the risk to groundwater is likely to be low. The source of pollutants is present in the form of burials, the receptor is present in the form of the groundwater but the pathway, though viable, is likely to be inefficient due to the reduced permeability of the soil and especially through the clay-dominated subsoil. Groundwater has been struck at between 6 and 7m bgl in boreholes within 2.5 km of the site but this is likely to be groundwater that is limited in extent and associated mainly with localised layers of sand and gravel or larger fractures within the bedrock. No groundwater was struck in any of the trial pits excavated to a minimum of 3m depth. It is possible that underlying groundwater is in hydraulic continuity with the nearest surface water and may contribute to baseflow in this stream but this is not certain. To ascertain the nature and extent of any risk more precisely, flux modelling of the major pollutants ammonium and nitrate is recommended.

By way of grave-specific mitigation, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite or Bentonite clays have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Pivato et al Waste Management Review 2004) (Rozic et al 2009 Bioinformatics).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

2.0 Introduction

Cemetery Development Services Ltd has been asked to carry out a Tier 2 site screening assessment for a proposed new cemetery off Allendale Rd, Loughborough, Leicestershire. This site will be considered on the basis of groundwater risk and as part of this, a T2 study based on the criteria required by the Environment Agency has been carried out. This is because sites that do not meet the requirements of the Environment Agency should be ruled out at an early stage since the Agency as Primary Consultees are able to prevent any site being developed should the site be deemed to represent too great a risk in respect to water pollution.

The proposed development area has been assessed on a 1 km area of influence: grid reference 454048; 317358, nearest postcode: LE11 2HU. The site is calculated as being approximately 3 hectares (7.4 acres).



Figure 1a. OS map of the site



Figure 1b. Aerial photograph of the site, (site boundary marked in red)

This report will review the site proposed for use as a burial facility in accordance with the requirements of the Environment Agency's Tier 2 survey. For the purposes of this study the anticipated burial rate for this site is estimated as being in approximately 60 per year.

3.0 Background

New cemetery developments or extensions to existing cemeteries can be very emotive. However, these concerns are often disproportionate to the actual environmental risk.

Whilst the Local Planning Authority is the principal controlling body in determining approval for new sites or site extensions, significant information is required to ensure that the environmental risks are examined and that the Environment Agency's views are considered. Therefore, measures to prevent pollution must be undertaken and reported. Any regulatory decision-making is based on sound scientific knowledge. On this basis, a review of potential pollution from cemeteries was undertaken by the Environment Agency in collaboration with the British Geological Survey.

The aim was to review old and new cemeteries and measure the effects of contamination from viruses, bacteria and other microbiological pathogens and to assess the potential of chemical

contaminants affecting groundwater supplies from decomposition processes. Preliminary results showed that the operating cemetery examined in the study (25 years old) did show some evidence of bacterial contaminants in groundwater derived from corpses. However, no viruses were detected and the overall contaminant loading was found to be low. The studies found that degradation and attenuation was occurring indicating that potential risks were low. Whilst the outcome of this research found contaminant risk to be low, it should be reviewed in the context that natural attenuation processes may have been optimum at these sites. Therefore, to optimise natural attenuation and reduce the risk of possible groundwater contamination, a series of guidelines have been drawn up that are directly applicable to cemeteries.

Failure to manage and reduce any environmental risk to a minimum may result in action being taken under the Groundwater Regulations 1998 and the Anti-pollution Works Notice Regulations 1999.

3.1 Groundwater protection policy

Initial risk screening starts with the tools contained in the Agency's publication, Policy and Practice for the Protection of Groundwater in cemeteries and in the latest GP3 guidance notes.

Tools include Groundwater Vulnerability and Source Protection Zone (SPZ's) maps. These maps highlight where there are likely to be particular risks posed to groundwater from surface activities. Groundwater Vulnerability (GWV) Maps show the damage from pollution to groundwater and the relative importance of the aquifer to water supplies. Risk assessment is made with reference to soil leaching potential and the levels of water tables above major and minor aquifers.

Source Protection Zones are delineated areas around groundwater abstractions used for public consumption and defined by travel, time of biological or chemical contaminants.

The zones are classified in three groups:

- Zone 1 High risk
- Zone 2 Intermediate to high risk
- Zone 3 Intermediate risk

The Environment Agency would be opposed to large graveyards within Zone 1 of an SPZ.

Whilst groundwater is a major part of policy concerns, other water point sources are also considered as requiring an evaluation of risk. These sources include surface water in the form of ditches, spring lines and surface run-off.

The factors influencing the risk of groundwater vulnerability include:

- Soil nature and type
 - Physical, mechanical and chemical properties
- Geomorphology
 - Depth to water table and or height above aquifers
 - Groundwater flow mechanisms
 - Aquifer type
- Abstractions
- SPZ's
- Proximity to water courses, ditches and drains

Therefore, prior to any consent being given by the Environment Agency, an assessment of risk should be undertaken. The degree of assessment is measured through a series of stages namely:

- Hazard identification
- Identification of consequences
- Magnitude of consequences
- Probability of consequences
- Significance of risk

3.2 Tiered risk assessment

There are 3 Tiers of Risk assessment. The associated size and position of the site will in-part determine which Tier is appropriate.

Tier 1

Desktop study of all appropriate documentation including GWV and SPZ maps, topographical, hydrological and geomorphologic maps. After adopting a systematic approach to the assessment of risk, a weighting can be given which is assessed as low, medium or high. If the overall risk is low, the proposal may be accepted by the Agency without further detailed assessment. However, the following practical guidelines would be recommended as appropriate controls to minimize pollution risk:

- 250 m distance from groundwater supply
- 30 m minimum distance from groundwater or spring
- 10 m distance from field drains
- No burials in standing water

For the purposes of this screening study, a T1 assessment is being made of each site. This will be augmented by on-site investigation at the preferred two sites following the conclusion of this study.

Tier 2

Should the risks not be clearly defined by the desktop study then further “ground truthing” might need to be undertaken. This may include field studies and monitoring of groundwater within the proposed area, comprising of the installation of up to three boreholes.

In this case, once the final preferred sites are identified the Environment Agency will be contacted with the site details and asked for a view as to whether boreholes or trial pits will be needed.

Tier 3

If the risk is considered high, i.e. the number of yearly burials exceeds 1,000; a full audit will be required. This would include, but not be limited to, a detailed site investigation including boreholes and monthly monitoring.

3.3 Water Resources Act 1991 – S161A Anti-Pollution Works Notices

The EA has powers under s161A of the Water Resources Act 1991 and the Anti-Pollution Works Regulations 1999, allowing Works Notices to be served to prevent or remedy pollution of controlled waters and under the Groundwater Regulations 1998 to prevent pollution of groundwater.

3.4 Groundwater Regulations 1998

Burial of human corpses can result in discharge of listed substances to groundwater. They are, therefore, covered by the requirements of the Groundwater Regulations. Individual burials spaced out over time will only release trivial amounts of listed substances.

These are considered to fall under the *de minimis exemption*. Large numbers of burials (>100 per annum) in a short time or the cumulative effects of many individual burials may cause groundwater pollution. In this case, the EA will, where appropriate, use their powers under the Groundwater Regulations to control or prohibit the burial. This has specific relevance to policy P12-2 but will apply more generally.

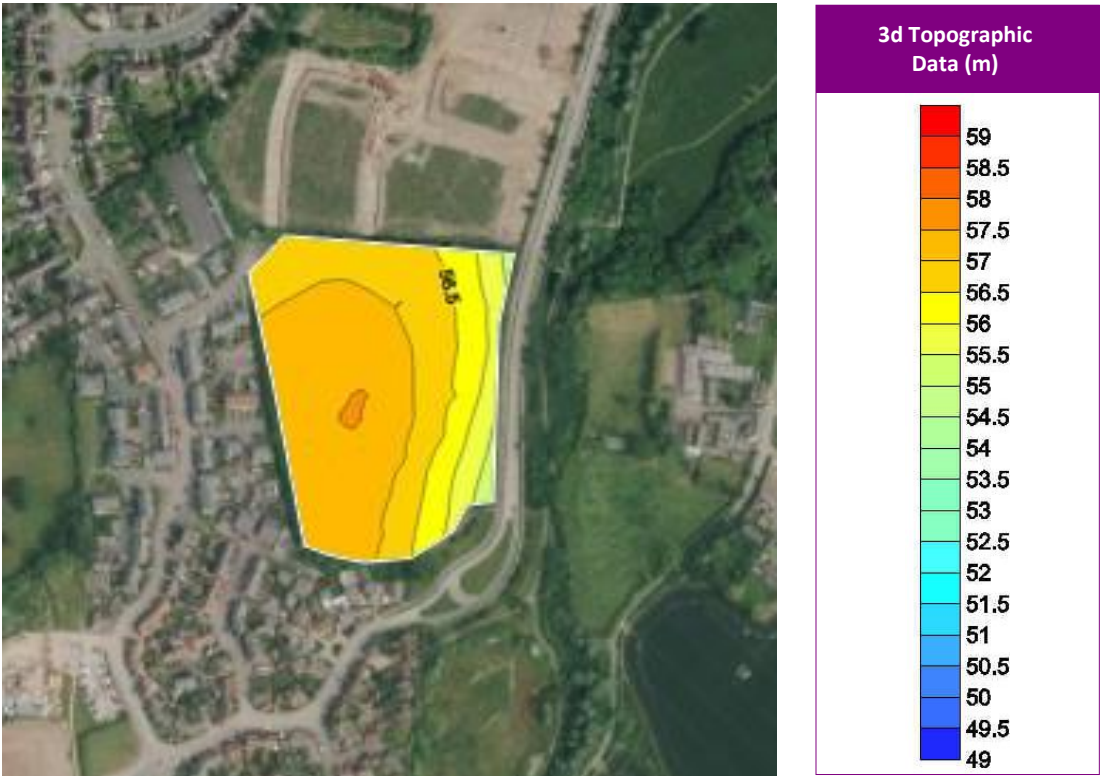
4.0 Site investigation

British Geological Survey and Cranfield University data was used in this report.

4.1 Topography and surface drainage

The site is currently amenity grassland and is located to the south of a further area of amenity land with Allendale Road to the east and south east with housing to the south west and along the western edge.

The site falls from the south west to the north east at a general grade of around 0.7% which is very gentle. According to OS data there are no water features on the site however a wet ditch or stream runs along the eastern edge of Allendale Road linking a pond to the north of Grange farm with a smaller pond south of Renals Farm.



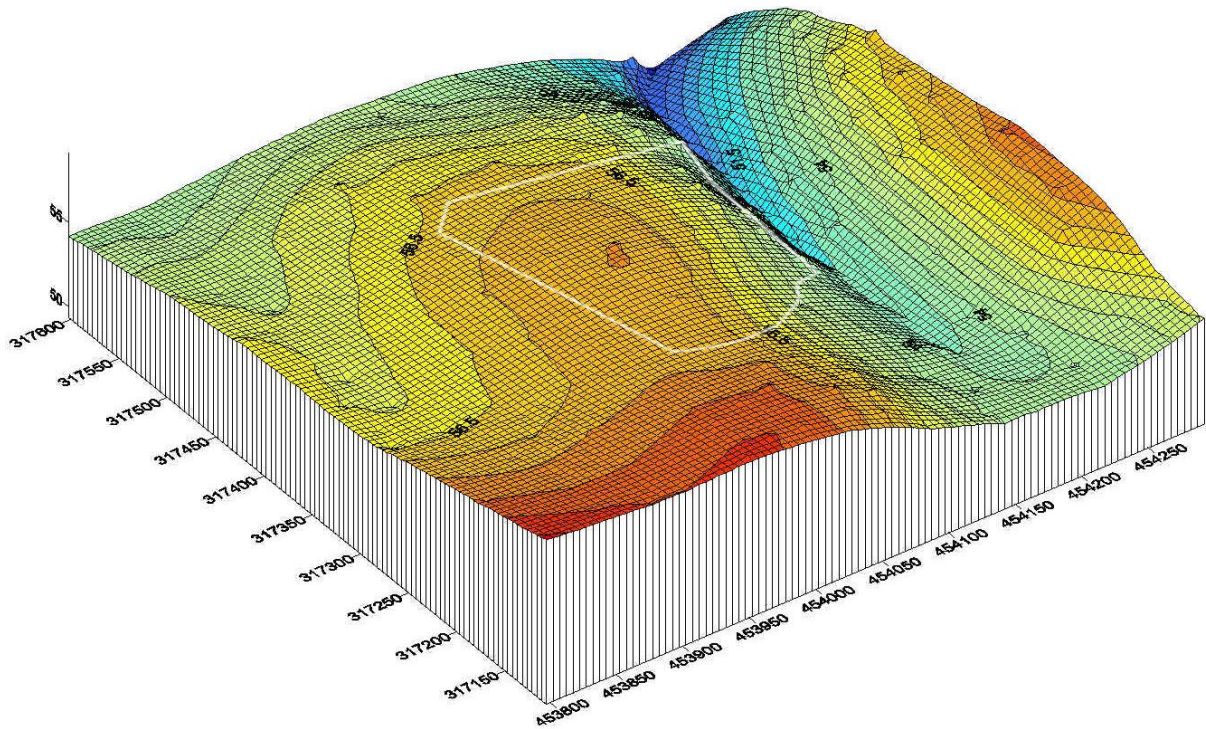


Figure 2. Topography of the site

4.2 Soil type

The Soil Survey of England and Wales map the site as containing soils belonging to the Curtisden Association (572i), as described in Table 1 and Figure 3.

Figure 3. Soil Associations in the vicinity of the site

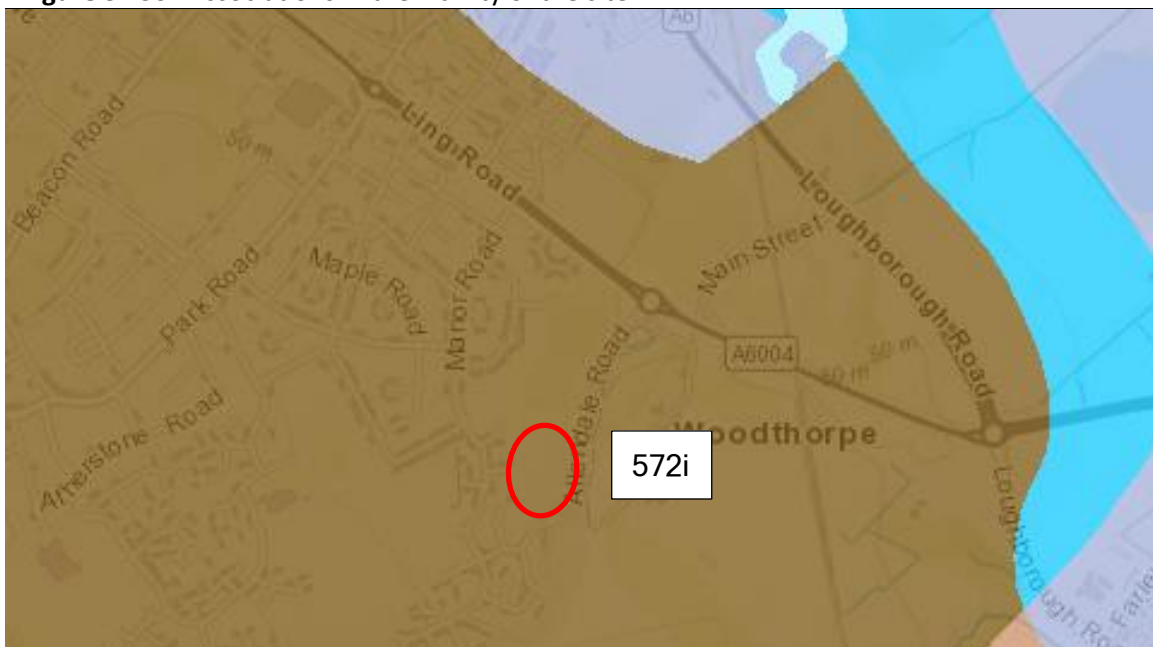


Table 1. Soil Associations in the vicinity of the site

Soil Association	Sub Groups	Description
511f Coombe 1	Cranbrook Stanway Bearsted Atrim	Silty soils over siltstone with slowly permeable subsoils and slight seasonal waterlogging. Some similar well drained soils. Some well drained coarse loamy soils over sandstone. Slumping possible locally.

This type of soil is generally suitable for cemeteries but may have some local issues with seepage from more permeable lenses within the subsoil which could flood graves if significant.

4.2.1 Site investigations

Site investigations were undertaken on 6th September 2017 with 6 trial pits dug to approximately 3.0 metres within and close to the area designated as a potential cemetery (Figure 5). Figure 4 shows the profiles of the pits excavated.

Figure 4. Trial pit soil profiles





Pit 3 profile



Pit 4 profile



Pit 5 profile



Pit 6 profile

The site was dry on day of the assessment following a period of average rainfall. The soils over the site were clay dominated being typically silty sandy clays. There was no evidence of the Birstall Member on the site as true sands and gravels but the upper 1m or so was a friable sandy clay rather than a much siltier clay or straight clay. The integrate between the superficial deposits and the underlying weathered would therefore appear to be gradual with a shallower depth of superficials than anticipated rom the geological mapping.



Figure 5. Trail pit location

4.3 Geology

The following headings cover the aspects of geology of the immediate area of the proposed development.

4.3.1 Artificial ground

This is ground at or near the surface that has been modified by man. It includes ground that has been deposited (Made Ground), landscaped, disturbed, excavated (Worked Ground) or some combination of these (Figure 6).

No Artificial Ground has been recorded by BGS up to the time of map compilation and Ordnance Survey maps, both current and historic, show no previous development of the site.

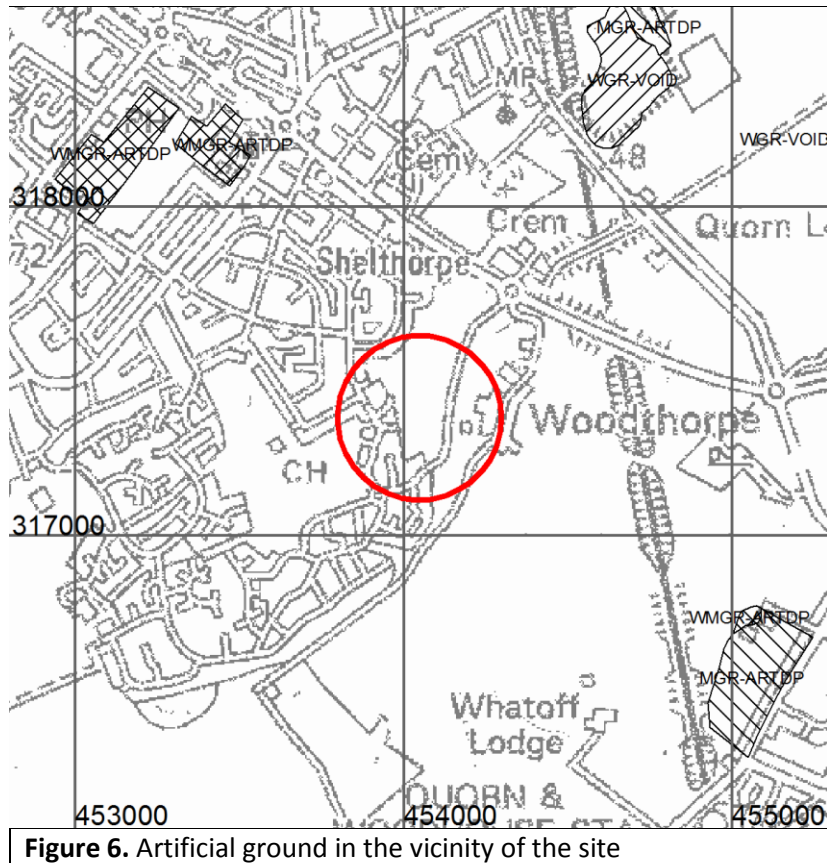


Figure 6. Artificial ground in the vicinity of the site

Search area indicated in red

Key to Artificial ground:

Map colour	Computer Code	Name of geological unit	Composition
	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

4.3.2 Superficial deposits

These are relatively young geological deposits formerly known as ‘Drift’, which lie on the bedrock in many areas. They include deposits such as unconsolidated sands and gravels formed by rivers and clayey tills formed by glacial action. They may be overlain by landslide deposits, by artificial deposits or both (Figure 7).

The site is almost entirely underlain by the Birstall Member (Soar Valley Formation) which is composed of sand and gravel with minor clay and silt lenses. The Birstall Member is comprised of a series of spatially isolated deposits that represent areas of ancient flood deposits (river terraces) during the Pleistocene. No boreholes prove the thickness of the Birstall Member at the site, though a borehole (SK51NW94 at 453910, 319670), located approximately 2.2 km to the NNW of the site (situated in another patch of the Birstall Member), has a thickness of 4 m. As such, it is likely that the Birstall Member at the site is likely to have a maximum thickness of ~4 m. The mapped margins of the Birstall Members coincide closely with the site boundary, though the Birstall Member is absent in the southeast corner of the site. The Birstall Member is likely to be thinner towards the mapped margins, perhaps ~1 m.

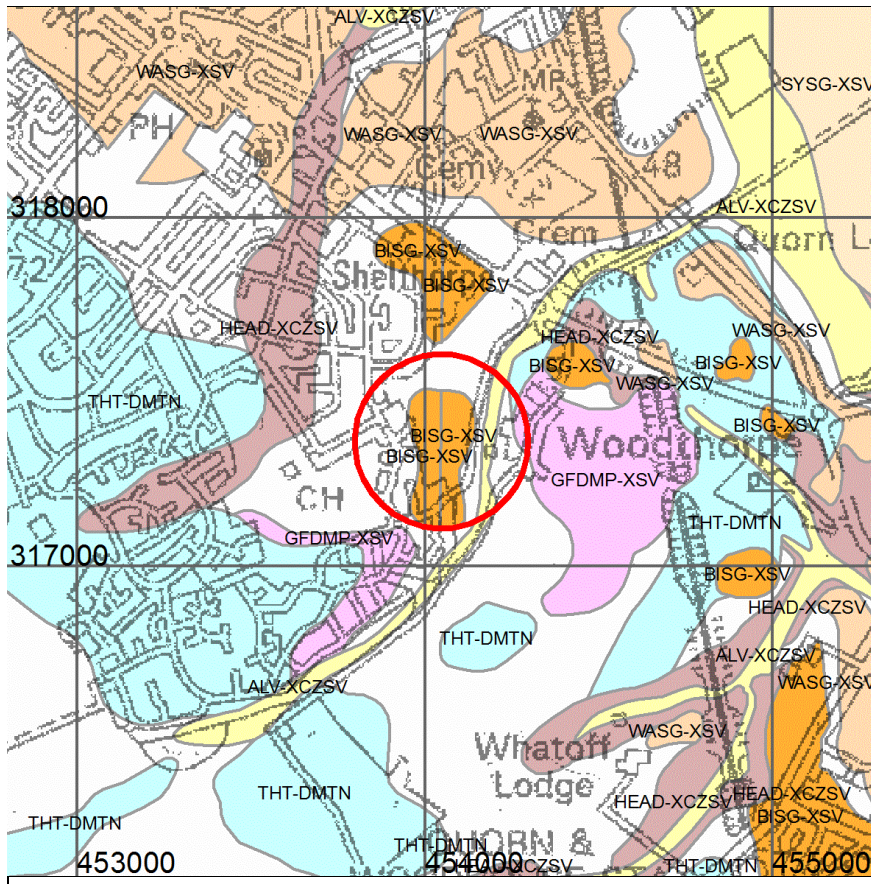









Figure 7. Superficial deposits in the vicinity of the site

Search area indicated in red

Key to Superficial deposits:

Map colour	Computer Code	Name of geological unit	Composition
	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
	SYSG-XSV	SYSTON MEMBER	SAND AND GRAVEL
	WASG-XSV	WANLIP MEMBER	SAND AND GRAVEL
	BISG-XSV	BIRSTALL MEMBER	SAND AND GRAVEL
	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL
	THT-DMTN	THRUSSINGTON MEMBER	DIAMICTON

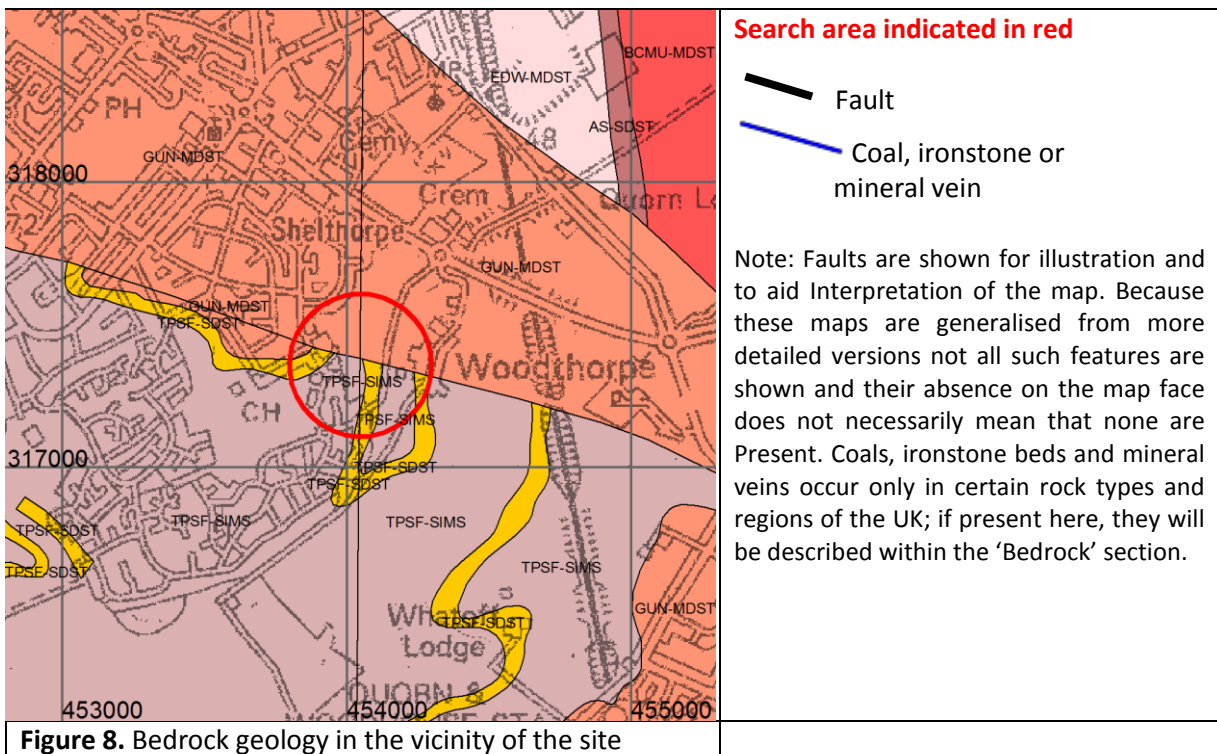
4.3.3 Rockhead depth

Rockhead at the site is likely to be between 0 and 4 m directly underlying the Birstall Member where it is present. Where the Birstall Member isn't present (southeast corner) bedrock is considered present at the surface.

4.3.4 Bedrock geology

The geology of the site is complicated by a mapped fault that is shown running WNW-ESE. This fault has juxtaposed slightly older rocks in the southern part of the site against younger in the northern. The northern third of the site is underlain by the Triassic Gunthorpe Member of the Sidmouth Mudstone Formation (part of the Mercia Mudstone Group). This is a red brown mudstone with

subordinate dolomitic siltstone and fine-grained, greenish-grey sandstone, with common gypsum veins and nodules.



Search area indicated in red

Key to Bedrock geology:

Map colour	Computer Code	Name of geological unit	Rock type
	BCMU-MDST	BRANSCOMBE MUDSTONE FORMATION	MUDSTONE
	AS-SDST	ARDEN SANDSTONE FORMATION	SANDSTONE
	EDW-MDST	EDWALTON MEMBER	MUDSTONE
	GUN-MDST	GUNTHORPE MEMBER	MUDSTONE
	TPSF-SDST	TARPORLEY SILTSTONE FORMATION	SANDSTONE
	TPSF-SIMS	TARPORLEY SILTSTONE FORMATION	SILTSTONE, MUDSTONE AND SANDSTONE

The Gunthorpe Member has a full thickness locally of ~70 m, though at the site the Gunthorpe Member is more likely to have a thickness of ~50 m. Underlying the Gunthorpe Member is the Radcliffe Member, also of the Sidmouth Mudstone Formation. The Radcliffe Member is predominately a mudstone and siltstone with occasional very fine-grained sandstones lenses. The unit is primarily red-brown coloured though may locally be pinkish red, red and sometimes green. The Radcliffe Member has a thickness of 5 – 15 m regionally. Beneath the Radcliffe Member is the Tarporley Siltstone Formation, another formation of the Mercia Mudstone Group. The Tarporley Siltstone is at depth in the northern part of the site but, due to the present fault, it directly underlies the superficial deposits of the Birstall Member in the southern part of the site. The Tarporley Siltstone Formation is composed of reddish-brown, interlaminated and interbedded, mudstones, siltstones and, fine- to medium-grained sandstones in approximately equal proportions. Locally the sandstone units contain abundant mudstone clasts and are commonly less than 0.5 m thick; though composite stacked sandstone units may cumulatively reach thicknesses of ~5 m. The sandstone units may also contain gypsum veins. The

Tarporley Siltstone Formation becomes generally sandier towards the bottom of the unit and has a thickness locally of 40 – 60 m.

The Tarporley Siltstone Formation is underlain by the Sherwood Sandstone Group. The Sherwood Sandstone is a yellow-white to red-brown sandstone that may contain minor amounts of mudstone or conglomerates. The Sherwood Sandstone is likely to have a thickness of ~200 m.

4.3.5 Schematic geological cross-section

This sketch (Figure 9) represents an interpretation of the geometrical relationships of the main rock units described in the text. It is not to scale. The blue line indicates ‘rockhead’; that is the base of superficial deposits. This is the ‘geological rockhead’, as distinct from the ‘engineering rockhead’, which is the base of ‘engineering soil’ (in the sense of BS5930:1999).

Not to scale

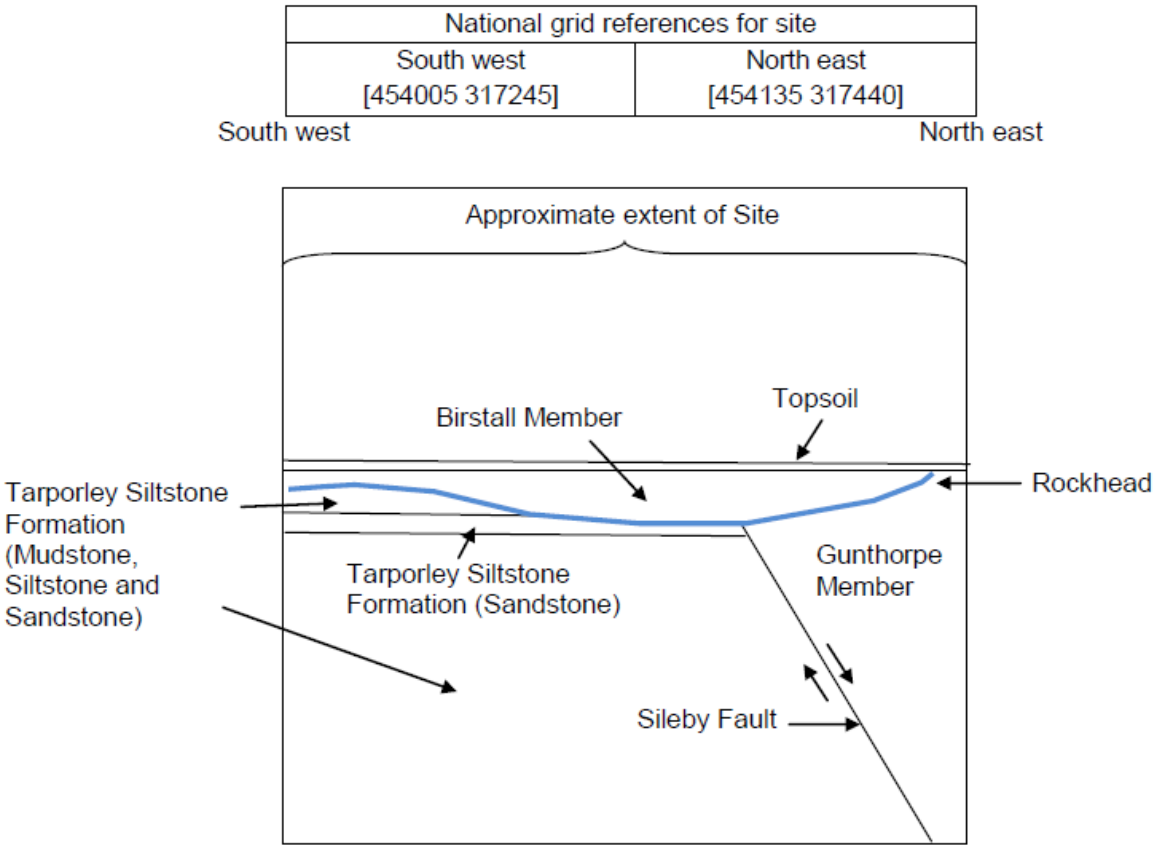
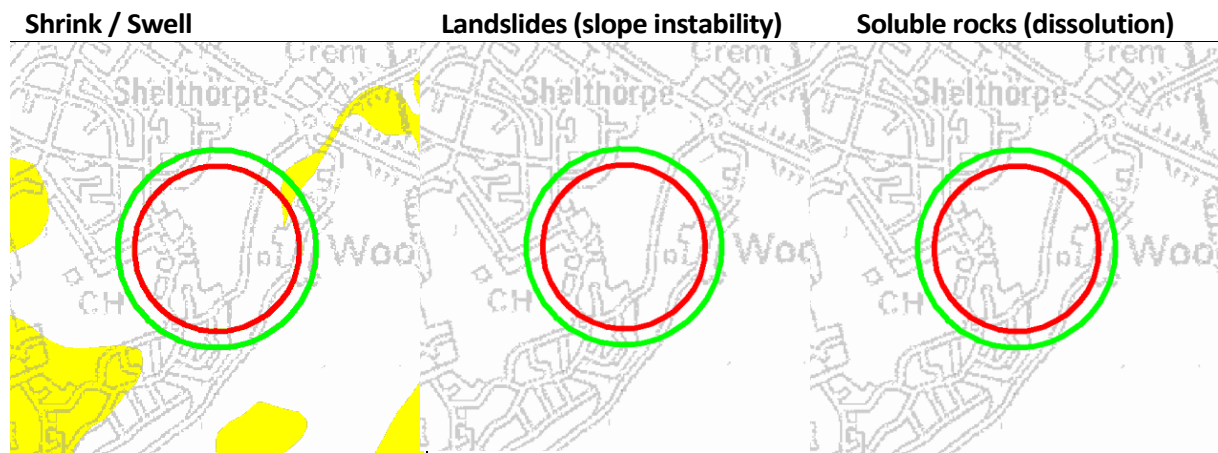


Figure 9. A schematic representation of the underlying geology of the site

4.4 Additional geological considerations

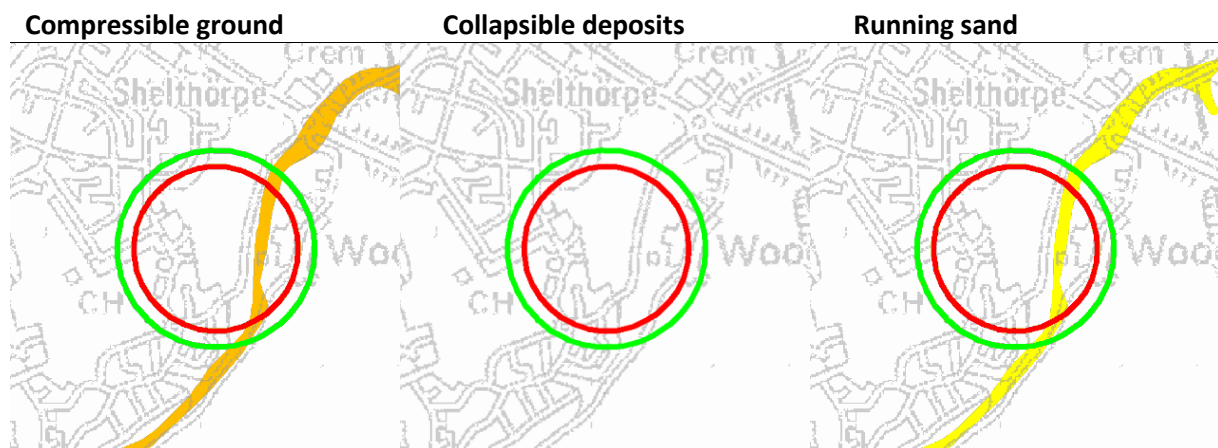
Figure 10. A summary of the geological hazards associated with the site



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The hazard levels are described as A (least) to E (greatest), or as 'No Hazard'. Levels A and B are not considered significant and are not shown on the maps.



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The geological hazards found on the site are explained in Table 2.

Table 2. Geohazard summary

Geological hazard	May be significant within site area	Comments
Potential Natural Ground Stability Hazards		
Shrink-Swell	No	Level C = Potential for hazard to become active is at a level where it should be considered in decisions about construction, building maintenance and land use. This hazard is associated with the deposits of Till located to the NE and SW, outside of the site area.
Landslides (slope instability)	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Soluble Rocks (dissolution)	No	Level A = Potential for hazard to be active is either zero or insignificant.
Compressible Ground	No	Level D = Significant potential for hazard to become active that requires site-specific advice on the level of hazard related to building type and environment. This hazard is associated with the alluvium deposits located to the east, outside of the site area.
Collapsible Deposits	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Running Sand	No	Level C = Potential for hazard to become active is at a level where it should be considered in decisions about construction, building maintenance and land use. This hazard is associated with the alluvium deposits located to the east, outside of the site area.
Other Potential Hazards		
Mining	No	None.
Flooding	Yes	The various formations and members of the Mercia Mudstone Formation have a high component of clay within them. As such, they drain water very slowly. During periods of excessive rainfall the lower infiltration rates of these rocks can lead to localised areas of flooding. The Environment Agency and local authorities can provide advice on such issues.
Natural Land Gas	No	Unlikely to encounter gas from bedrock and coal mining; unlikely to encounter gas from peat.
Radon		Level of protective measures: NO

4.5 Hydrogeology

In lowland areas of the UK with little topographic variation, groundwater is likely to be found at shallow depths of only a few metres. Water table fluctuations will be small as they will be constrained by the ground surface and the base level of the local perennial streams and rivers.

In upland areas, precipitation is usually high and the dominantly metamorphic and igneous rocks often have relatively shallow groundwater levels.

This is due to preferential groundwater storage in near-surface weathered and fractured zones with limited drainage into the underlying un-weathered lower permeability rock. Exceptions can occur where higher permeability rocks, such as sandstone or limestone, allow faster through flow of groundwater towards the nearest stream or other discharge point.

Perched water tables occur where a less permeable horizon (e.g. a clay layer) in an otherwise permeable sequence retains a body of groundwater above the level of the regional water table. They usually occur at shallow depths in alluvial and glacial sediments and can be difficult to identify or to delimit.

An aquifer becomes confined when it is overlain by a less permeable horizon that restricts the upward movement of groundwater. When this less permeable horizon is penetrated (e.g. by drilling), the groundwater level rises above where struck to a level controlled by the hydrostatic pressure. If this is above ground level, overflowing artesian conditions will be encountered. Confined conditions should be anticipated, where possible, in order to plan for the problems they can generate.

Individual sites will always require more detailed assessments to determine the specific impact on groundwater resources. The maps represent conditions only at the ground surface. Where the soil and/or underlying formations have been disturbed or removed the vulnerability class may have been changed and site specific data will be required. Sites in urban areas and restored or current mineral workings are classified as having high (urban) soil leaching potential until proved otherwise.

The site is located on Environment Agency groundwater vulnerability map, sheet 23, Leicestershire.

No boreholes are near to site; the closest are site investigation boreholes c.1.1 km to east. One appeared to strike water between 6.5 and 10.0 m below ground level, no rest water level given. No other information available.

No boreholes are near to site; the closest are site investigation boreholes c.1.8 km to south. One struck "trace" of water at 6.1 m below ground level, no rest water level given. All other boreholes dry (deepest 6.5 m).

The Environment Agency now use their Aquifer Designation Dataset (<http://apps.environment-agency.gov.uk/wiyby/117020.aspx>) for Groundwater Protection matters, rather than the Groundwater Vulnerability maps. The Groundwater Vulnerability maps include information on Soil Leaching Potential, so we continue to reference them. The Aquifer Designation Dataset classifies superficial deposits in addition to bedrock.

At this site:

- the Birstall Member is classed as a Secondary A Aquifer,
- the Gunthorpe Member is classed as a Secondary B Aquifer,
- the Tarporley Siltstone Member is classed as a Secondary B Aquifer, apart from the mapped sandstone horizons which are designated as Secondary A Aquifers.

The definitions of these designations are:

- Secondary A - permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers;

- Secondary B - predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

It is possible that water will be present in the Birstall Member, perched upon the underlying lower permeability Gunthorpe Member and Tarporley Siltstone Formation. In periods of high surface water runoff water levels in the Birstall Member could be close to the surface since drainage of water through the underlying lower permeability formations could be slow (particularly through the Gunthorpe Member). In the south-east corner of the site, where the Birstall Member directly overlies the mapped sandstone unit within the Tarporley Siltstone Formation, the potential for groundwater drainage depends greatly on the localised geometry of the Birstall Member deposit, and thus the geometry of rockhead. Any groundwater within the Birstall Member would be likely to drain eastwards with the level controlled by the rockhead and there is therefore the potential for seepages along the eastern margin of the site, although none have been mapped.

Faults can form zones of different permeability to the surrounding rocks. We have no information about the impact on the hydrogeology of the fault that crosses the site.

The hydrological information for the site is summarised in Table 3.

Table 3. Hydrogeology summary

Geological unit	Groundwater potential	Water level and strikes	Quality	EA groundwater vulnerability classification
Birstall Member (Soar Valley Formation)	Sand and gravel deposit, likely to be very permeable	No information (no boreholes) but likely to contain groundwater. Groundwater within this deposit will be in hydraulic continuity with the underlying sandstone bed (part of the Tarporley Siltstone Formation) present at rockhead in the south-east quadrant of the site.	No information but may be similar to local surface water but more mineralised	Superficial deposits are not classified.
Gunthorpe Member (Sidmouth Mudstone Formation)	Generally regarded as a non-aquifer but with the possibility of some small quantities of groundwater within some sandy / sandstone horizons	No borehole information in the search area. If water is encountered in more permeable horizons, it may rise above the level at which it was first struck	No information but any groundwater present may be highly mineralised	Classified as a non-aquifer however some groundwater flow through these rocks may occur and should be considered when assessing the risk associated with persistent pollutants

Tarpoley Siltstone Formation	The formation as a whole is not highly permeable but small quantities of groundwater may be encountered in fractures and more permeable horizons. The mapped sandstone bed which is at rockhead in the south east is likely to be permeable and contain some groundwater	No borehole information in the search area. If water is encountered in more permeable horizons beneath lower permeability siltstone beds it may rise above the level it was first struck	No information but any groundwater present may be highly mineralised	Classified as a non-aquifer however some groundwater flow through these rocks may occur and should be considered when assessing the risk associated with persistent pollutants
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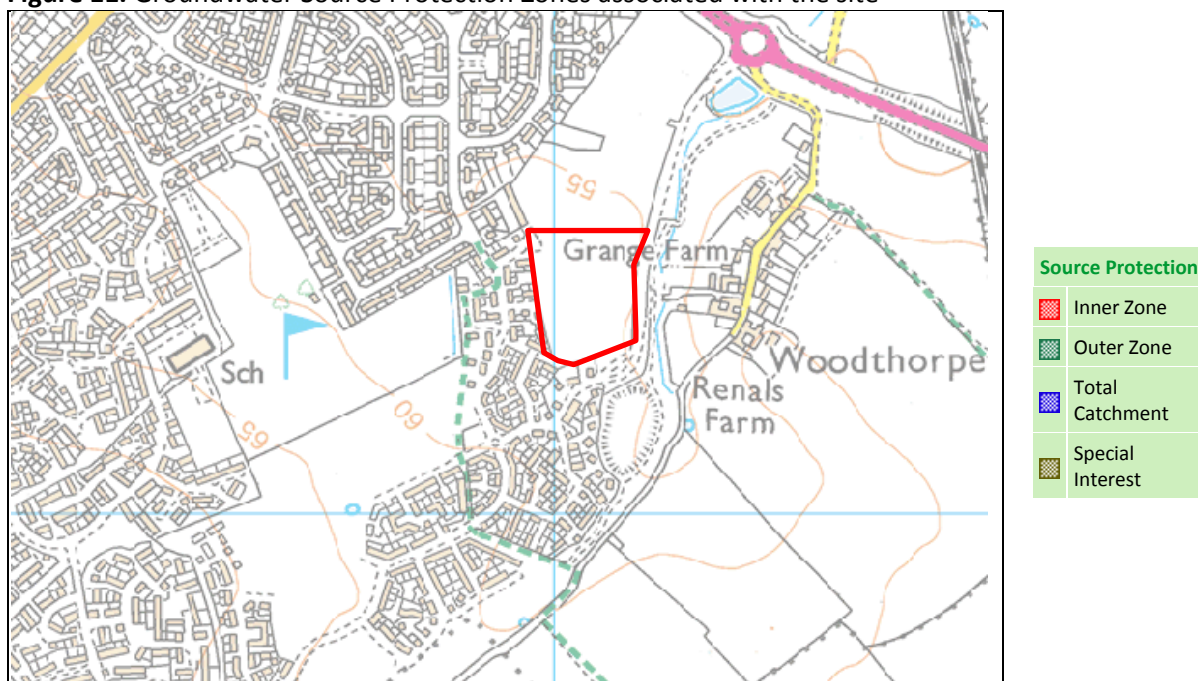
4.5.1 Groundwater vulnerability

This section reviews all components of hydrology, geology and top soil surface water drainage to assess risk notably to groundwater.

4.5.2 Source Protection Zones

The position of the site relative to current ground water protection zones is shown in Figure 11.

Figure 11. Groundwater Source Protection Zones associated with the site



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Source Protection Zones (SPZs) provide an indication of the risk to groundwater supplies that may result from potentially polluting activities and accidental releases of pollutants. Generally the closer the activity or release is to a groundwater source the greater the risk. Three zones (an inner, outer and total catchment) are usually defined although a fourth zone (zone of special interest) is occasionally defined.

The Agency has subdivided groundwater source catchments into four zones. Two of these are determined by the travel time of potential pollutants, the third by the source catchment area itself and the fourth is a "Zone of Special Interest". This fourth zone highlights areas where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

- *Zone I (Inner Protection Zone)* - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has, as a minimum, a 50-meter radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease.
- *Zone II (Outer Protection Zone)* - This zone is defined by the 400-day travel time, or 25% of the source catchment area, whichever is larger. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants.
- *Zone III (Total catchment)* - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.
- *Zone of Special Interest* - For some groundwater sources an additional Zone of Special Interest may be defined.

These zones highlight areas (mainly on non-aquifers) where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

The proposed development site lies outside any Groundwater Source Protection Zone.

4.5.3 Aquifer vulnerability

The Groundwater Vulnerability maps are produced at 1:100,000 scale. They show, by means of colour coding, those areas of the country where water-bearing rocks (aquifers) are present. They also show the vulnerability of groundwater to pollution. The aquifers are classified into major, minor and non-aquifers according to their physical properties and their consequent value as a resource.

The classification of the land surface reflects the ability of contaminants to leach through the covering soils and pose a potential risk to groundwater at depth. The maps also indicate areas where the presence of low permeability drift may provide additional groundwater protection.

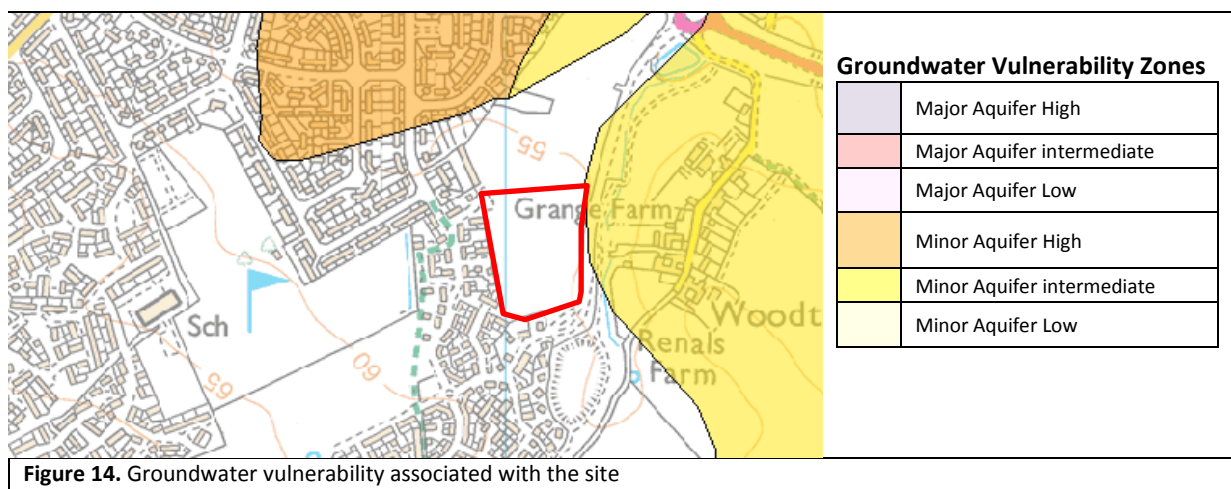
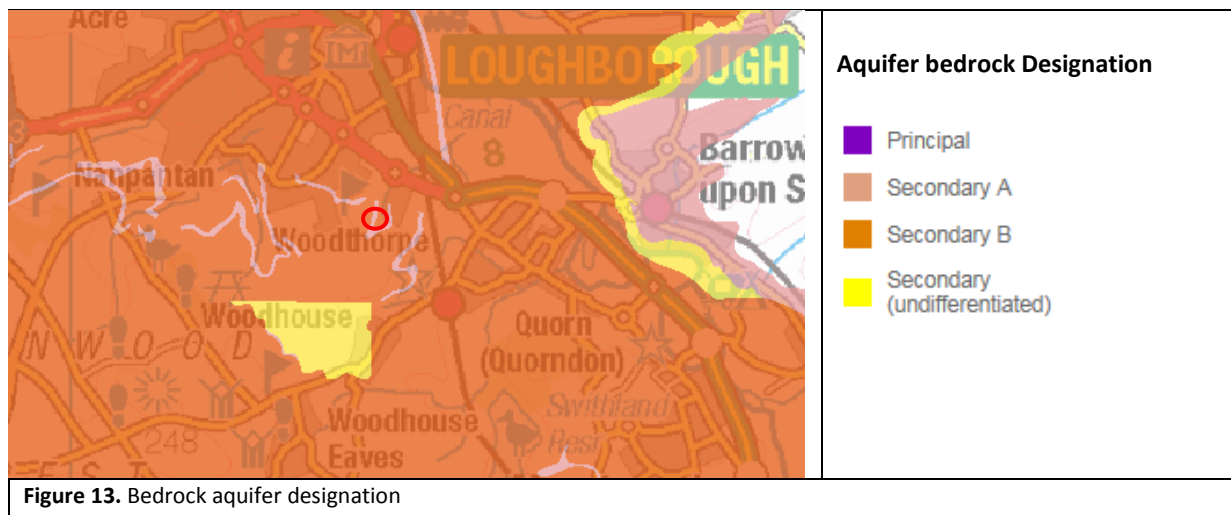
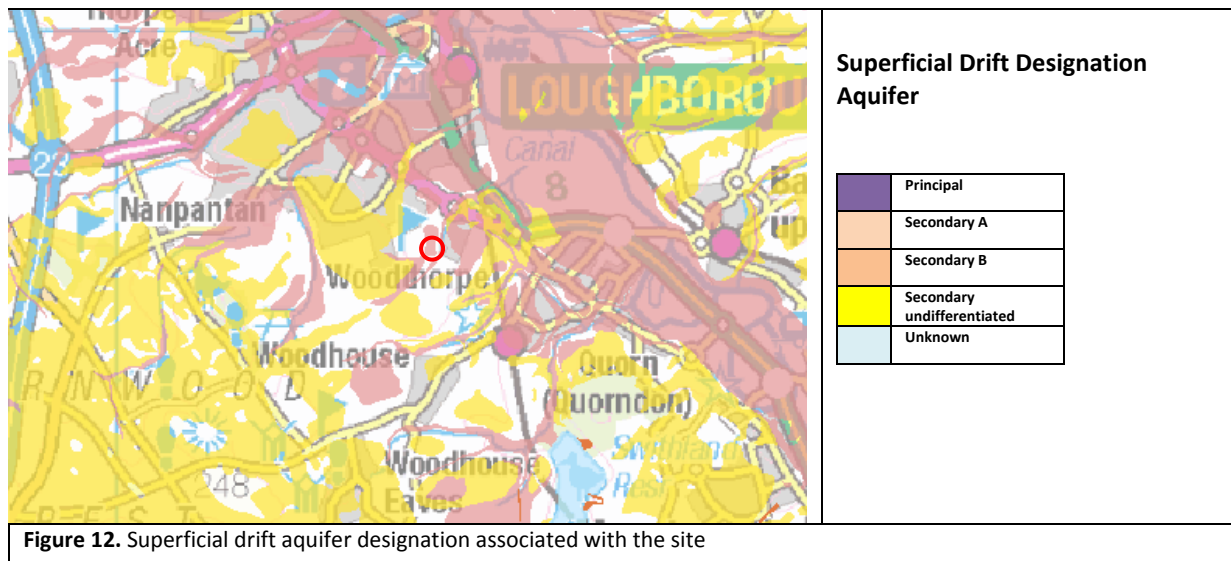
These maps can therefore be used for an initial screening assessment of the vulnerability of groundwater to contaminants applied to the surface of the ground. They do not provide all information relevant to the determination of vulnerability, such as the depth to water table or nature of the drift deposits. Site-specific information would always be needed for a detailed assessment of vulnerability at a given location. The original groundwater vulnerability maps were produced some time ago.

Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have descriptions on them to explain the different aquifer and soil types.

Areas shown as "major aquifers" have strategic significance for water resource; they often support large abstractions for the public water supply.

Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts

of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.



Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have

descriptions on them to explain the different aquifer and soil types. Areas shown as "major aquifers" have strategic significance for water resources, they often support large abstractions for the public water supply. Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.

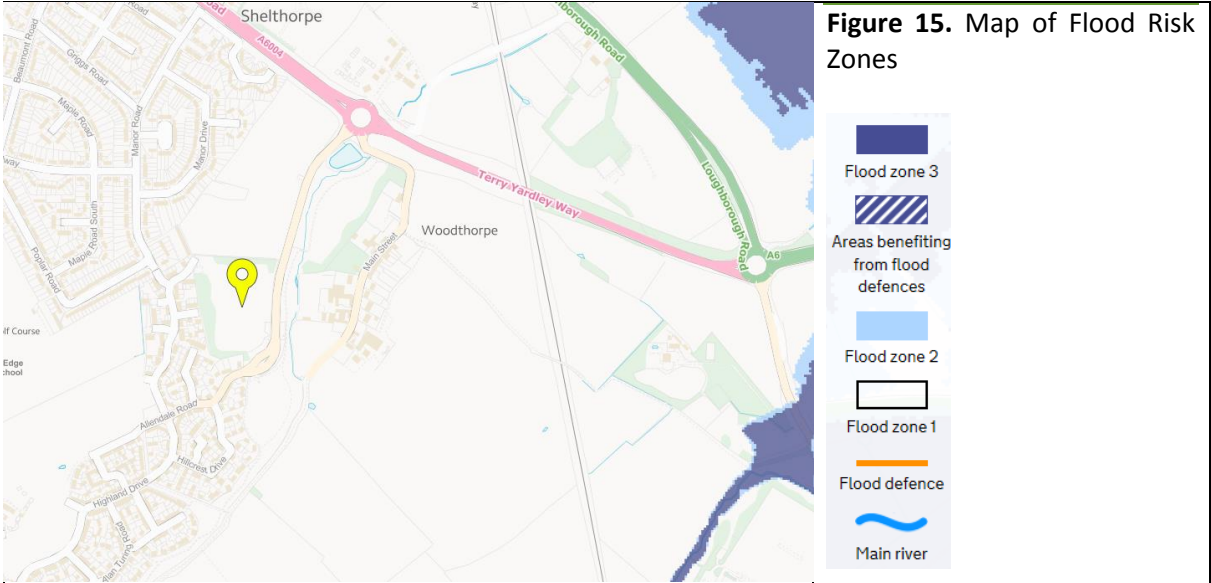
Major and minor aquifers may be important in contributing to the base-flow of streams and rivers. The maps show where groundwater is protected from above by rocks with a low permeability, such as glacial clay. They also show the characteristics of the soil above.

Superficial drift deposits which overlay the solid geological strata can sometimes be substantial in thickness. They are often variable in composition changing from highly permeable outwash gravels to low permeability clays over short distances both laterally and vertically. The presence of permeable drift deposits is recognised as Minor Aquifers except where these overlie a Major Aquifer and they then assume the status of a Major Aquifer.

The site is over a Secondary A aquifer associated with the superficial deposits and a Secondary B aquifer associated with the bedrock geology. The site is classed as being over a minor aquifer with low vulnerability. The site is not within a surface or ground water safeguard zone. The site is within a surface water Nitrate Vulnerable Zone.

4.5.4 Flood risk

The site is within Flood Zone 1 land which is very low risk – less than 1 in 1000 in any given year (Figure 15). The site is not covered by flood warnings issued by the Environment Agency.



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If areas of impermeable surfaces such as buildings, roads etc. are constructed on a greenfield site, a surface water management system designed in accordance with the principles of Sustainable Urban Drainage Schemes (SUDS) will be required.

4.5.5 Wells in the vicinity of the site

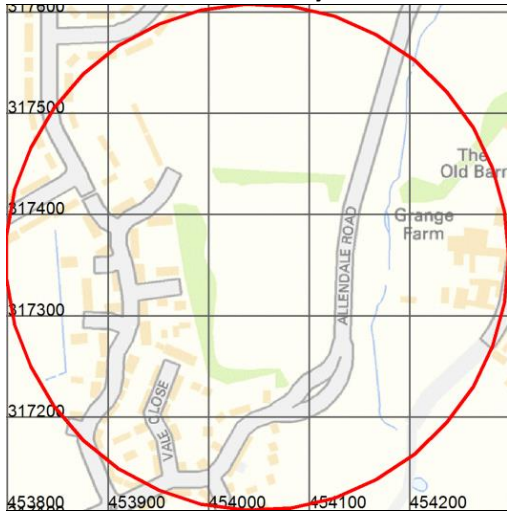


Figure 16. Well records

Number of records within a 300 m radius of the centre of the site: 0

Search area indicated in red

4.5.6 Boreholes in the vicinity of the site

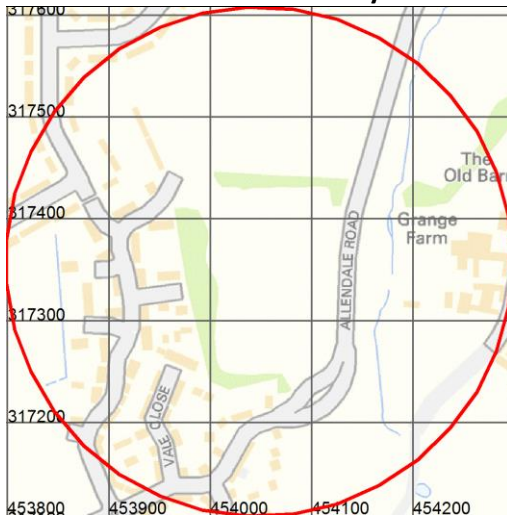


Figure 17. Borehole records

Number of records within a 300 m radius of the centre of the site: 0

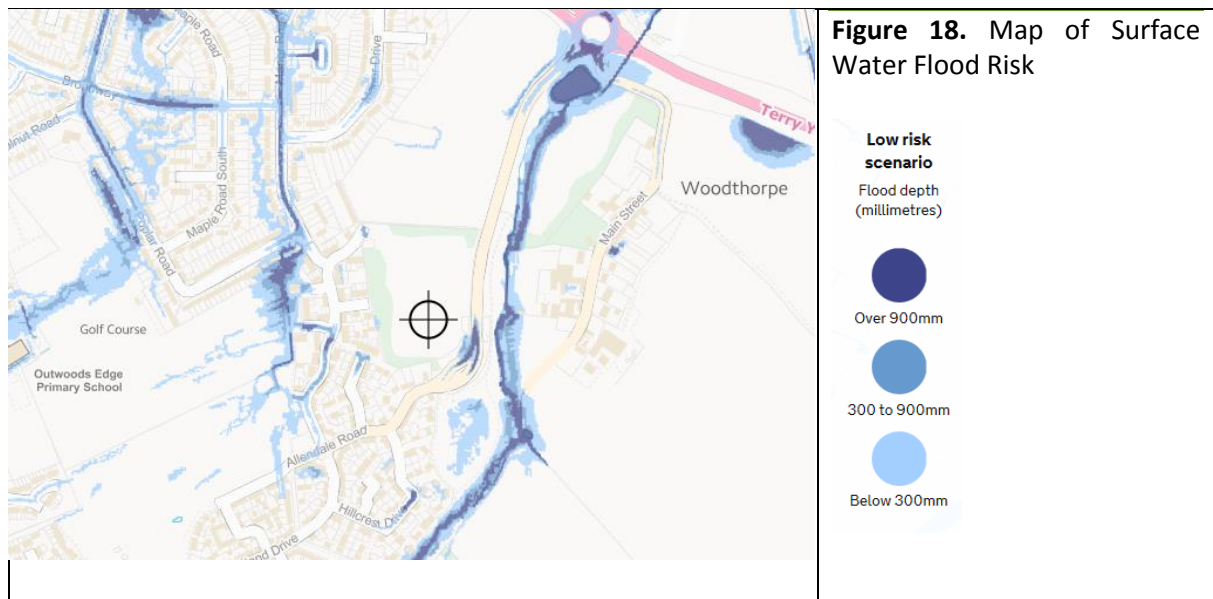
Search area indicated in red

4.6 Meteorological data

The agro climatic index number for this site is 22w with a mean annual rainfall of 661 mm, the Standard Average Annual Rainfall (SAAR) for the site itself is 640 mm.

4.7 Surface water issues

The site has a very low risk of surface water flooding within it. No flood depths are given for the site based on the EA mapping though this does not mean that localised surface water flooding cannot occur (Figure 18). Very Low risk is less than 0.1% chance of surface water flooding occurring in any year. The main reason for this is likely to be the relatively free-draining nature of the topsoil and the slope allowing water to shed off the surface to lower lying areas. Regardless of this, any works which might increase the risk of flooding on or off site need to be identified and the risks assessed and mitigated using a suitable SUDS compliant approach.



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5.0 Pollutant risk

Due to the approximately 60 per annum number of full burials at the site, the cumulative ammoniacal nitrogen concentrations are likely to be moderate to high with similar levels of total organic compounds (TOC).

Pathogens

There has been some evidence from recent studies of the occurrence of Enterococci and Clostridium bacteria found in drainage water of cemeteries. Enterococci are bacteria that are commonly found in the bowel of normal healthy individuals. They can cause a range of illnesses including urinary tract infections, bacteraemia (blood stream infections) and wound infections.

The two most common species of Enterococci are *E. faecalis* and *E. faecium*. During the mid-1980s, enterococci with resistance to glycopeptide antibiotics such as vancomycin and teicoplanin emerged, termed glycopeptide-resistant enterococci (GRE). Most GRE are *E. faecium*.

Due to the nature of the soil and geomorphology, there may be some movement of pathogenic organisms, notably *Pseudomonas aeruginosa* and Faecal streptococci, which may leach because of the relatively freely draining soils. However pathogens tend to be short lived away from the host and if there is no immediate ground water risk or potable well supply, the risk may be considered low. The subsoil is slowly permeable as is the underlying bedrock which further mitigates this risk.

Given the existing soil conditions, oxidative decomposition is likely to be high due to the relatively free-draining nature of the topsoil. Post-burial accumulation of water around a coffin is possible on these soils as at burial depth the subsoil is likely to be slowly permeable if it is formed within the weathered bedrock material and this might have an impact on re-opening graves following prolonged wet periods.

6.0 Depth of burial

Based on data from the British Geological Survey, the site is overlain by soils derived from the superficial deposits and the weathered bedrock. Typically the soils from these deposits in this area are moderately freely drained. Soil depth is in excess of 3m as proved by the trial pits and is easy to

dig, dry to this depth and stable. The trial pits showed a topsoil dominated by sandy clay rather than sands and gravels. As such surface water drainage is likely to be a little slower than otherwise expected. Implications on burial depth are minimal, however.

7.0 Archaeology

It is recommended that consultation with the county archaeological team be undertaken to ascertain any archaeological interest in the area.

8.0 Risk evaluation

Assessment of general hazards

The potential of a number of pollutant pathways and the degree of associated risk assessed numerically on a 0-10 score with 10 being the highest risk is shown in Table 4. From the resultant data, the final values are assessed against burial number and a determinant of risk calculated from EA flow charts and nomographs.

Table 4. Summary of pollution risk associated with the site

Risk	Assessment High, moderate, Low	Comment	Score
Burials per annum	High	Expected to be around 60 per annum	
Drift / superficial data	Moderate	Clayey Silty Sand and gravel	6-5
Drift thickness	High	Drift between 0 and 3 m generally	8-7
Proximity to water course	High	The nearest water body is some 31m to the east in the form of a wet ditch or stream	8-7
Proximity to land drains	Moderate	Amenity land may have been drained	6-5
Depth to Water Table	High	Boreholes suggest groundwater is below 6m from surface	8-7
Proximity to Wells or potable water source	Very Low	No wells within 500 m radius	2-1
Flow mechanism	Moderate	Intergranular in superfcials, fracture flow in bedrock	6-5
Aquifers	Low	Minor aquifer – low vulnerability	4-3
SPZ	Very Low	The site for development lies outside any SPZ	2-1
Met data	Moderate	Annual rainfall moderate	N/A
Proximity to housing	Low	Residential housing in close proximity of the site	N/A
SSSI	Low		N/A
Archaeology	Low	None observed but will require district archaeologist assessment	N/A
		Total	50-41

Table 4 is assessed using the groundwater vulnerability-ranking criteria in Table 5. The total score comes to 50-41 and is considered as a moderate to high risk. These data are then assessed against the burial rate of 60 per annum on the groundwater risk nomograph p.37 of PP223. The final assessment of risk for this site according to the nomograph (Figure 19), would class it as being **high**.

Table 5. Groundwater ranking

Ranking	Very Low 2-1	Low 4-3	Moderate 6-5	High 8-7	Very High 10-9
Drift Type	Clay	Silt	Silty sand	Sand/gravel	Absent
Drift Thickness	>5 m	>3-5 m	3 m	0-3 m	Absent
Depth to water Table	>25 m	11 – 25 m	10 m	5 – 9 m	<5m
Flow mechanism	Intergranular				Fissured
Proximity to wells					Within 250 m from private potable supply
Aquifer type	Non Aquifer		Minor aquifer		Major aquifer
Abstractions and SPZs	Outside Zone 3	Within Zone 3	Close boundary to of Zone 2	Within Zone 2	Within Zone 1
Water courses and springs		>100 m	>50 <70 m	>30 <50 m	<30 m
Drains	>100 m	>40 <100 m	30 – 40 m	>10 <30 m	<10 m

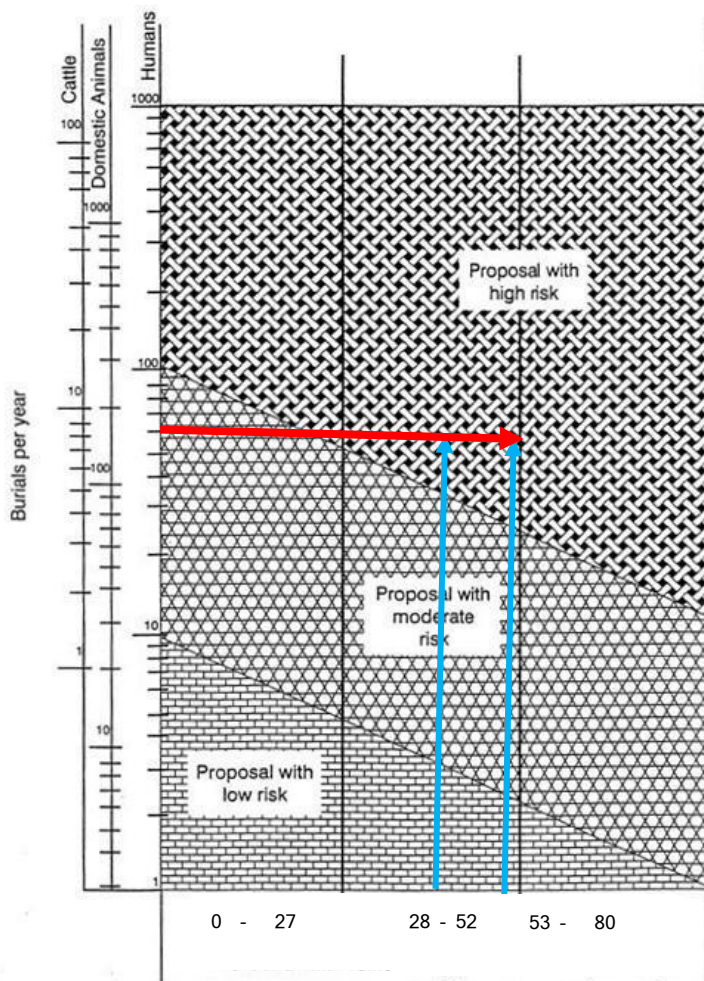


Figure 19. Groundwater risk nomograph

9.0 Conclusion

The site is considered to be **high risk** with the risk mainly attributed to the high predicted burial numbers.

Given that burials are likely to be into either the superficial deposits or the weathered bedrock, and given that these materials are only moderately or slowly permeable the risk to groundwater is likely to be low. The source of pollutants is present in the form of burials, the receptor is present in the form of the groundwater but the pathway, though viable, is likely to be inefficient due to the reduced permeability of the soil and especially through the clay-dominated subsoil. Groundwater has been struck at between 6 and 7m bgl in boreholes within 2.5 km of the site but this is likely to be groundwater that is limited in extent and associated mainly with localised layers of sand and gravel or larger fractures within the bedrock. No groundwater was struck in any of the trial pits excavated to a minimum of 3m depth. It is possible that underlying groundwater is in hydraulic continuity with the nearest surface water and may contribute to baseflow in this stream but this is not certain. To ascertain the nature and extent of any risk more precisely, flux modelling of the major pollutants ammonium and nitrate is recommended.

By way of grave-specific mitigation, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite or Bentonite clays have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Pivato et al Waste Management Review 2004) (Rozic et al 2009 Bioinformatics).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

10.0 Reporting details

Report Author:	Mr Alex Vickers
Verification:	Mr Justin Smith
Date:	03.10.17

Cemetery Development Services - Terms and Conditions

Cemetery Development Services (CDS)
Terms and Conditions for the Supply of Services

Interpretation

In these Conditions

AGREED FEE means the charges agreed between CDS and the Client in relation to the Specified Service

CLIENT means the person named on the Specification Sheet for whom CDS has agreed to provide the Specified Service in accordance with these Conditions

CONTRACT means the contract for the provision of the Specified Service

DOCUMENT includes, in addition to a document in writing, any map, plan, graph, drawing or photograph, any film, negative, tape or other device embodying visual images and any disc, tape or other device embodying any other data

INPUT MATERIAL means any Documents or other materials, and any data or other information provided by the Client relating to the Specified Service

OUTPUT MATERIAL means any Documents or other materials, and any data or other information provided by CDS relating to the Specified Service

SPECIFICATION SHEET means the sheet to which these Conditions are appended

SPECIFIED SERVICE means the service relating to geophysical surveys of land to be provided by CDS for the Client and referred to in the Specification Sheet

CDS means CDS (registered in England under number 05089827) or its subsidiary as stated on the Specification Sheet

The headings in these Conditions are for convenience only and shall not affect their interpretation.

Supply of the Specified Service

CDS shall provide the Specified Service to the Client subject to these Conditions. Any changes or additions to the Specified Service or these Conditions must be agreed in writing by CDS and the Client.

The Client shall allow CDS adequate access to its property at reasonable times and for so long as is necessary to enable CDS to provide the Specified Service in accordance with the Contract.

The Client shall at its own expense supply CDS with all necessary Documents or other materials, and all necessary data or other information relating to the Specified Service, within sufficient time to enable CDS to provide the Specified Service in accordance with the Contract. The Client shall ensure the accuracy of all Input Material.

CDS shall have no liability for any loss or damage, however caused, to the Input Material. All Output Material shall be at the sole risk of the Client from the time of delivery to or to the order of the Client.

The Specified Service shall be provided in accordance with the Specification Sheet subject to these Conditions.

Further details about the Specified Service, and advice or recommendations about its provision or utilisation, which are not given in CDS's brochure or other promotional literature, may be made available on written request.

CDS may correct any typographical or other errors or omissions in any brochure, promotional literature, quotation or other document relating to the provision of the Specified Service without any liability to the Client.

CDS may at any time without notifying the Client make any changes to the Specified Service which are necessary to comply with any applicable safety or other statutory requirements, or which do not materially affect the nature or quality of the Specified Service.

Charges

Subject to any special terms agreed, the Client shall pay the Agreed Fee and any additional sums which are agreed between CDS and the Client for the provision of the Specified Service or which, in CDS's sole discretion, are reasonably incurred as a result of the Client's instructions or lack of instructions, the inaccuracy of any Input Material or any other cause attributable to the Client.

All charges quoted to the Client for the provision of the Specified Service are exclusive of any Value Added Tax, for which the Client shall be additionally liable at the applicable rate from time to time.

CDS shall be entitled to invoice the Client on completion of the Specified Service.

The Agreed Fee and any additional sums payable shall be paid by the Client (together with any applicable Value Added Tax, and without any set-off or other deduction) within 30 days of the date of CDS's invoice.

If payment is not made on the due date, CDS shall be entitled, without limiting any other rights it may have, to charge interest on the outstanding amount (both before and after any judgment) at the rate of 4 % above the base rate from time to time of Barclays Bank plc from the due date until the outstanding amount is paid in full.

Rights in Input Material and Output Material

The property and any copyright or other intellectual property rights in:

any Input Material shall belong to the Client

any Output Material and any amendments or variations to the Input Material made by CDS shall, unless otherwise agreed in writing between the Client and CDS, belong to CDS, subject only to the right of the Client to use the Output Material for the purposes of utilising the Specified Service.

Any Input Material or other information provided by the Client which is so designated by the Client and any Output Material shall be kept confidential by CDS, and all Output Material or other information provided by CDS which is so designated by CDS shall be kept confidential by the Client; but the foregoing shall not apply to any Documents or other materials, data or other information which are public knowledge at the time when they are so provided by either party, and shall cease to apply if at any future time they become public knowledge through no fault of the other party.

The Client warrants that any Input Material and its use by CDS for the purpose of providing the Specified Service will not infringe the copyright or other rights of any third party, and the Client shall indemnify CDS against any loss, damages, costs, expenses or other claims arising from any such infringement.

Warranties and Liability

CDS warrants to the Client that the Specified Service will be provided using reasonable care and skill and, as far as reasonably possible, in accordance with the Specification and at the intervals and within the times referred to in the Specification Sheet. Where CDS supplies in connection with the provision of the Specified Service any goods (including Output Material) supplied by a third party, CDS does not give any warranty, guarantee or other term as to their quality, fitness for purpose or

otherwise, but shall, where possible, assign to the Client the benefit of any warranty, guarantee or indemnity given by the person supplying the goods to CDS.

CDS shall have no liability to the Client for any loss, damage, costs, expenses or other claims for compensation arising from any Input Material or instructions supplied by the Client which are incomplete, incorrect, inaccurate, illegible, out of sequence or in the wrong form, or arising from their late arrival or non-arrival, or any other fault of the Client.

Except in respect of death or personal injury caused by CDS's negligence, or as expressly provided in these Conditions, CDS shall not be liable to the Client by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, for any loss of profit or any indirect, special or consequential loss, damage, costs, expenses or other claims (whether caused by the negligence of CDS, its servants or agents or otherwise) which arise out of or in connection with the provision of the Specified Service or their use by the Client, and the entire liability of CDS under or in connection with the Contract shall not exceed the amount of CDS's charges for the provision of the Specified Service, except as expressly provided in these Conditions.

CDS shall not be liable to the Client or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of CDS's obligations in relation to the Specified Service, if the delay or failure was due to any cause beyond CDS's reasonable control.

Termination

Either party may (without limiting any other remedy) at any time terminate the Contract by giving written notice to the other if the other commits any breach of these Conditions and (if capable of remedy) fails to remedy the breach within 30 days after being required by written notice to do so.

Insolvency of Client

This clause applies if:

the Client makes any voluntary arrangement with its creditors or (being an individual or firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or an encumbrancer takes possession, or a receiver is appointed, of any of the property or assets of the Client; or

the Client ceases, or threatens to cease, to carry on business; or

CDS reasonably apprehends that any of the events mentioned above is about to occur in relation to the Client and notifies the Client accordingly.

If this clause applies then, without prejudice to any other right or remedy available to CDS, CDS shall be entitled to cancel the Contract or suspend any further provision of services under the Contract without any liability to the Client, and if the Services have been provided but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

General

These Conditions (together with the terms, if any, set out in the Specification Sheet) constitute the entire agreement between the parties, supersede any previous agreement or understanding and may not be varied except in writing between the parties. All other terms and conditions, express or implied by statute or otherwise, are excluded to the fullest extent permitted by law.

Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to the other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving the notice.

No failure or delay by either party in exercising any of its rights under the Contract shall be deemed to be a waiver of that right, and no waiver by either party of any breach of the Contract by the other shall be considered as a waiver of any subsequent breach of the same or any other provision.

If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part, the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected.

Any dispute arising under or in connection with these Conditions or the provision of the Specified Service shall be referred to arbitration by a single arbitrator appointed by agreement or (in default) nominated on the application of either party by the President for the time being of Institute of Arbitrators.

English law shall apply to the Contract, and the parties agree to submit to the non-exclusive jurisdiction of the English courts.

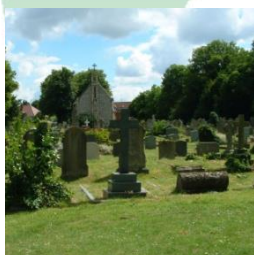


Cemetery Development Services

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A report to Charnwood Borough Council on the suitability of proposed new cemetery at a site off the Nanpanton Road, Nanpanton as part of an Environment Agency T2 Audit

March 2018
D1.0



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Charnwood Borough Council

An Environment Agency T2 Assessment for a proposed new cemetery at a site off the Nanpanton Road, Nanpanton, Leicestershire, LE11 3YE. Grid Ref: 451950; 317221

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1.0 Executive summary

The site is considered to be **high risk** with the risk mainly attributed to the predicted burial numbers generally and the presence of wet ditches on the western and northern boundaries of the site. In the areas where glacial till overlies the siltstone, the risks are likely to be much lower as there is no significant perched water within the till based on the trial pits and water movement through the subsoil is likely to be very slow. The trial pits struck no permeable deposits or lenses within or within 1m of burial depth thus the risk to local surface waters is also likely to be quite low however for the key risks the risk to local surface water is likely to be greater than the risk to groundwater at this site.

As the soils are very poorly drained, water may gather around burials making re-opening potentially difficult. This can be mitigated by compacting backfill over recent burials firmly to reduce the risk of infiltration through the disturbed back-fill material.

The site has two wet ditches along the boundaries which would require a minimum 10m no burial zone and one ditch may class as a tertiary river, in which case it may require a 30 m no burial zone. The site has two large aqueducts and a high pressure gas main running through the centre of the site and it is likely that this will also require a 10 m no dig zone either side of the nearest service, thus much of the site cannot be used for burials.

By way of grave-specific mitigation if needed, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Rozic et al 2009).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

2.0 Introduction

Cemetery Development Services Ltd. has been asked to carry out a Tier 2 site screening assessment for a new cemetery located on land off Nanpanton Road, Nanpanton, and Loughborough. This site will be considered on the basis of groundwater risk and as part of this, a T2 study based on the criteria required by the Environment Agency has been carried out. This is because sites that do not meet the requirements of the Environment Agency should be ruled out at an early stage since the Agency as Primary Consultees are able to prevent any site being developed should the site be deemed to represent too great a risk in respect to water pollution.

The proposed development area has been assessed on a 1 km area of influence: grid reference 451950; 317221, nearest postcode: LE11 3YE. The site is calculated as being approximately 14 hectares (34.6 acres).

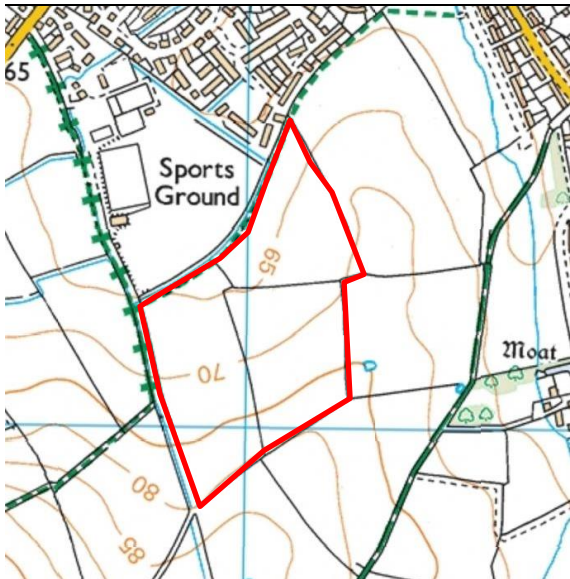


Figure 1a. Map of the site.



Figure 1b. Aerial photograph of the site, (site boundary marked in red).

This report will review the site proposed for use as a burial facility in accordance with the requirements of the Environment Agency's Tier 2 survey. For the purposes of this study the anticipated burial rate for this site is estimated as being in approximately 60 per year.

3.0 Background

New cemetery developments or extensions to existing cemeteries can be very emotive. However, these concerns are often disproportionate to the actual environmental risk.

Whilst the Local Planning Authority is the principal controlling body in determining approval for new sites or site extensions, significant information is required to ensure that the environmental risks are examined and that the Environment Agency's views are considered. Therefore, measures to prevent pollution must be undertaken and reported. Any regulatory decision-making is based on sound scientific knowledge. On this basis, a review of potential pollution from cemeteries was undertaken by the Environment Agency in collaboration with the British Geological Survey.

The aim was to review old and new cemeteries and measure the effects of contamination from viruses, bacteria and other microbiological pathogens and to assess the potential of chemical

contaminants affecting groundwater supplies from decomposition processes. Preliminary results showed that the operating cemetery examined in the study (25 years old) did show some evidence of bacterial contaminants in groundwater derived from corpses. However, no viruses were detected and the overall contaminant loading was found to be low. The studies found that degradation and attenuation was occurring indicating that potential risks were low. Whilst the outcome of this research found contaminant risk to be low, it should be reviewed in the context that natural attenuation processes may have been optimum at these sites. Therefore, to optimise natural attenuation and reduce the risk of possible groundwater contamination, a series of guidelines have been drawn up that are directly applicable to cemeteries.

Failure to manage and reduce any environmental risk to a minimum may result in action being taken under the Groundwater Regulations 1998 and the Anti-pollution Works Notice Regulations 1999.

3.1 Groundwater protection policy

Initial risk screening starts with the tools contained in the Agency's publication, Policy and Practice for the Protection of Groundwater in cemeteries and in the latest GP3 guidance notes.

Tools include Groundwater Vulnerability and Source Protection Zone (SPZ's) maps. These maps highlight where there are likely to be particular risks posed to groundwater from surface activities. Groundwater Vulnerability (GWV) Maps show the damage from pollution to groundwater and the relative importance of the aquifer to water supplies. Risk assessment is made with reference to soil leaching potential and the levels of water tables above major and minor aquifers.

Source Protection Zones are delineated areas around groundwater abstractions used for public consumption and defined by travel, time of biological or chemical contaminants.

The zones are classified in three groups:

- Zone 1 High risk
- Zone 2 Intermediate to high risk
- Zone 3 Intermediate risk

The Environment Agency would be opposed to large graveyards within Zone 1 of an SPZ.

Whilst groundwater is a major part of policy concerns, other water point sources are also considered as requiring an evaluation of risk. These sources include surface water in the form of ditches, spring lines and surface run-off.

The factors influencing the risk of groundwater vulnerability include:

- Soil nature and type
 - Physical, mechanical and chemical properties
- Geomorphology
 - Depth to water table and or height above aquifers
 - Groundwater flow mechanisms
 - Aquifer type
- Abstractions
- SPZ's
- Proximity to water courses, ditches and drains

Therefore, prior to any consent being given by the Environment Agency, an assessment of risk should be undertaken. The degree of assessment is measured through a series of stages namely:

- Hazard identification
- Identification of consequences
- Magnitude of consequences
- Probability of consequences
- Significance of risk

3.2 Tiered risk assessment

There are 3 Tiers of Risk assessment. The associated size and position of the site will in-part determine which Tier is appropriate.

Tier 1

Desktop study of all appropriate documentation including GWV and SPZ maps, topographical, hydrological and geomorphologic maps. After adopting a systematic approach to the assessment of risk, a weighting can be given which is assessed as low, medium or high. If the overall risk is low, the proposal may be accepted by the Agency without further detailed assessment. However, the following practical guidelines would be recommended as appropriate controls to minimize pollution risk:

- 250 m distance from groundwater supply
- 30 m minimum distance from groundwater or spring
- 10 m distance from field drains
- No burials in standing water

Tier 2

Should the risks not be clearly defined by the desktop study then further “ground truthing” might need to be undertaken. This may include field studies and monitoring of groundwater within the proposed area, comprising of the installation of up to three boreholes.

Tier 3

If the risk is considered high, i.e. the number of yearly burials exceeds 1,000; a full audit will be required. This would include, but not be limited to, a detailed site investigation including boreholes and monthly monitoring.

3.3 Water Resources Act 1991 – S161A Anti-Pollution Works Notices

The EA has powers under s161A of the Water Resources Act 1991 and the Anti-Pollution Works Regulations 1999, allowing Works Notices to be served to prevent or remedy pollution of controlled waters and under the Groundwater Regulations 1998 to prevent pollution of groundwater.

3.4 Groundwater Regulations 1998

Burial of human corpses can result in discharge of listed substances to groundwater. They are, therefore, covered by the requirements of the Groundwater Regulations. Individual burials spaced out over time will only release trivial amounts of listed substances.

These are considered to fall under the *de minimis exemption*. Large numbers of burials (>100 per annum) in a short time or the cumulative effects of many individual burials may cause groundwater

pollution. In this case, the EA will, where appropriate, use their powers under the Groundwater Regulations to control or prohibit the burial. This has specific relevance to policy P12-2 but will apply more generally.

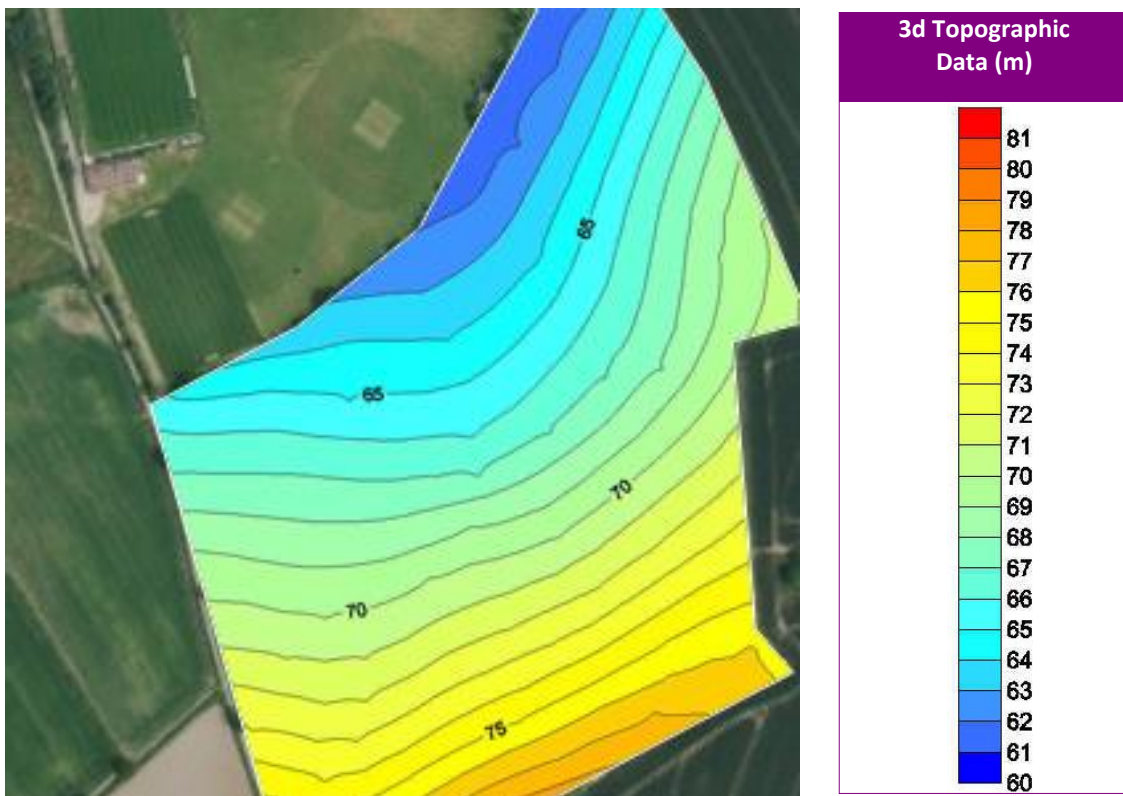
4.0 Site investigation

British Geological Survey and Cranfield University data was used in this report.

4.1 Topography and surface drainage

The site is currently in arable production and is bounded on all sides by further arable fields with the exception of the north which is a sportsfield. A small track runs along the western border and the site comprises three separate fields and includes a small copse. The site falls from the south to the north at a general grade of around 3.4% which is a moderate slope. According to OS data there are no water features on the site however a wet ditch flows along the western boundary between the site and the sportsground and away to the west as well as along the western boundary flowing to the north. This ditch becomes a small stream some 100m below the site. A small pond is located some 40 m beyond the eastern boundary of the site, in an adjacent field. The site has two large aqueducts and a high pressure gas main running under it through the centre of the site in an approximate south to north direction.

The site falls from the south to the north at an average grade of around 3.5% and it also falls from the east to the centre of the site and from the west to the centre of the site at an average grade of around 1.7%.



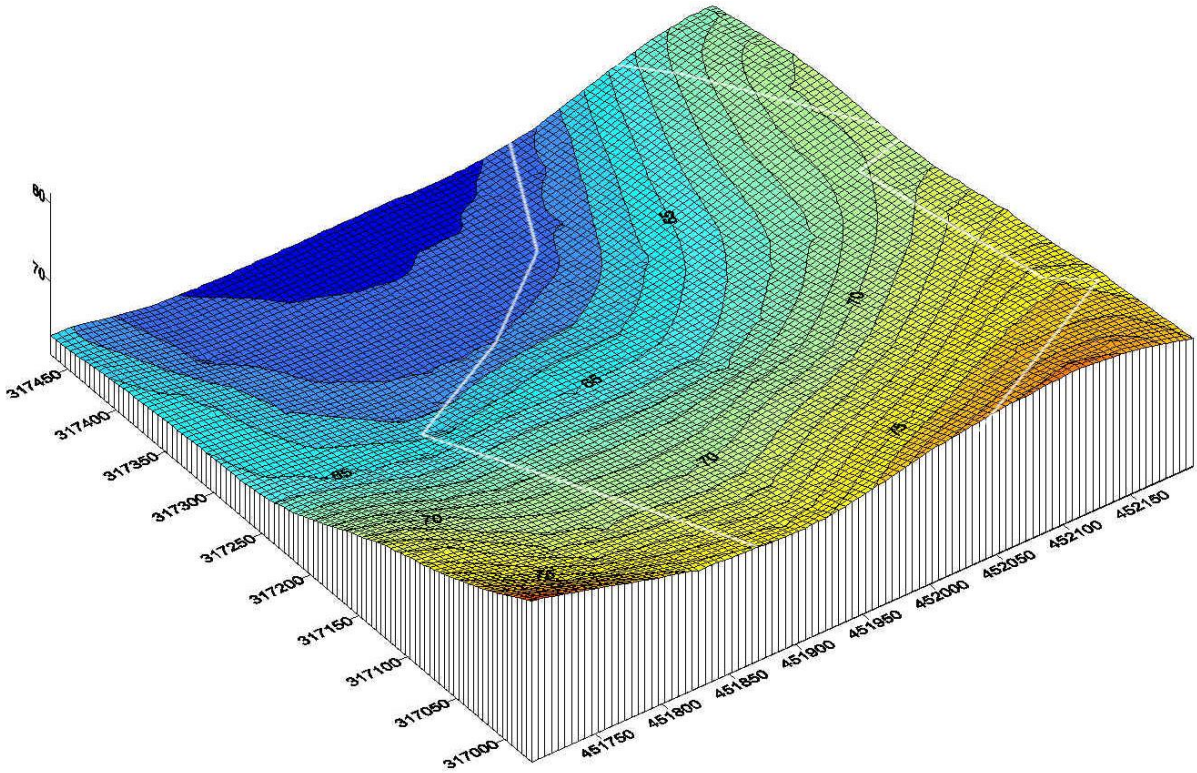


Figure 2. Topography of the site.

4.2 Soil type

The Soil Survey of England and Wales map the site as containing soils belonging to the Whimple 3 Association as described in Table 1 and Figure 3.

Figure 3. Soil Associations in the vicinity of the site.

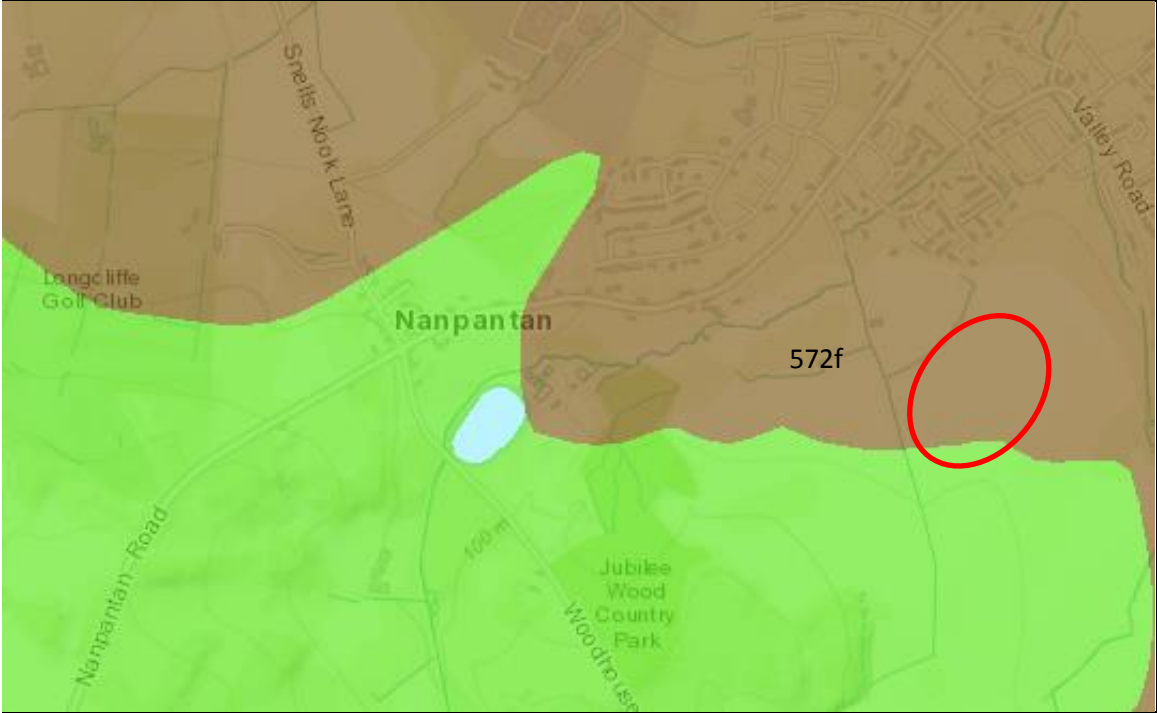


Table 1. Soil Associations in the vicinity of the site.

Soil Association	Sub Groups	Description
572f Whimble 3	Whimble Worcester Brockhurst	Reddish fine loamy or fine silty over clayey soils with slowly permeable subsoils and slight seasonal waterlogging. Some similar clayey soils on brows. Slowly permeable seasonally waterlogged fine loamy and fine silty over clayey soils on lower slopes.

The soils on site belong to the Whimble 3 Association (572f). These soils tend to be silty or fine loamy in characteristics but with clay dominated subsoils. Often these soils have poor surface water drainage in winter and especially when worked or trafficked as silty soils are very prone to mechanical damage. Effective compaction management can significantly improve surface water drainage rates in amenity grassland settings.

This type of soil is generally suitable for cemeteries but may have some local issues with seepage from more permeable lenses within the subsoil which could flood graves if significant. Surface water drainage issues can be significant in very wet periods which may make accessing graves difficult at times but this can be improved with appropriate land drainage and good design.

4.2.1 Trial pits

Site investigations were undertaken on 6th March 2018 with 5 trial pits dug to approximately 3.5 metres depth (Figure 5). Figure 4 shows the profiles of the pits excavated.

Figure 4. Trial pit soil profiles





Pit 3 profile.



Pit 4 profile.



Pit 5 profile.



Figure 5. Trial pit locations.

Due to the presence of major regional services running north to south through the centre of the site and comprising two large aqueducts and one high pressure gas main no pits were dug within 50 m either side of the nearest service. This means that the pits have been excavated close to the periphery of the site, however the soils were very similar so in this case it is suggested that the pits are representative of the soils on the site as a whole. In addition, the services are such that no burials will be permitted within at least 10 m or possibly 20m of the peripheral service lines thus most of the centre of the site cannot be used for burials anyway.

The pits were dug following a period of prolonged rainfall and the site was very wet, with saturated topsoil throughout. Significant areas of standing water were present at the base of the slope and these were avoided during the digs however it does clearly indicate the difficulties in surface water management associated with this site in wet periods. The pits were dug to a minimum of 2.9m below ground level (bgl) ensuring that the soil was examined to at least 1m below normal double burial depth.

All the pits excavated showed very similar morphology with a topsoil layer varying between 280 and 350 mm overlying a weathered silty clay subsoil, often with good soil structure. This was underlain at varying depths by weathered Tarporely Siltstone which continued to the base of the pits. The siltstone was friable, shaley and incompetently bedded. It varied between deep red layers and lighter green layers. In all cases the pits were dry to depth however in Pit 5 there was considerable surface water flow into the pit from the base of the topsoil. The topsoil was saturated and water flowed into the pit from many points. This

suggests that an effective surface water drainage system will be needed for this site to minimise the risk of graves being flooded by surface water when in preparation during the winter.

The only other water encountered was when a clay field drain was damaged during the excavation of Pit 1.

No alluvium was struck in any trial pit and it appears that this deposit is restricted to the sportsfields north of the site.

4.3 Geology

The following headings cover the aspects of geology of the immediate area of the proposed development.

4.3.1 Artificial ground

This is ground at or near the surface that has been modified by man. It includes ground that has been deposited (Made Ground), landscaped, disturbed, excavated (Worked Ground) or some combination of these (Figure 6). No Artificial ground is mapped within the site area.

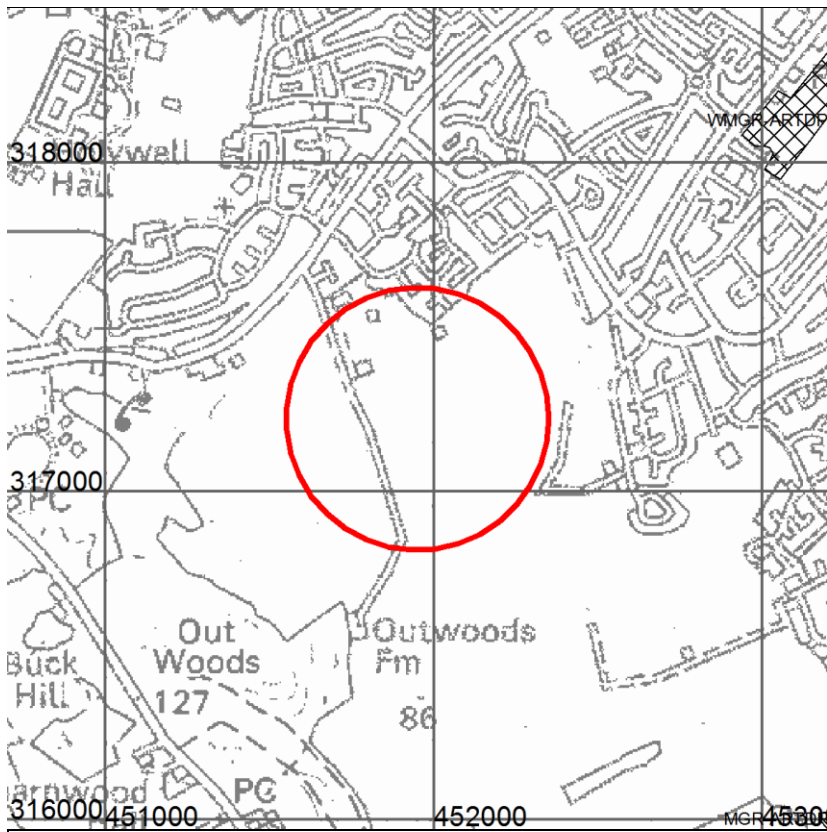





Figure 6. Artificial ground in the vicinity of the site.

Search area indicated in red

Key to Artificial ground:

Map colour	Computer Code	Name of geological unit	Composition
	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

4.3.2 Superficial deposits

These are relatively young geological deposits formerly known as 'Drift', which lie on the bedrock in many areas. They include deposits such as unconsolidated sands and gravels formed by rivers and clayey tills formed by glacial action. They may be overlain by landslide deposits, by artificial deposits or both (Figure 7).

Two types of superficial deposits have been recorded near or on the site. The northern part may have some limited coverage by alluvium, though this is mainly associated with the sportsground to the north. Alluvium is a fluvial deposit formed from sediments laid down by rivers, usually within the last 11,500 years (Holocene epoch). The alluvium has been cored by a series of borehole situated c. 1.8-2 km to the northeast. These boreholes indicate that the alluvium is composed of sandy clay and silt with occasional pebbles, gravelly sand and sandy gravel. Here the deposit is up to 2 m thick over weathered bedrock. Unfortunately, no borehole closer to the site has penetrated this deposit and as such, the thickness and composition of the alluvium at the site could reasonably differ. It is expected however, that the alluvium is no more than 2 m thick.

The southern part of the site is locally covered by a thin deposit of glacial till, which caps the ridge immediately south of the proposed development. The till, of Quaternary age, belongs to the Thrusington Member of the Wolston Formation, and was deposited during the Anglian glaciation. The Thrusington Member is primarily comprised of firm to stiff, red-brown to grey coloured, variably sandy or silty clay. It commonly also contains gravel and larger cobbles interspersed throughout the unit. The Thrusington Member south of the site is not penetrated by any boreholes, but the geological setting suggests that the Thrusington Member is not likely to be more than 2-3 metres thick, although further east in Loughborough the Thrusington Member can reach thicknesses of up to 8 m.

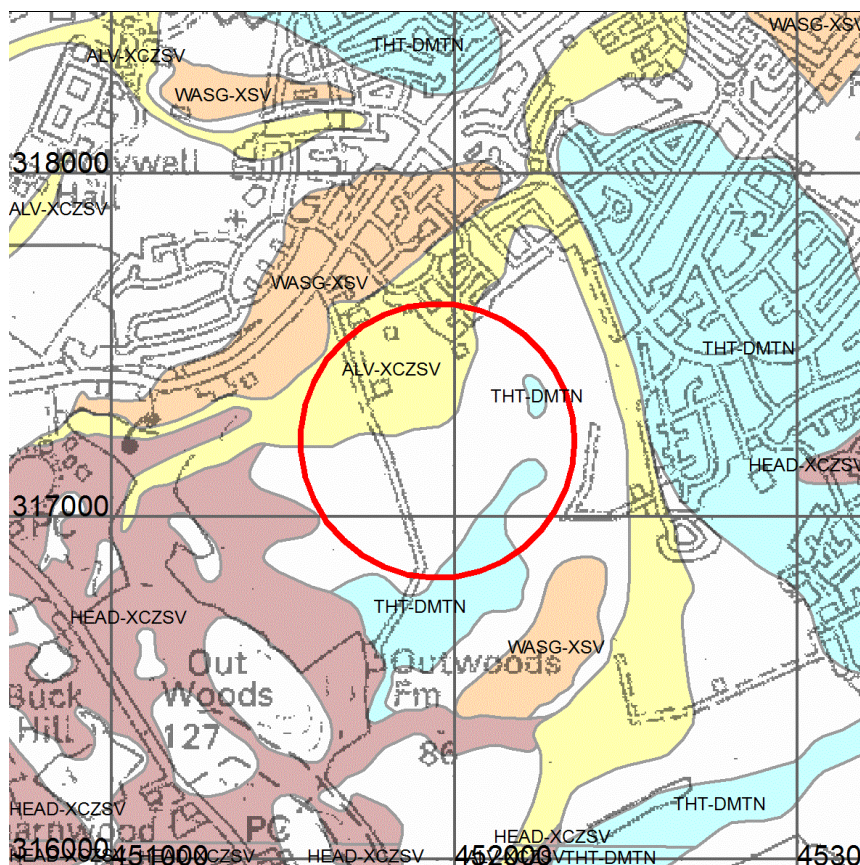






Figure 7. Superficial deposits in the vicinity of the site.

Search area indicated in red

Key to Superficial deposits:

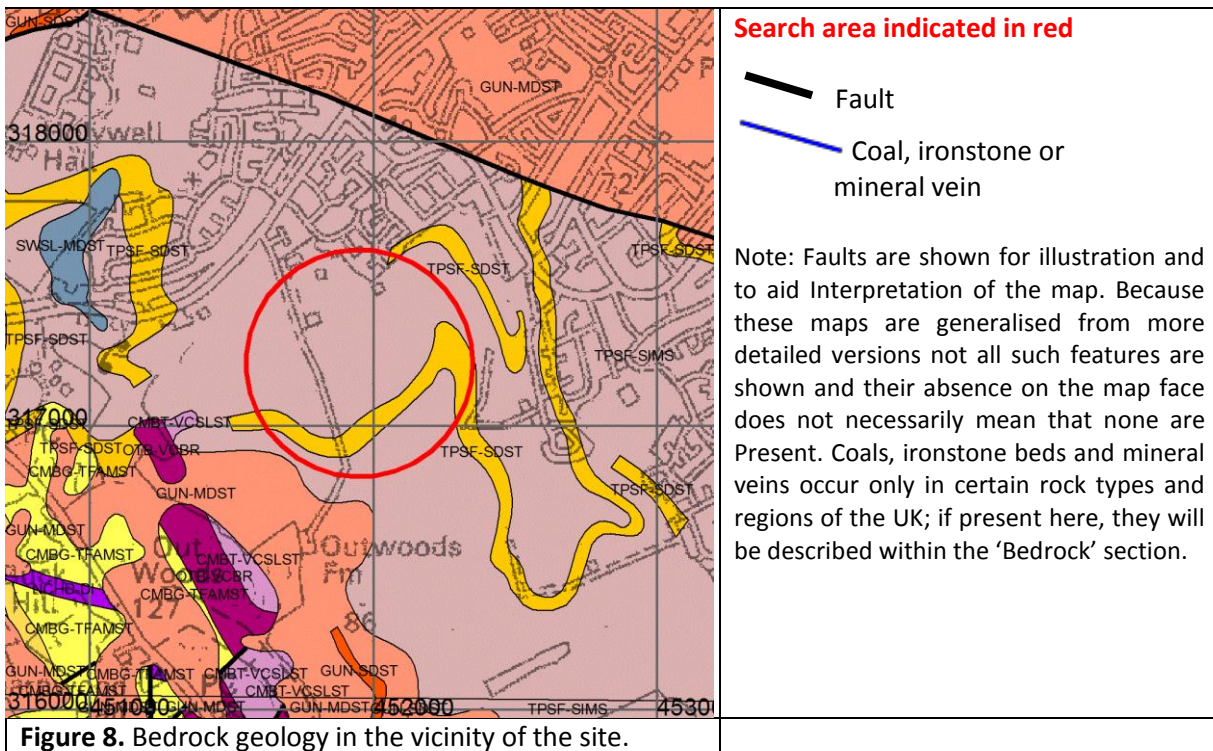
Map colour	Computer Code	Name of geological unit	Composition
	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
	WASG-XSV	WANLIP MEMBER	SAND AND GRAVEL
	THT-DMTN	THRUSSTON MEMBER	DIAMICTON
	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

4.3.3 Rockhead depth











Rockhead is situated at the surface where no superficial deposits are recorded (central part of the search area) and directly below the alluvium or Thrussington Member where these are present. The depth to the rock-head is thus likely to be variable but less than 2 m.

4.3.4 Bedrock geology

The site is underlain by the Tarporley Siltstone Formation of the Mercia Mudstone Group. The Tarporley Siltstone Formation is a Triassic aged deposit that is primarily comprised of red-brown siltstones, mudstones and sandstones. The Tarporley Siltstone locally has a relative thick sandstone bed that has been identified on BGS maps (golden coloured unit on Figure 8). This sandstone bed passes through the site and will be sandstone rich and siltstone poor relative the remaining parts of the Tarporley Siltstone. Locally the Tarporley Siltstone has a thickness of up to 50 m, it is likely that at the site the Tarporley Siltstone is relatively thin, with a thickness of up to 40 m.



Key to Bedrock geology:

Map colour	Computer Code	Name of geological unit	Rock type
	GUN-MDST	GUNTHORPE MEMBER	MUDSTONE
	GUN-SDST	GUNTHORPE MEMBER	SANDSTONE
	TPSF-SDST	TARPORLEY SILTSTONE FORMATION	SANDSTONE
	TPSF-SIMS	TARPORLEY SILTSTONE FORMATION	SILTSTONE, MUDSTONE AND SANDSTONE
	SWSL-MDST	SWITHLAND FORMATION	MUDSTONE
	CMBG-TFAMST	BUCK HILLS MEMBER	TUFFACEOUS-MUDSTONE
	CMBG-TFASST	BUCK HILLS MEMBER	TUFFACEOUS-SANDSTONE
	CMBT-VCSSLST	BRADGATE FORMATION	VOLCANICLASTIC-SILTSTONE
	NCHD-DI	NORTH CHARNWOOD DIORITE	DIORITE
	OTB-VCBR	OUTWOODS BRECCIA MEMBER	VOLCANICLASTIC-BRECCIA

Beneath the Tarporley Siltstone is the Triassic Sherwood Sandstone Group. The Sherwood Sandstone is a yellow to red-brown clean sandstone. It is likely to have a thickness of >200 m locally. The boundary between the Sherwood Sandstone and the overlying Tarporley Siltstone can be gradational with the red-brown siltstone dominated Tarporley Siltstone slowly changing into the more yellow sandstone beds of the Sherwood Sandstone. However, the boundary may also be abrupt with a sudden change from one unit to the other.

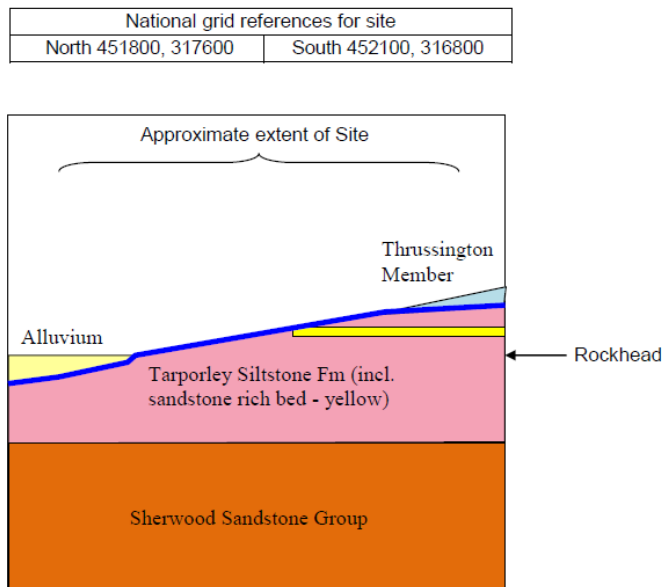
There is no evidence of any surface mining locally. There is no evidence of any major faulting.

4.3.5 Schematic geological cross-section

This sketch (Figure 9) represents an interpretation of the geometrical relationships of the main rock units described in the text. It is not to scale. The blue line indicates 'rockhead'; that is the base of superficial deposits. This is the 'geological rockhead', as distinct from the 'engineering rockhead', which is the base of 'engineering soil' (in the sense of BS5930:1999).

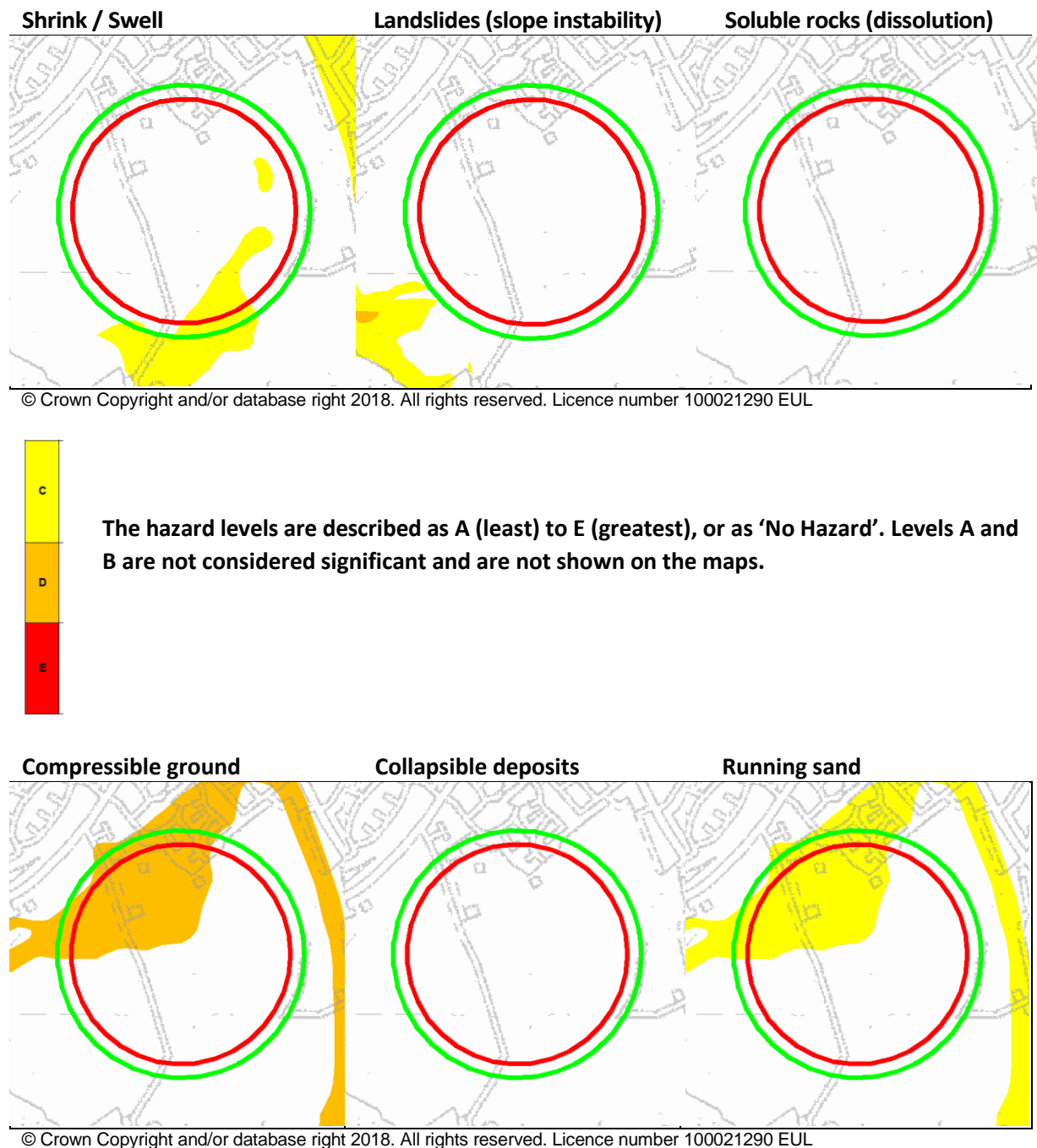
Figure 9. A schematic representation of the underlying geology.

Not to scale



4.4 Additional geological considerations

Figure 10. A summary of the geological hazards associated with the site.



The geological hazards found on the site are explained in Table 2.

Table 2. Geohazard summary

Geological hazard	May be significant within site area	Comments
Potential Natural Ground Stability Hazards		
Shrink-Swell	Yes	Level C = Potential for hazard to become active is at a level where it should be considered in decisions about construction, building maintenance and land use. This risk is associated with the clay rich Thrussington Member to the south of the site
Landslides (slope instability)	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Soluble Rocks (dissolution)	No	Level A = Potential for hazard to be active is either zero or insignificant.
Compressible Ground	Yes	Level D = Significant potential for hazard to become active that requires site-specific advice on the level of hazard related to building type and environment. The hazard is linked with the superficial alluvium deposits to the north of the site (mainly over sportsfields).
Collapsible Deposits	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Running Sand	Yes	Level C = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances. Running sands occurs whereby water-rich loose sand is contained within impermeable clay and silts. When these sand units are penetrated during building or coring the release of pressure can cause the sand to flow to surface leaving small voids liable to collapse. Due to the nature of this risk it is only associated with superficial deposits that are a mix of sand and clay/silt. Being derived from silty or sandy bedrock, both the alluvium and Thrussington Member have such a composition.
Other Potential Hazards		
Mining	No	None.
Flooding	Yes	The presence of alluvium along the northern boundary suggests that this section of the site may be at risk from flooding.
Natural Land Gas	No	Unlikely to encounter gas from bedrock and coal mining; unlikely to encounter gas from peat.
Radon		Level of protective measures: NO

4.5 Hydrogeology

In lowland areas of the UK with little topographic variation, groundwater is likely to be found at shallow depths of only a few metres. Water table fluctuations will be small as they will be constrained by the ground surface and the base level of the local perennial streams and rivers.

In upland areas, precipitation is usually high and the dominantly metamorphic and igneous rocks often have relatively shallow groundwater levels.

This is due to preferential groundwater storage in near-surface weathered and fractured zones with limited drainage into the underlying un-weathered lower permeability rock. Exceptions can occur where higher permeability rocks, such as sandstone or limestone, allow faster through flow of groundwater towards the nearest stream or other discharge point.

Perched water tables occur where a less permeable horizon (e.g. a clay layer) in an otherwise permeable sequence retains a body of groundwater above the level of the regional water table. They usually occur at shallow depths in alluvial and glacial sediments and can be difficult to identify or to delimit.

An aquifer becomes confined when it is overlain by a less permeable horizon that restricts the upward movement of groundwater. When this less permeable horizon is penetrated (e.g. by drilling), the groundwater level rises above where struck to a level controlled by the hydrostatic pressure. If this is above ground level, overflowing artesian conditions will be encountered. Confined conditions should be anticipated, where possible, in order to plan for the problems they can generate.

Individual sites will always require more detailed assessments to determine the specific impact on groundwater resources. The maps represent conditions only at the ground surface. Where the soil and/or underlying formations have been disturbed or removed the vulnerability class may have been changed and site specific data will be required. Sites in urban areas and restored or current mineral workings are classified as having high (urban) soil leaching potential until proved otherwise.

There are no boreholes within 1 km of the site hence the information in Table 3 is mainly generic. Four trial boreholes in Nanpantan, 1.3 km to the west of the site, all struck water at the top of a sandstone horizon within the Tarporley Siltstone Formation encountered at depths of 6.5-7.6 m below surface (83.4-83.9 m above OD). However there is no information on the final water level.

The regional direction of groundwater flow in the Sherwood Sandstone Group is north-eastwards. The hydrological information for the site is summarised in Table 3.

Table 3. Hydrogeology summary

Geological unit	Groundwater potential	Water level and strikes	Quality	EA groundwater vulnerability classification
Alluvium	Some groundwater may be present in the more permeable sand and gravel horizons at least for part of the year	Shallow and likely to be in hydraulic conductivity with the Wood Brook	Similar composition, but more mineralised than water in the brook.	Medium vulnerability secondary aquifer.
Till	Low permeability, unless subordinate sand and gravel horizons encountered	As till is thin, if water present will be encountered within a few meters of the ground surface	No information, but water from glacial deposits is often hard and ferruginous.	Medium vulnerability secondary aquifer.
Tarporley Siltstone Formation	Some groundwater likely to be present in the siltstone and sandstone units, particularly the mapped sandstone unit that traverses the site.	Water levels within the siltstone and sandstone horizons may rise above where first struck. Water level possibly within a few metres of the ground surface.	Groundwater present within siltstone and sandstone horizons may be of good quality but likely to be hard.	Secondary B aquifer associated with the siltstone and sandstone units.
Sherwood Sandstone Group	Important aquifer with both intergranular and fracture flow.	Water may rise above level where first struck, possibly to about 70m above OD, so potentially artesian conditions below lower lying parts of the site.	Likely to be potable but hard with total dissolved solids content of up to 800 mg/l or even higher.	Principal aquifer.

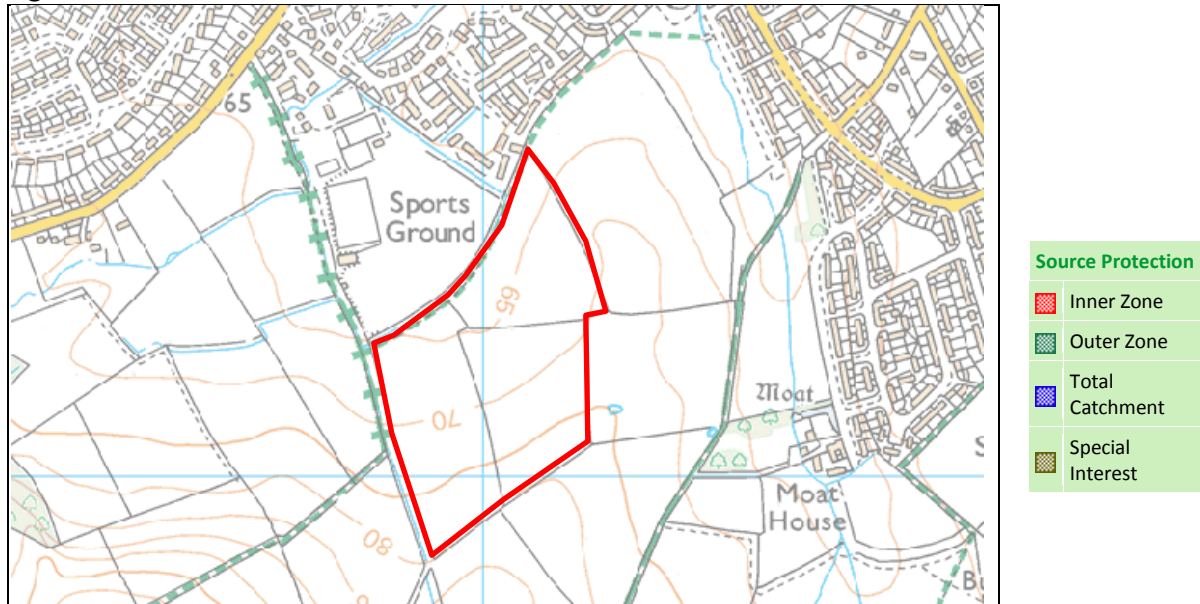
4.5.1 Groundwater vulnerability

This section reviews all components of hydrology, geology and top soil surface water drainage to assess risk notably to groundwater.

4.5.2 Source Protection Zones

The position of the site relative to current ground water protection zones is shown in Figure 11.

Figure 11. Groundwater Source Protection Zones associated with the site



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Source Protection Zones (SPZs) provide an indication of the risk to groundwater supplies that may result from potentially polluting activities and accidental releases of pollutants. Generally the closer the activity or release is to a groundwater source the greater the risk. Three zones (an inner, outer and total catchment) are usually defined although a fourth zone (zone of special interest) is occasionally defined.

The Agency has subdivided groundwater source catchments into four zones. Two of these are determined by the travel time of potential pollutants, the third by the source catchment area itself and the fourth is a "Zone of Special Interest". This fourth zone highlights areas where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

- *Zone I (Inner Protection Zone)* - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has, as a minimum, a 50-meter radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease.
- *Zone II (Outer Protection Zone)* - This zone is defined by the 400-day travel time, or 25% of the source catchment area, whichever is larger. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants.
- *Zone III (Total catchment)* - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.
- *Zone of Special Interest* - For some groundwater sources an additional Zone of Special Interest may be defined.

These zones highlight areas (mainly on non-aquifers) where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

The proposed development site lies outside any Groundwater Source Protection Zone.

4.5.3 Aquifer vulnerability

The Groundwater Vulnerability maps are produced at 1:100,000 scale. They show, by means of colour coding, those areas of the country where water-bearing rocks (aquifers) are present. They also show the vulnerability of groundwater to pollution. The aquifers are classified into major, minor and non-aquifers according to their physical properties and their consequent value as a resource.

The classification of the land surface reflects the ability of contaminants to leach through the covering soils and pose a potential risk to groundwater at depth. The maps also indicate areas where the presence of low permeability drift may provide additional groundwater protection.

These maps can therefore be used for an initial screening assessment of the vulnerability of groundwater to contaminants applied to the surface of the ground. They do not provide all information relevant to the determination of vulnerability, such as the depth to water table or nature of the drift deposits. Site-specific information would always be needed for a detailed assessment of vulnerability at a given location. The original groundwater vulnerability maps were produced some time ago.

Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have descriptions on them to explain the different aquifer and soil types.

Areas shown as "major aquifers" have strategic significance for water resource; they often support large abstractions for the public water supply.

Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.

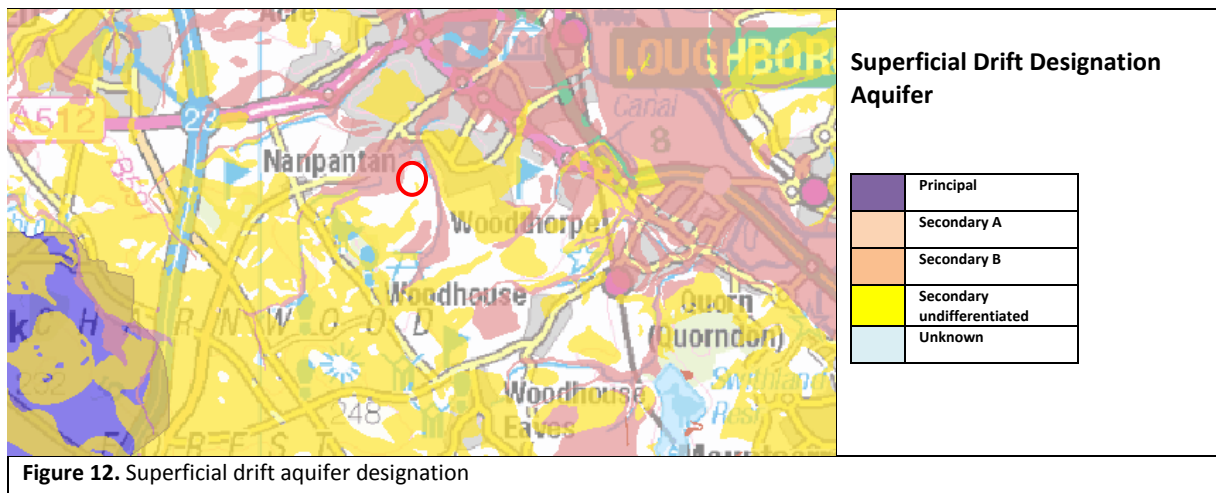


Figure 12. Superficial drift aquifer designation

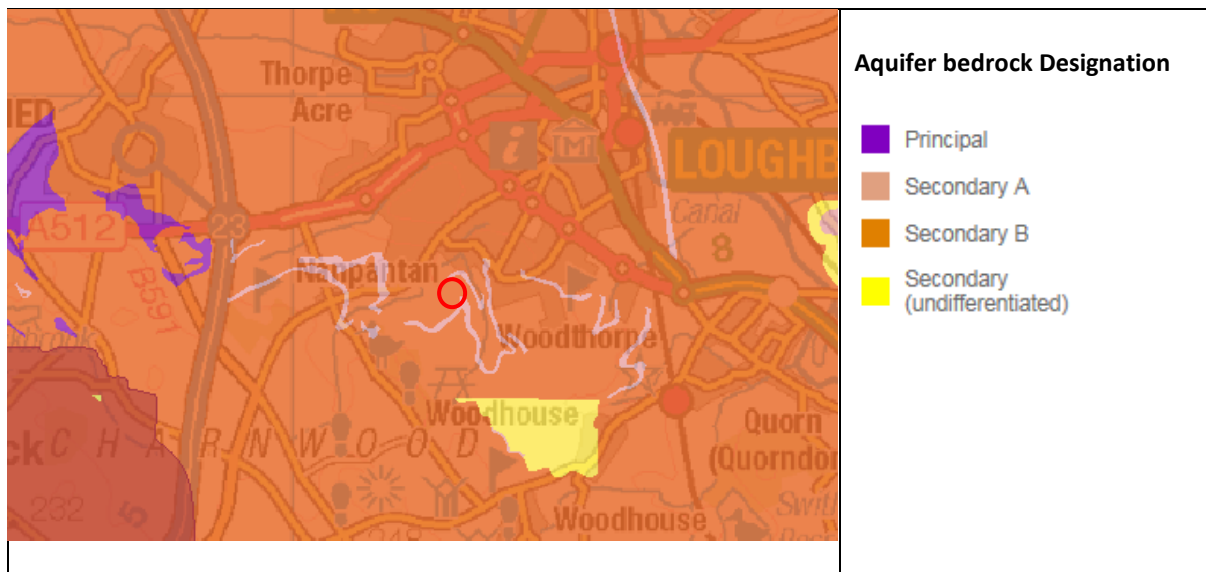


Figure 13. Bedrock aquifer designation

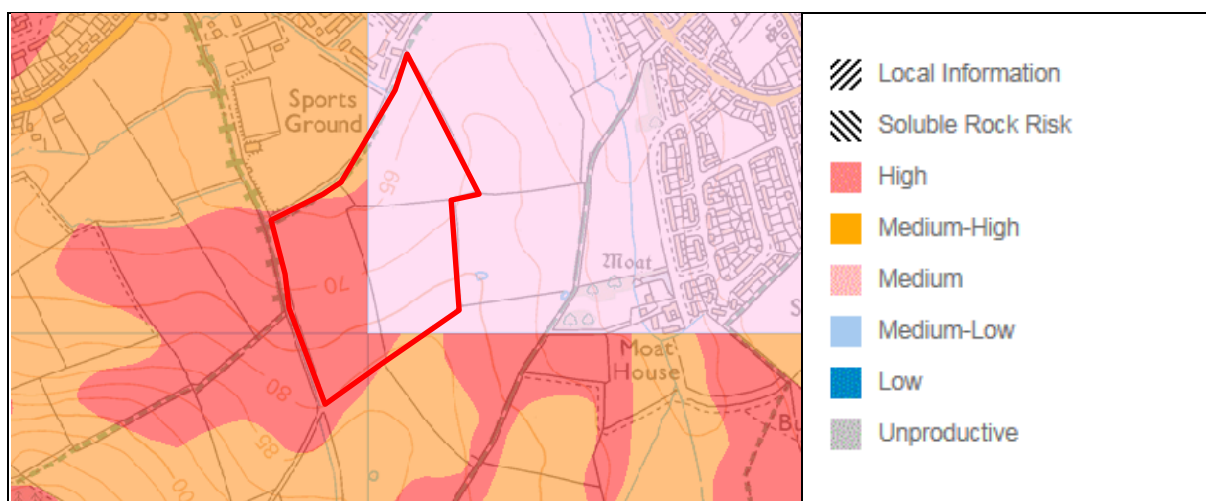


Figure 14. Groundwater vulnerability

Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have descriptions on them to explain the different aquifer and soil types. Areas shown as "major aquifers" have strategic significance for water resources, they often support large abstractions for the public water supply. Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.

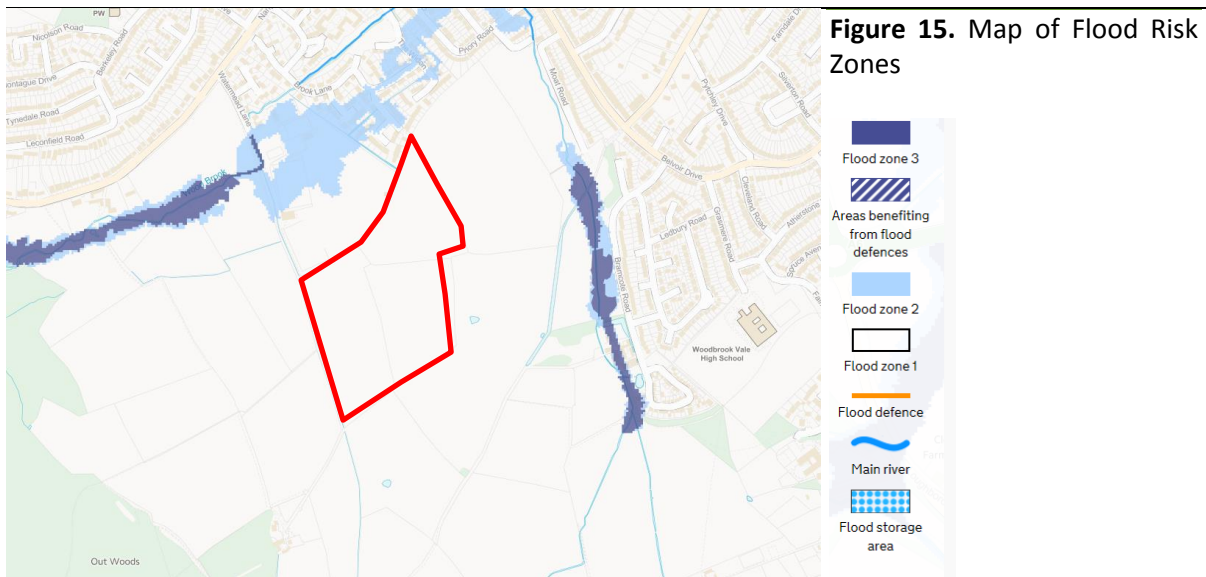
Major and minor aquifers may be important in contributing to the base-flow of streams and rivers. The maps show where groundwater is protected from above by rocks with a low permeability, such as glacial clay. They also show the characteristics of the soil above.

Superficial drift deposits which overlay the solid geological strata can sometimes be substantial in thickness. They are often variable in composition changing from highly permeable outwash gravels to low permeability clays over short distances both laterally and vertically. The presence of permeable drift deposits is recognised as Minor Aquifers except where these overlie a Major Aquifer and they then assume the status of a Major Aquifer.

The site is over a non aquifer associated with the superficial deposits and a Secondary B Aquifer associated with the bedrock. The site is classed partially as high vulnerability and partially as medium-high vulnerability in respect to groundwater pollution. The site is within a Surface Water Nitrate Vulnerable Zone but is not within a Drinking Water Safeguard Zone.

4.5.4 Flood risk

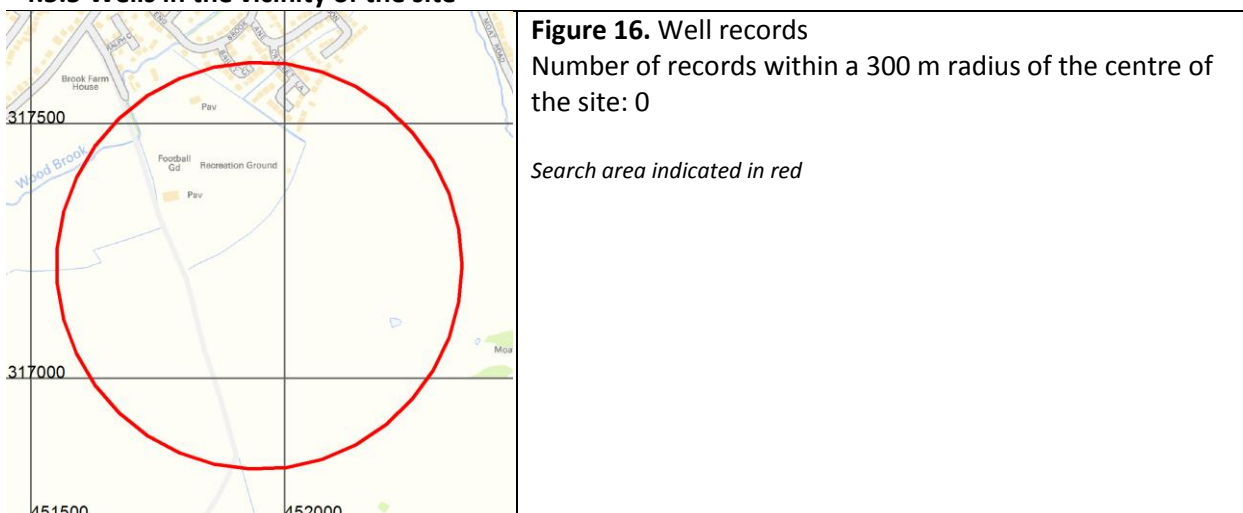
The site is within Flood Zone 1 land which is very low risk – less than 1 in 1000 in any given year (Figure 15). The site is not covered by flood warnings issued by the Environment Agency.



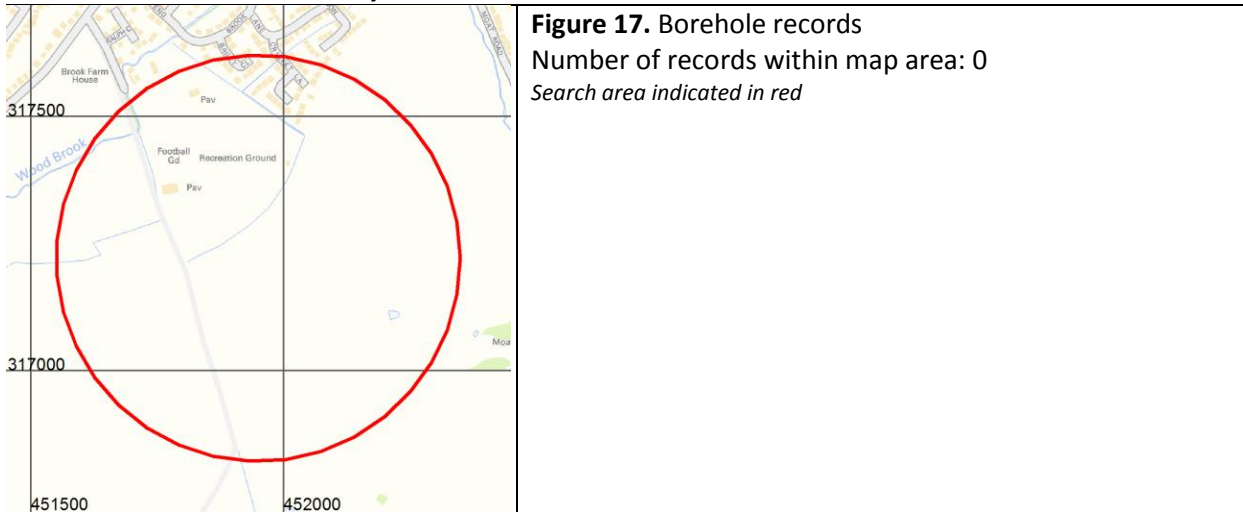
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If areas of impermeable surfaces such as buildings, roads etc. are constructed on a greenfield site, a surface water management system designed in accordance with the principles of Sustainable Urban Drainage Schemes (SUDS) will be required.

4.5.5 Wells in the vicinity of the site



4.5.6 Boreholes in the vicinity of the site

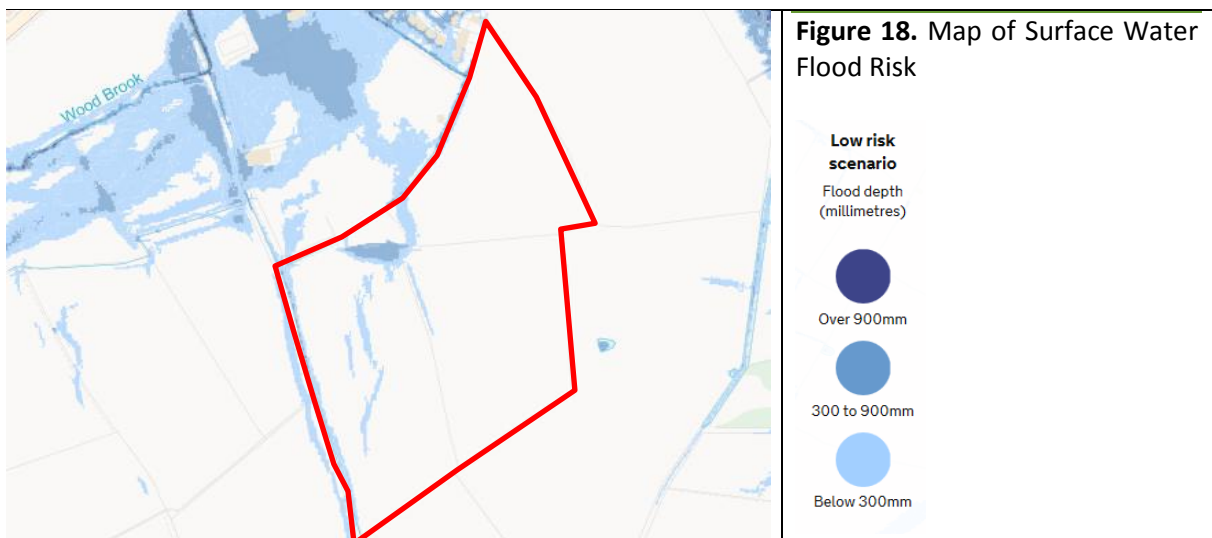


4.6 Meteorological data

The agro climatic index number for this site is 22E with a mean annual rainfall of 627 mm, the Standard Average Annual Rainfall (SAAR) for the site itself is 660 mm.

4.7 Surface water issues

The site generally has a very low risk of surface water flooding with the exception of the areas shown in Figure 18. There is a shallow thalweg running through the westerly section of the site where there is a low risk (1% chance of flooding occurring in a given year) of flooding to generally no more than 300 mm deep. This flows to an area near the centre of the northern boundary of the site where surface water may gather and pond to as deep as 900 mm. This area has the highest risk of flooding to a depth of up to 300 mm (a greater than 3.3% chance each year of flooding occurring). Poor surface water drainage associated with these soils is likely to lead to wet conditions under foot frequently through the winter and where depressions occur in the surface water may remain for some time. The areas with higher risk of surface water flooding may require enhanced drainage or localised land raising to make them suitable for burials.



5.0 Pollutant risk

Due to the approximately 60 per annum number of full burials at the site, the cumulative ammoniacal nitrogen concentrations are likely to be high with similar levels of total organic compounds (TOC).

Pathogens

There has been some evidence from recent studies of the occurrence of Enterococci and Clostridium bacteria found in drainage water of cemeteries. Enterococci are bacteria that are commonly found in the bowel of normal healthy individuals. They can cause a range of illnesses including urinary tract infections, bacteraemia (blood stream infections) and wound infections.

The two most common species of Enterococci are *E. faecalis* and *E. faecium*. During the mid-1980s, enterococci with resistance to glycopeptide antibiotics such as vancomycin and teicoplanin emerged, termed glycopeptide-resistant enterococci (GRE). Most GRE are *E. faecium*.

Due to the nature of the soil and geomorphology, there is unlikely to be much movement of pathogenic organisms, notably *Pseudomonas aeruginosa* and Faecal streptococci, other than where burials coincide with any sand lenses that connect to the adjacent watercourses. However pathogens tend to be short lived away from the host and if there is no immediate ground water risk or potable well supply, the risk may therefore be considered acceptably low. This site is underlain by a non-aquifer associated with the superficial deposits and a Secondary B Aquifer associated with the bedrock geology. This suggests limited risk to any underlying groundwater as the superficial deposits (where present) and the slowly permeable Tarpoley Siltstone provide good protection to the Principal Aquifer within the Sherwood Sandstone. Any sand or gravel lenses within burial depth in the Siltstone or superficial deposits are likely to be in hydraulic continuity with the water providing base flow to the adjacent streams however the trial pits did not encounter any such lenses thus the risk is considered low.

Post-burial accumulation of water around a coffin is likely to be an issue in these soils and to minimise the risks thereafter faced on re-opening a grave it is suggested that backfill over a new burial be compacted well to minimise infiltration through to the burial itself.

6.0 Depth of burial

Based on data from the British Geological Survey, the site is overlain by soils derived from clays and silts. Typically such soils are poorly drained and prone to structural damage if worked when wet. Digging is unlikely to be impacted by the presence of hard rock but running sands may prevent burials if perched water is encountered in any sandy lenses which may occur within burial depth, however none were found in the trial pits.

7.0 Archaeology

It is recommended that consultation with the county archaeological team be undertaken to ascertain any archaeological interest in the area.

8.0 Risk evaluation

Assessment of general hazards

The potential of a number of pollutant pathways and the degree of associated risk assessed numerically on a 0-10 score with 10 being the highest risk is shown in Table 4. From the resultant data, the final values are assessed against burial number and a determinant of risk calculated from EA flow charts and nomographs.

Table 4. Summary of pollution risk associated with the site

Risk	Assessment High, moderate, Low	Comment	Score
Burials per annum	Moderate	Expected to be around 60 per annum	
Drift / superficial data	Moderate	Partial cover of till	6-5
Drift thickness	High	Cover variable and thin	8-7
Proximity to water course	Very High	Wet ditch present along western and northern boundaries	10-9
Proximity to land drains	High	Land has previously been drained	8-7
Depth to Water Table	Very low	Water not likely to be present within Tarporley Siltstone which is around 40 m thick in this location.	2-1
Proximity to Wells or potable water source	Very Low	No wells within 500 m radius	2-1
Flow mechanism	Low	Generally Intergranular flow through clay and silt.	4-3
Aquifers	Moderate	Minor aquifer with moderate vulnerability	6-5
SPZ	Very Low	The site for development lies outside any SPZ	2-1
Met data	Moderate	Annual rainfall moderate	N/A
Proximity to housing	Low	Residential housing in close proximity of the site	N/A
SSSI	Low		N/A
Archaeology	Low	None observed but will require County Archaeologist assessment	N/A
		Total	48-39

Table 4 is assessed using the groundwater vulnerability-ranking criteria in Table 5. The total score comes to 48-39 and is considered as a moderate risk. These data are then assessed against the burial rate of 60 per annum on the groundwater risk nomograph p.37 of PP223. The final assessment of risk for this site according to the nomograph (Figure 19), would class it as being **high**.

Table 5. Groundwater ranking

Ranking	Very Low 2-1	Low 4-3	Moderate 6-5	High 8-7	Very High 10-9
Drift Type	Clay	Silt	Silty sand	Sand/gravel	Absent
Drift Thickness	>5 m	>3-5 m	3 m	0-3 m	Absent
Depth to water Table	>25 m	11 – 25 m	10 m	5 – 9 m	<5m
Flow mechanism	Intergranular				Fissured
Proximity to wells					Within 250 m from private potable supply
Aquifer type	Non Aquifer		Minor aquifer		Major aquifer
Abstractions and SPZs	Outside Zone 3	Within Zone 3	Close boundary to of Zone 2	Within Zone 2	Within Zone 1
Water courses and springs		>100 m	>50 <70 m	>30 <50 m	<30 m
Drains	>100 m	>40 <100 m	30 – 40 m	>10 <30 m	<10 m

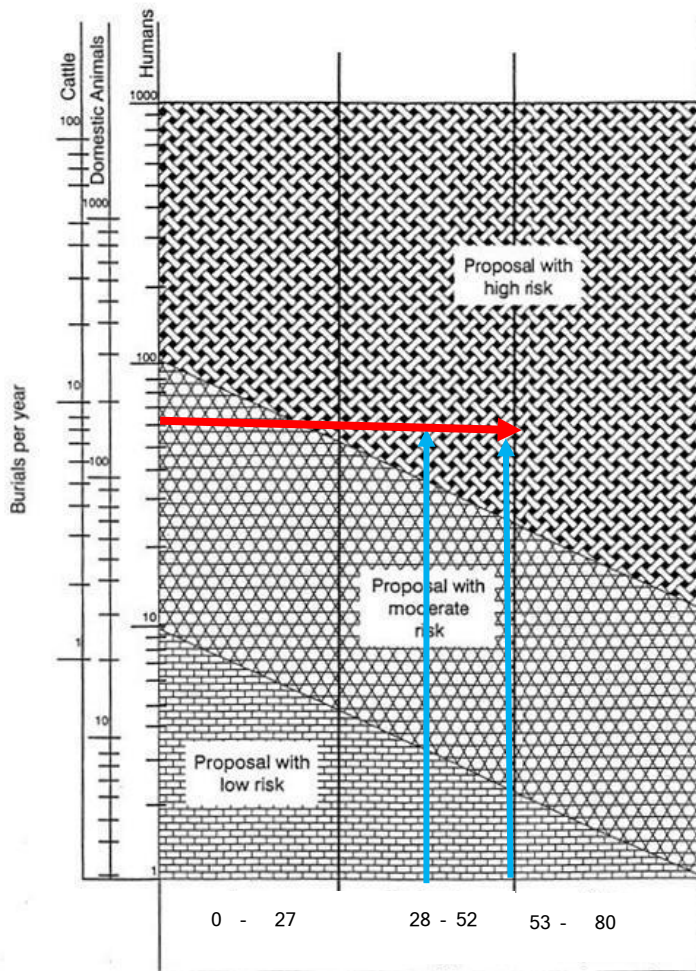


Figure 19. Groundwater risk nomograph

9.0 Conclusion

The site is considered to be **high risk** with the risk mainly attributed to the predicted burial numbers generally and the presence of wet ditches on the western and northern boundaries of the site. In the areas where glacial till overlies the siltstone, the risks are likely to be much lower as there is no significant perched water within the till based on the trial pits and water movement through the subsoil is likely to be very slow. The trial pits struck no permeable deposits or lenses within or within 1m of burial depth thus the risk to local surface waters is also likely to be quite low however for the key risks the risk to local surface water is likely to be greater than the risk to groundwater at this site.

As the soils are very poorly drained, water may gather around burials making re-opening potentially difficult. This can be mitigated by compacting backfill over recent burials firmly to reduce the risk of infiltration through the disturbed back-fill material.

The site has two wet ditches along the boundaries which would require a minimum 10m no burial zone and one ditch may class as a tertiary river, in which case it may require a 30 m no burial zone. The site has two large aqueducts and a high pressure gas main running through the centre of the site and it is likely that this will also require a 10 m no dig zone either side of the nearest service, thus much of the site could not be used for burials.

By way of grave-specific mitigation if needed, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Rozic et al 2009).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

10.0 Reporting details

Report Author: Mr Alex Vickers

Verification: Mr Justin Smith

Date: 22.3.18

Cemetery Development Services - Terms and Conditions

Cemetery Development Services (CDS)
Terms and Conditions for the Supply of Services

Interpretation

In these Conditions

AGREED FEE means the charges agreed between CDS and the Client in relation to the Specified Service

CLIENT means the person named on the Specification Sheet for whom CDS has agreed to provide the Specified Service in accordance with these Conditions

CONTRACT means the contract for the provision of the Specified Service

DOCUMENT includes, in addition to a document in writing, any map, plan, graph, drawing or photograph, any film, negative, tape or other device embodying visual images and any disc, tape or other device embodying any other data

INPUT MATERIAL means any Documents or other materials, and any data or other information provided by the Client relating to the Specified Service

OUTPUT MATERIAL means any Documents or other materials, and any data or other information provided by CDS relating to the Specified Service

SPECIFICATION SHEET means the sheet to which these Conditions are appended

SPECIFIED SERVICE means the service relating to geophysical surveys of land to be provided by CDS for the Client and referred to in the Specification Sheet

CDS means CDS (registered in England under number 05089827) or its subsidiary as stated on the Specification Sheet

The headings in these Conditions are for convenience only and shall not affect their interpretation.

Supply of the Specified Service

CDS shall provide the Specified Service to the Client subject to these Conditions. Any changes or additions to the Specified Service or these Conditions must be agreed in writing by CDS and the Client.

The Client shall allow CDS adequate access to its property at reasonable times and for so long as is necessary to enable CDS to provide the Specified Service in accordance with the Contract.

The Client shall at its own expense supply CDS with all necessary Documents or other materials, and all necessary data or other information relating to the Specified Service, within sufficient time to enable CDS to provide the Specified Service in accordance with the Contract. The Client shall ensure the accuracy of all Input Material.

CDS shall have no liability for any loss or damage, however caused, to the Input Material. All Output Material shall be at the sole risk of the Client from the time of delivery to or to the order of the Client.

The Specified Service shall be provided in accordance with the Specification Sheet subject to these Conditions.

Further details about the Specified Service, and advice or recommendations about its provision or utilisation, which are not given in CDS's brochure or other promotional literature, may be made available on written request.

CDS may correct any typographical or other errors or omissions in any brochure, promotional literature, quotation or other document relating to the provision of the Specified Service without any liability to the Client.

CDS may at any time without notifying the Client make any changes to the Specified Service which are necessary to comply with any applicable safety or other statutory requirements, or which do not materially affect the nature or quality of the Specified Service.

Charges

Subject to any special terms agreed, the Client shall pay the Agreed Fee and any additional sums which are agreed between CDS and the Client for the provision of the Specified Service or which, in CDS's sole discretion, are reasonably incurred as a result of the Client's instructions or lack of instructions, the inaccuracy of any Input Material or any other cause attributable to the Client.

All charges quoted to the Client for the provision of the Specified Service are exclusive of any Value Added Tax, for which the Client shall be additionally liable at the applicable rate from time to time.

CDS shall be entitled to invoice the Client on completion of the Specified Service.

The Agreed Fee and any additional sums payable shall be paid by the Client (together with any applicable Value Added Tax, and without any set-off or other deduction) within 30 days of the date of CDS's invoice.

If payment is not made on the due date, CDS shall be entitled, without limiting any other rights it may have, to charge interest on the outstanding amount (both before and after any judgment) at the rate of 4 % above the base rate from time to time of Barclays Bank plc from the due date until the outstanding amount is paid in full.

Rights in Input Material and Output Material

The property and any copyright or other intellectual property rights in:

any Input Material shall belong to the Client

any Output Material and any amendments or variations to the Input Material made by CDS shall, unless otherwise agreed in writing between the Client and CDS, belong to CDS, subject only to the right of the Client to use the Output Material for the purposes of utilising the Specified Service.

Any Input Material or other information provided by the Client which is so designated by the Client and any Output Material shall be kept confidential by CDS, and all Output Material or other information provided by CDS which is so designated by CDS shall be kept confidential by the Client; but the foregoing shall not apply to any Documents or other materials, data or other information which are public knowledge at the time when they are so provided by either party, and shall cease to apply if at any future time they become public knowledge through no fault of the other party.

The Client warrants that any Input Material and its use by CDS for the purpose of providing the Specified Service will not infringe the copyright or other rights of any third party, and the Client shall indemnify CDS against any loss, damages, costs, expenses or other claims arising from any such infringement.

Warranties and Liability

CDS warrants to the Client that the Specified Service will be provided using reasonable care and skill and, as far as reasonably possible, in accordance with the Specification and at the intervals and within the times referred to in the Specification Sheet. Where CDS supplies in connection with the provision of the Specified Service any goods (including Output Material) supplied by a third party, CDS does not give any warranty, guarantee or other term as to their quality, fitness for purpose or

otherwise, but shall, where possible, assign to the Client the benefit of any warranty, guarantee or indemnity given by the person supplying the goods to CDS.

CDS shall have no liability to the Client for any loss, damage, costs, expenses or other claims for compensation arising from any Input Material or instructions supplied by the Client which are incomplete, incorrect, inaccurate, illegible, out of sequence or in the wrong form, or arising from their late arrival or non-arrival, or any other fault of the Client.

Except in respect of death or personal injury caused by CDS's negligence, or as expressly provided in these Conditions, CDS shall not be liable to the Client by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, for any loss of profit or any indirect, special or consequential loss, damage, costs, expenses or other claims (whether caused by the negligence of CDS, its servants or agents or otherwise) which arise out of or in connection with the provision of the Specified Service or their use by the Client, and the entire liability of CDS under or in connection with the Contract shall not exceed the amount of CDS's charges for the provision of the Specified Service, except as expressly provided in these Conditions.

CDS shall not be liable to the Client or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of CDS's obligations in relation to the Specified Service, if the delay or failure was due to any cause beyond CDS's reasonable control.

Termination

Either party may (without limiting any other remedy) at any time terminate the Contract by giving written notice to the other if the other commits any breach of these Conditions and (if capable of remedy) fails to remedy the breach within 30 days after being required by written notice to do so.

Insolvency of Client

This clause applies if:

the Client makes any voluntary arrangement with its creditors or (being an individual or firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or an encumbrancer takes possession, or a receiver is appointed, of any of the property or assets of the Client; or

the Client ceases, or threatens to cease, to carry on business; or

CDS reasonably apprehends that any of the events mentioned above is about to occur in relation to the Client and notifies the Client accordingly.

If this clause applies then, without prejudice to any other right or remedy available to CDS, CDS shall be entitled to cancel the Contract or suspend any further provision of services under the Contract without any liability to the Client, and if the Services have been provided but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

General

These Conditions (together with the terms, if any, set out in the Specification Sheet) constitute the entire agreement between the parties, supersede any previous agreement or understanding and may not be varied except in writing between the parties. All other terms and conditions, express or implied by statute or otherwise, are excluded to the fullest extent permitted by law.

Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to the other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving the notice.

No failure or delay by either party in exercising any of its rights under the Contract shall be deemed to be a waiver of that right, and no waiver by either party of any breach of the Contract by the other shall be considered as a waiver of any subsequent breach of the same or any other provision.

If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part, the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected.

Any dispute arising under or in connection with these Conditions or the provision of the Specified Service shall be referred to arbitration by a single arbitrator appointed by agreement or (in default) nominated on the application of either party by the President for the time being of Institute of Arbitrators.

English law shall apply to the Contract, and the parties agree to submit to the non-exclusive jurisdiction of the English courts.

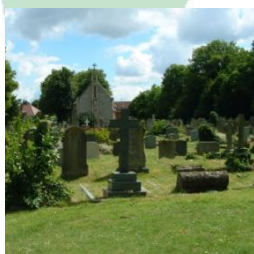


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A report to Charnwood Borough Council on the suitability of proposed new cemetery at Shelthorpe Golf Course as part of an Environment Agency T2 Audit

March 2018
D1.0



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Charnwood Borough Council

**An Environment Agency T2 Assessment for a proposed new
cemetery at Shelthorpe Golf Course, Loughborough,
Leicestershire, LE11 2JS. Grid Ref: 453523; 317470**

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1.0 Executive summary

The site is considered to be **moderate to high risk in the south and eastern sections** of the site and **moderate risk in the northern section** with the risk mainly attributed to the predicted burial numbers generally, the presence of a culverted watercourse through the centre of the site and the likely presence of groundwater within 5m of the surface within the head deposits in the southern and eastern sections. In the areas where glacial till overlies the siltstone, the risks are likely to be much lower as there is no significant perched water within the till based on the trial pits and water movement through the subsoil is likely to be very slow. Based on this, if this site is to be considered for burials it is recommended that only the northern section of the site is suitable as the remaining section offers a possible risk to groundwater and adjacent surface waters and would also be practically difficult to bury into due to the presence of hard rock at, or close to, burial depth and the presence of (slowly) running sands.

Where burials take place into the glacial till soils, water may gather around burials making re-opening potentially difficult. This can be mitigated by compacting backfill over recent burials firmly to reduce the risk of infiltration through the disturbed back-fill material.

By way of grave-specific mitigation if needed, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Rozic et al 2009).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

2.0 Introduction

Cemetery Development Services Ltd. has been asked to carry out a Tier 2 site screening assessment for a new cemetery located on the current site of Shelthorpe Golf Course, Loughborough. This site will be considered on the basis of groundwater risk and as part of this, a T2 study based on the criteria required by the Environment Agency has been carried out. This is because sites that do not meet the requirements of the Environment Agency should be ruled out at an early stage since the Agency as Primary Consultees are able to prevent any site being developed should the site be deemed to represent too great a risk in respect to water pollution.

The proposed development area has been assessed on a 1 km area of influence: grid reference 453523; 317470, nearest postcode: LE11 2JS. The site is calculated as being approximately 9.4 hectares (23.2 acres).

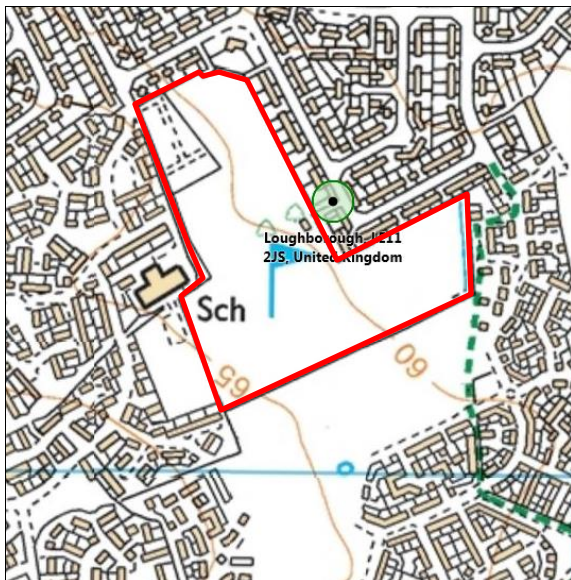


Figure 1a. Map of the site.



Figure 1b. Aerial photograph of the site, (site boundary marked in red).

This report will review the site proposed for use as a burial facility in accordance with the requirements of the Environment Agency's Tier 2 survey. For the purposes of this study the anticipated burial rate for this site is estimated as being in approximately 60 per year.

3.0 Background

New cemetery developments or extensions to existing cemeteries can be very emotive. However, these concerns are often disproportionate to the actual environmental risk.

Whilst the Local Planning Authority is the principal controlling body in determining approval for new sites or site extensions, significant information is required to ensure that the environmental risks are examined and that the Environment Agency's views are considered. Therefore, measures to prevent pollution must be undertaken and reported. Any regulatory decision-making is based on sound scientific knowledge. On this basis, a review of potential pollution from cemeteries was undertaken by the Environment Agency in collaboration with the British Geological Survey.

The aim was to review old and new cemeteries and measure the effects of contamination from viruses, bacteria and other microbiological pathogens and to assess the potential of chemical

contaminants affecting groundwater supplies from decomposition processes. Preliminary results showed that the operating cemetery examined in the study (25 years old) did show some evidence of bacterial contaminants in groundwater derived from corpses. However, no viruses were detected and the overall contaminant loading was found to be low. The studies found that degradation and attenuation was occurring indicating that potential risks were low. Whilst the outcome of this research found contaminant risk to be low, it should be reviewed in the context that natural attenuation processes may have been optimum at these sites. Therefore, to optimise natural attenuation and reduce the risk of possible groundwater contamination, a series of guidelines have been drawn up that are directly applicable to cemeteries.

Failure to manage and reduce any environmental risk to a minimum may result in action being taken under the Groundwater Regulations 1998 and the Anti-pollution Works Notice Regulations 1999.

3.1 Groundwater protection policy

Initial risk screening starts with the tools contained in the Agency's publication, Policy and Practice for the Protection of Groundwater in cemeteries and in the latest GP3 guidance notes.

Tools include Groundwater Vulnerability and Source Protection Zone (SPZ's) maps. These maps highlight where there are likely to be particular risks posed to groundwater from surface activities. Groundwater Vulnerability (GWV) Maps show the damage from pollution to groundwater and the relative importance of the aquifer to water supplies. Risk assessment is made with reference to soil leaching potential and the levels of water tables above major and minor aquifers.

Source Protection Zones are delineated areas around groundwater abstractions used for public consumption and defined by travel, time of biological or chemical contaminants.

The zones are classified in three groups:

- Zone 1 High risk
- Zone 2 Intermediate to high risk
- Zone 3 Intermediate risk

The Environment Agency would be opposed to large graveyards within Zone 1 of an SPZ.

Whilst groundwater is a major part of policy concerns, other water point sources are also considered as requiring an evaluation of risk. These sources include surface water in the form of ditches, spring lines and surface run-off.

The factors influencing the risk of groundwater vulnerability include:

- Soil nature and type
 - Physical, mechanical and chemical properties
- Geomorphology
 - Depth to water table and or height above aquifers
 - Groundwater flow mechanisms
 - Aquifer type
- Abstractions
- SPZ's
- Proximity to water courses, ditches and drains

Therefore, prior to any consent being given by the Environment Agency, an assessment of risk should be undertaken. The degree of assessment is measured through a series of stages namely:

- Hazard identification
- Identification of consequences
- Magnitude of consequences
- Probability of consequences
- Significance of risk

3.2 Tiered risk assessment

There are 3 Tiers of Risk assessment. The associated size and position of the site will in-part determine which Tier is appropriate.

Tier 1

Desktop study of all appropriate documentation including GWV and SPZ maps, topographical, hydrological and geomorphologic maps. After adopting a systematic approach to the assessment of risk, a weighting can be given which is assessed as low, medium or high. If the overall risk is low, the proposal may be accepted by the Agency without further detailed assessment. However, the following practical guidelines would be recommended as appropriate controls to minimize pollution risk:

- 250 m distance from groundwater supply
- 30 m minimum distance from groundwater or spring
- 10 m distance from field drains
- No burials in standing water

For the purposes of this screening study, a T1 assessment is being made of each site. This will be augmented by on-site investigation at the preferred two sites following the conclusion of this study.

Tier 2

Should the risks not be clearly defined by the desktop study then further “ground truthing” might need to be undertaken. This may include field studies and monitoring of groundwater within the proposed area, comprising of the installation of up to three boreholes.

In this case, once the final preferred sites are identified the Environment Agency will be contacted with the site details and asked for a view as to whether boreholes or trial pits will be needed.

Tier 3

If the risk is considered high, i.e. the number of yearly burials exceeds 1,000; a full audit will be required. This would include, but not be limited to, a detailed site investigation including boreholes and monthly monitoring.

3.3 Water Resources Act 1991 – S161A Anti-Pollution Works Notices

The EA has powers under s161A of the Water Resources Act 1991 and the Anti-Pollution Works Regulations 1999, allowing Works Notices to be served to prevent or remedy pollution of controlled waters and under the Groundwater Regulations 1998 to prevent pollution of groundwater.

3.4 Groundwater Regulations 1998

Burial of human corpses can result in discharge of listed substances to groundwater. They are, therefore, covered by the requirements of the Groundwater Regulations. Individual burials spaced out over time will only release trivial amounts of listed substances.

These are considered to fall under the *de minimis exemption*. Large numbers of burials (>100 per annum) in a short time or the cumulative effects of many individual burials may cause groundwater pollution. In this case, the EA will, where appropriate, use their powers under the Groundwater Regulations to control or prohibit the burial. This has specific relevance to policy P12-2 but will apply more generally.

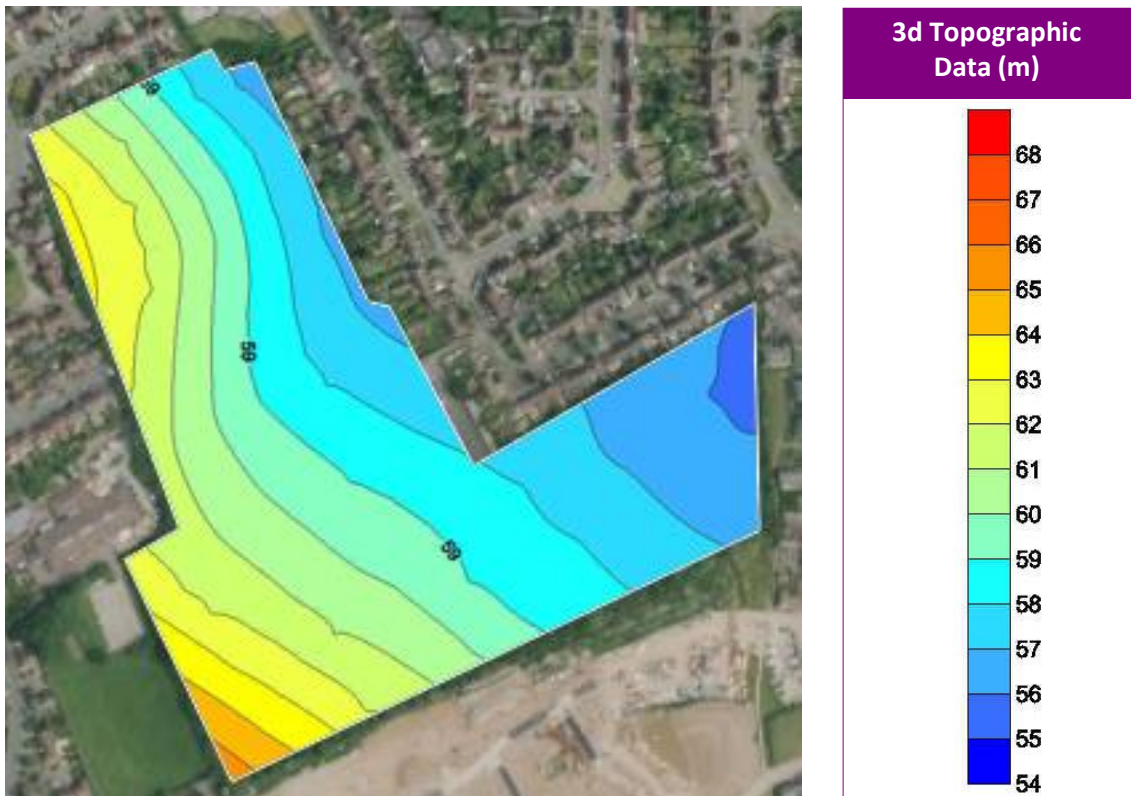
4.0 Site investigation

British Geological Survey and Cranfield University data was used in this report.

4.1 Topography and surface drainage

The site is currently an 18-hole pitch and putt golf course. It is a mix of grassland and woodland and is surrounded to the north, west and east by established residential developments, to the south west by a school and school playing field and to the south by a new housing development. According to the OS maps there is a wet ditch running along the south eastern boundary and there is a small pond to the south but this appears to have been filled during the recent building works in this area.

The site falls from the south west to the north east at an average grade of around 2.8%.



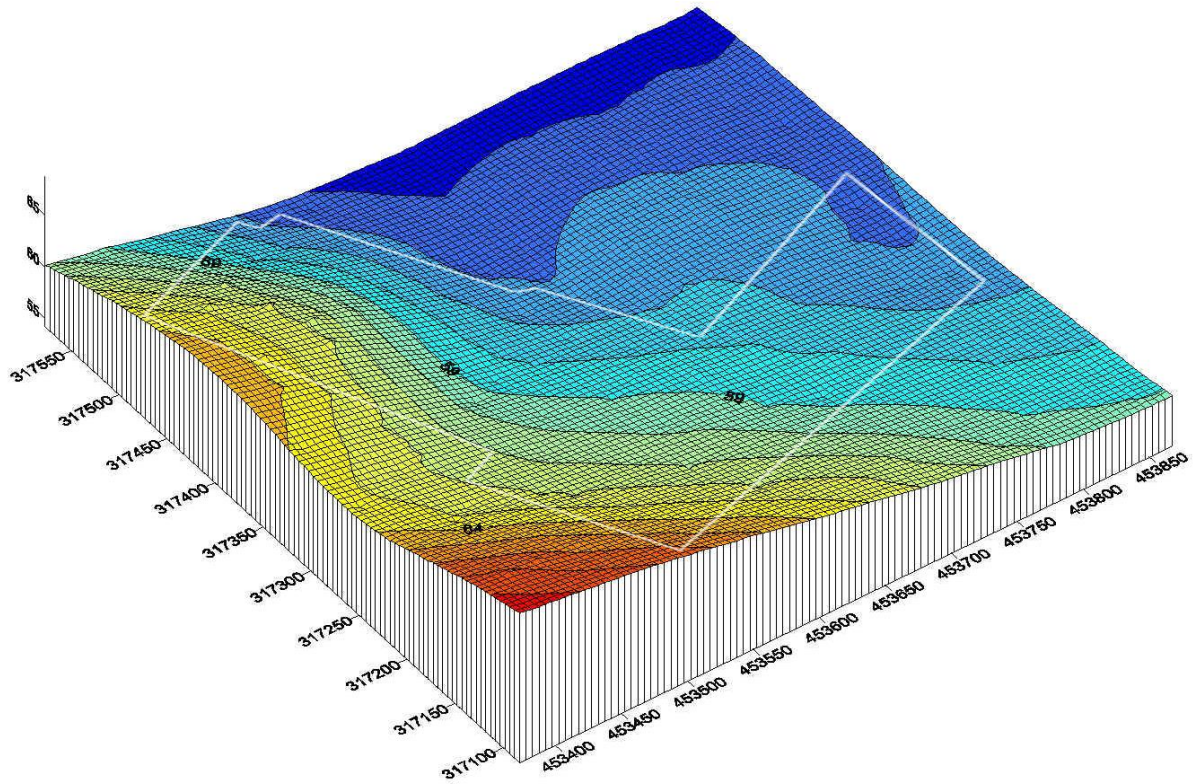


Figure 2. Topography of the site.

4.2 Soil type

The Soil Survey of England and Wales map the site as containing soils belonging to the Whimble 3 Association as described in Table 1 and Figure 3.

Figure 3. Soil Associations in the vicinity of the site.



Table 1. Soil Associations in the vicinity of the site.

Soil Association	Sub Groups	Description
572f Whimble 3	Whimble Worcester Brockhurst	Reddish fine loamy or fine silty over clayey soils with slowly permeable subsoils and slight seasonal waterlogging. Some similar clayey soils on brows. Slowly permeable seasonally waterlogged fine loamy and fine silty over clayey soils on lower slopes.

The soils on site belong to the Whimble 3 Association (572f). These soils tend to be silty or fine loamy in characteristics but with clay dominated subsoils. Often these soils have poor surface water drainage in winter and especially when worked or trafficked as silty soils are very prone to mechanical damage. Effective compaction management can significantly improve surface water drainage rates in amenity grassland settings.

This type of soil is generally suitable for cemeteries but may have some local issues with seepage from more permeable lenses within the subsoil which could flood graves if significant. This can only be confirmed by digging trial pits. Surface water drainage issues can be significant in very wet periods which may make accessing graves difficult at times but this can be improved with appropriate land drainage and good design.

4.2.1 Trial pits

Site investigations were undertaken on 27th February 2018 with 3 trial pits dug to approximately 3.5 metres depth (Figure 5). Figure 4 shows the profiles of the pits excavated.

Figure 4. Trial pit soil profiles





Pit 3 profile.



Pit 4 profile.



Pit 5 profile.



Figure 5. Trial pit locations.

Due to the size of the excavator available it was not possible to dig below 2.2m thus it is not possible to be conclusive regarding soil conditions in the full 1m below normal burial depth as this would have required a pit to be excavated to a depth of at least 2.8m. The soils reflect the variation in parent material found over the site.

Pits 1 and 2 are directly into glacial till over the Tarporley Siltstone formation and are clay-dominated in both the topsoil and subsoil. Both these pits were dry to depth though Pit 2 did show some very minor seepage at 1.1m from a very thin sandy layer. This seepage was not enough to cause any practical issues and is unlikely to be anything other than some perched localised water held in a coarser, hydraulically isolated layer in the subsoil.

Pits 3 and 4 were located in area where there was some superficial head deposits running through the site. The produced a sand-dominated topsoil and upper 1.6 to 1.8m depth of subsoil. In Pit 3 the pit was stopped at 1.6m as a layer of very hard sandstone was struck. It was not possible to dig through this layer with the machine available. There was slow seepage from a 20 cm layer of sand immediately over the hard sandstone, probably from water perched within the sand over the hard sandstone. Flow rates were slow and flow occurred as slumping rather than running sand. It is possible that within this area if graves are left for an extended period that the sides would collapse. More importantly, however, the presence on the

indurated sandstone in this location makes digging graves difficult from a practical point of view. In Pit 4 there was no layer of hard sandstone and the sandier head material occurred directly over the underlying Tarporley Sandstone Formation at a depth of 1.8m. Water seeped into the pit from multiple points and from all sides from below 1.3m. Though flow rates were not rapid, the mix of slumping sand and water was sufficient to flood the pit at the base when left for 10 minutes. The water was flowing in from a mix of thin saturated sandier layers perched over slightly finer sandy clay layers at around 1.3m and from the sandy clay itself in the 20 – 30 cm over the interface with the Tarporley Siltstone from more significant perched water. It is unlikely that such water is a major groundwater resource but it is likely to be connected to local surface waters that run through and around the site and as such could be a conduit for pollution from burials into the local surface waters. As such there is a potential risk from burials within this part of the site.

The final pit was excavated into an area where the head deposits were thinning, thus the weathered Tarporley Siltstone was struck at a depth of 0.8m. In this case there was some limited seepage into the pit at this interface, with additional seepage from a layer of slightly coarser clayey sand at 1.7m but also directly into the base of the pit from the weathered Tarporley Siltstone suggesting that in this location at least, there was a range of perched groundwater able to flow into any pit excavated. Seepage rates in this location were slow which is typical from subsoils with very fine pores and unlikely to flood a grave unless the grave was excavated several days in advance and left. It is possible that the water in the sandier layers in this pit is in connection with the ditch that runs along the western boundary of the site in this location.

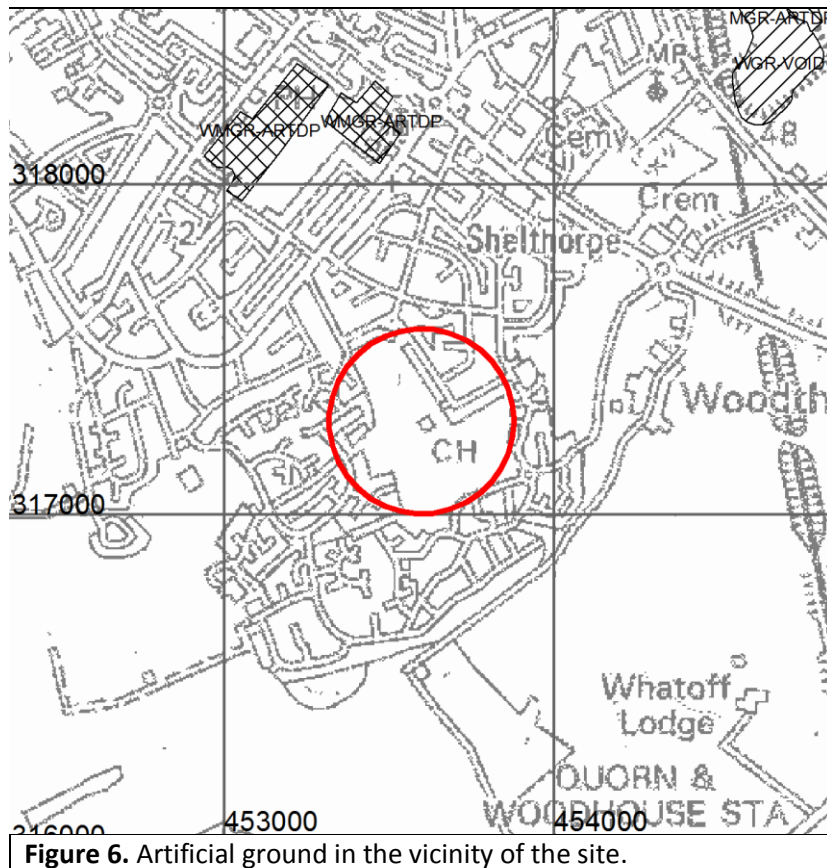
Based on the trial pit digs and bearing in mind the restricted depth of excavation possible, the northern third of the site which is covered in glacial till over the Tarporley Siltstone is more suited to burials than the southern third where the head deposits are thicker.

4.3 Geology

The following headings cover the aspects of geology of the immediate area of the proposed development.

4.3.1 Artificial ground

This is ground at or near the surface that has been modified by man. It includes ground that has been deposited (Made Ground), landscaped, disturbed, excavated (Worked Ground) or some combination of these (Figure 6). No Artificial ground is mapped within the site area; however, the site currently encompasses a golf course and allotment gardens so some degree of landscaping is to be expected. Historic OS maps dated 1884 to 1938 show no significant previous development of the site.



Key to Artificial ground:

Map colour	Computer Code	Name of geological unit	Composition
	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

4.3.2 Superficial deposits

These are relatively young geological deposits formerly known as ‘Drift’, which lie on the bedrock in many areas. They include deposits such as unconsolidated sands and gravels formed by rivers and clayey tills formed by glacial action. They may be overlain by landslide deposits, by artificial deposits or both (Figure 7).

The north-western corner of the site is underlain by the Thrusington Member of the Wolston Formation of Pleistocene age. This glacial till is distinctively red-brown in colour and composed of clay, stones and sand. The Thrusington Member is typically 1 to 7 m thick. This unit may be susceptible to shrink-swell behaviour.

Head is present adjacent to and probably overlying the glacial till, following a small valley running south-west to north-east across the site. Head is a solifluction deposit of Quaternary age composed of poorly sorted sand, gravel, silt and clay. The Head is likely to be 1 to 3 m thick within the site area.

The south-west corner of the site contains Glaciofluvial Deposits of Mid Pleistocene age. These deposits consist of sand and gravel and are likely to be 1 to 2 m thick in the site area.

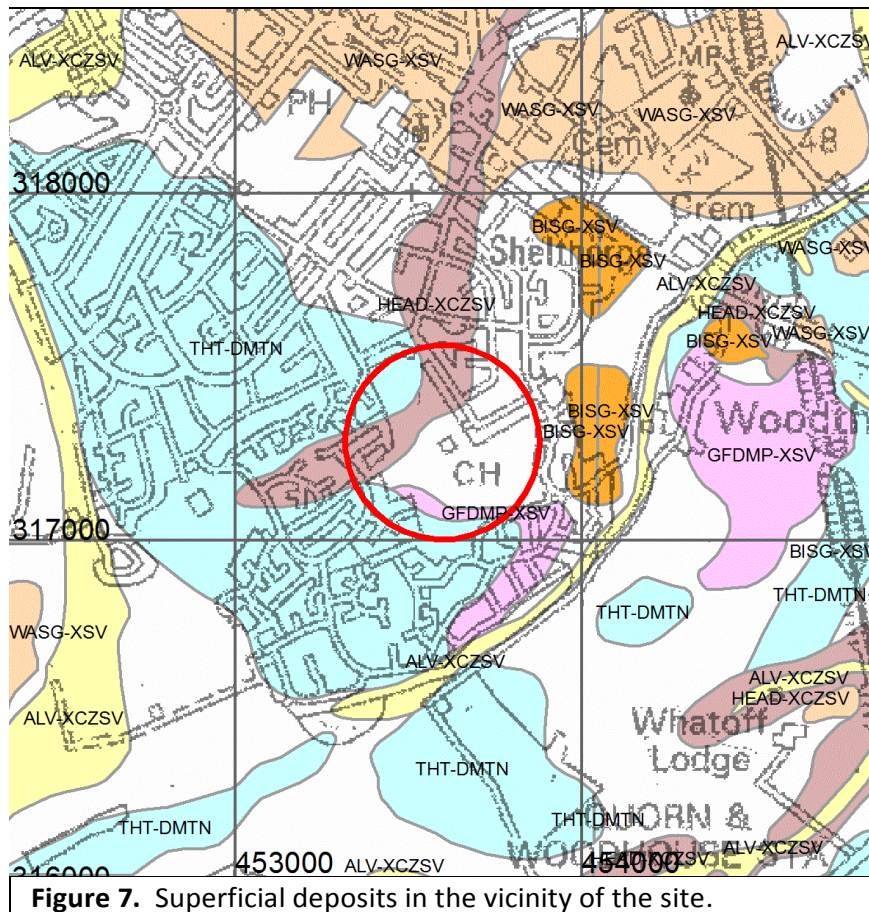








Figure 7. Superficial deposits in the vicinity of the site.

Search area indicated in red

Key to Superficial deposits:

Map colour	Computer Code	Name of geological unit	Composition
	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
	WASG-XSV	WANLIP MEMBER	SAND AND GRAVEL
	BISG-XSV	BIRSTALL MEMBER	SAND AND GRAVEL
	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL
	THT-DMTN	THRUSINGTON MEMBER	DIAMICTON

4.3.3 Rockhead depth

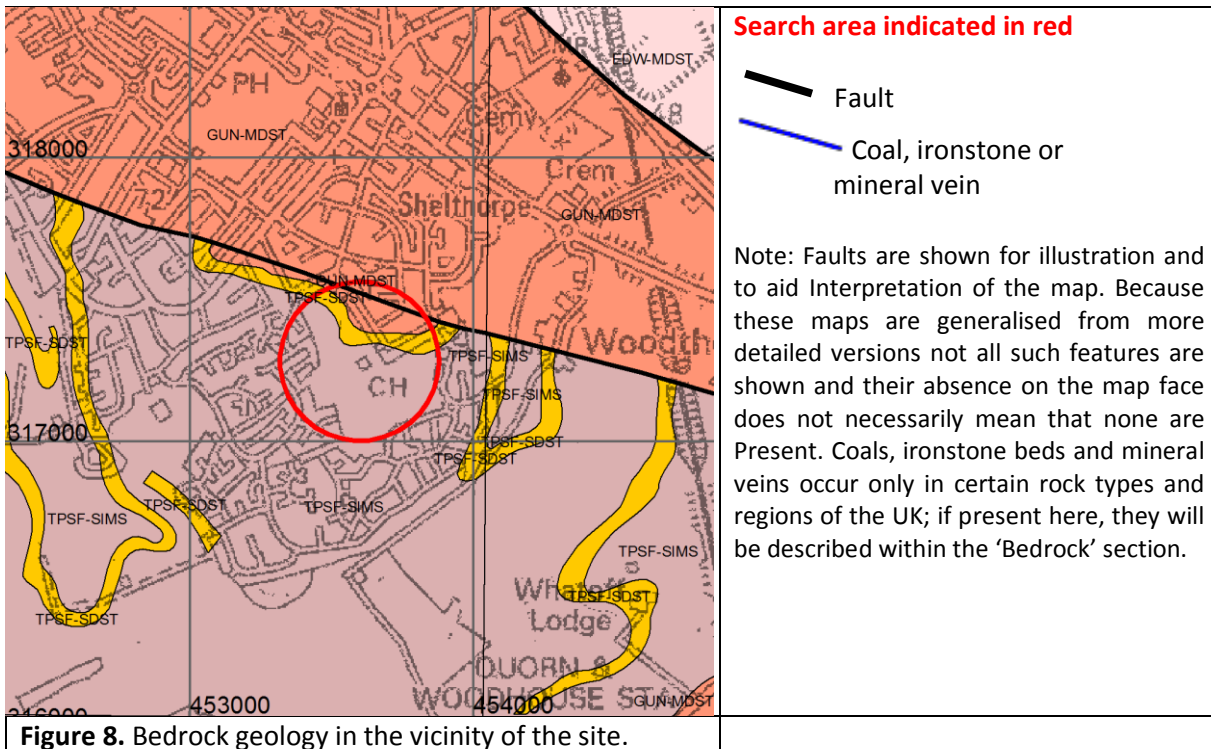
Bedrock is mapped at outcrop in most of the southern and eastern half of the site and therefore in this area, rockhead is expected to be at or near the surface. Beneath the mapped superficial deposits, the depth to rockhead is not known with any degree of certainty, but it is likely to be in the range of 1 to 5 m.

4.3.4 Bedrock geology

The site is underlain by the Tarpорley Siltstone Formation of Triassic age. This formation is composed of red-brown and green-grey siltstones and mudstones with paler grey-brown sandstones. A distinct unit of sandstone mapped within the Tarpорley Siltstone Formation crosses the northern and eastern

parts of the site, and is likely to be approximately 2 m thick. Overall, the Tarporley Siltstone Formation is likely to be up to 50 m thick in this area.

The Bedrock geological map, shown below, suggests the presence of the Gunthorpe Member of the Sidmouth Mudstone Formation at the northern edge of the site but this is an error and in fact the Tarporley Siltstone Formation continues up to the fault mapped immediately north of the site.



Search area indicated in red

Key to Bedrock geology:

Map colour	Computer Code	Name of geological unit	Rock type
	EDW-MDST	EDWALTON MEMBER	MUDSTONE
	GUN-MDST	GUNTHORPE MEMBER	MUDSTONE
	TPSF-SDST	TARPORLEY SILTSTONE FORMATION	SANDSTONE
	TPSF-SIMS	TARPORLEY SILTSTONE FORMATION	SILTSTONE, MUDSTONE AND SANDSTONE

The west-east trending Sibley Fault is mapped along the northern boundary of the site therefore it is possible that smaller unmapped faults might occur within the site area. It is important to understand the nature of geological faults, and the uncertainties which attend their mapped position at the surface. Faults are planes of movement along which adjacent blocks of rock strata have moved relative to each other. They commonly consist of zones, perhaps up to several tens of metres wide, containing several to many fractures. The portrayal of such faults as a single line on the geological map is therefore a generalisation. Geological faults in this area are of ancient origin, are today mainly inactive, and are thought to present no threat to property.

4.3.5 Schematic geological cross-section

This sketch (Figure 9) represents an interpretation of the geometrical relationships of the main rock units described in the text. It is not to scale. The blue line indicates 'rockhead'; that is the base of superficial deposits. This is the 'geological rockhead', as distinct from the 'engineering rockhead', which is the base of 'engineering soil' (in the sense of BS5930:1999).

Not to scale

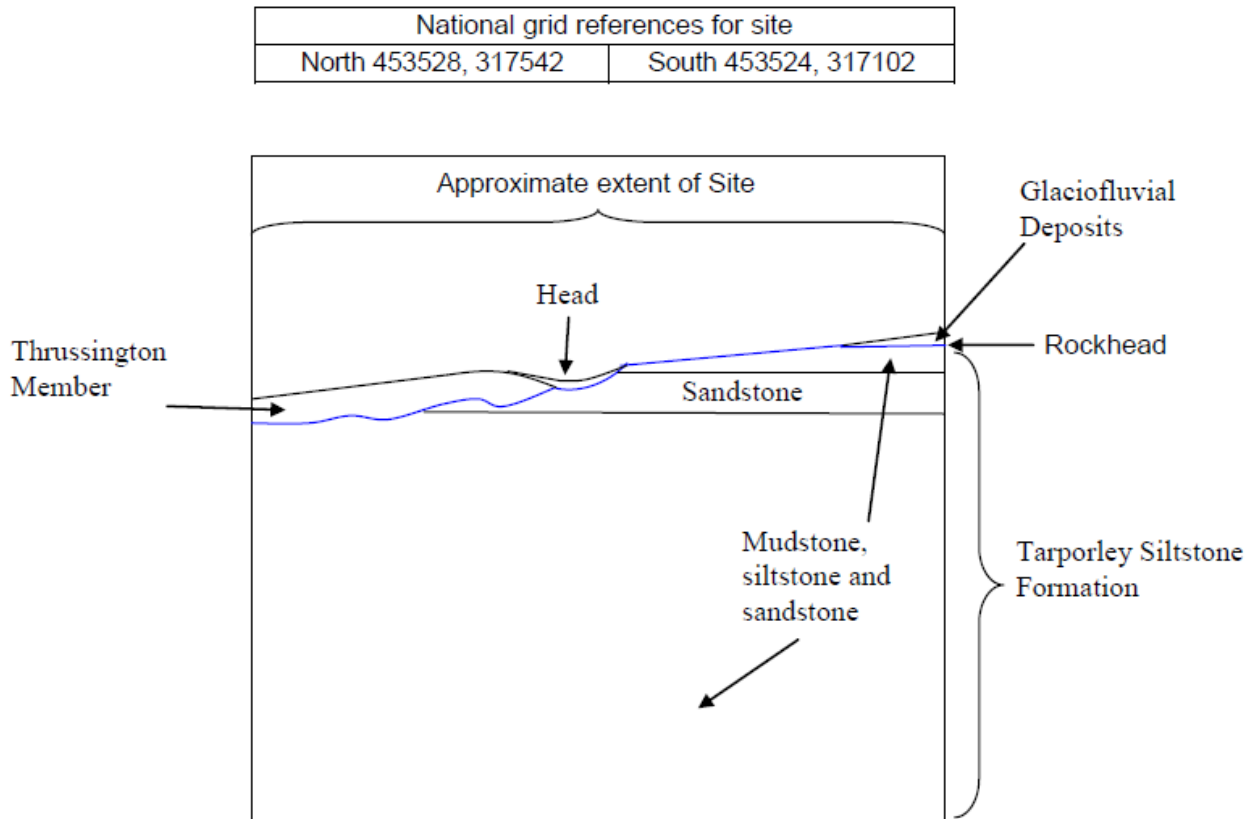
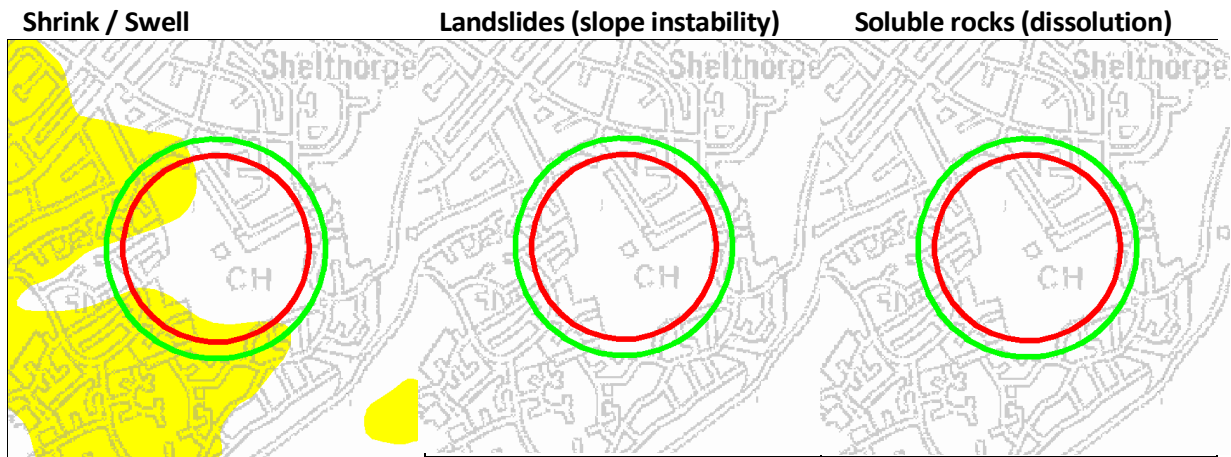


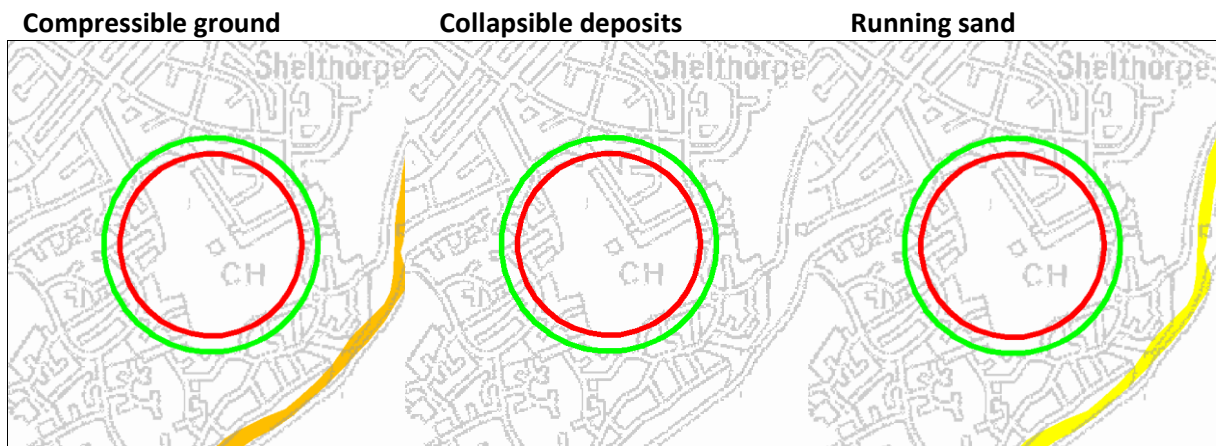
Figure 9. A schematic representation of the underlying geology.

4.4 Additional geological considerations

Figure 10. A summary of the geological hazards associated with the site.



The hazard levels are described as A (least) to E (greatest), or as 'No Hazard'. Levels A and B are not considered significant and are not shown on the maps.



The geological hazards found on the site are explained in Table 2.

Table 2. Geohazard summary

Geological hazard	May be significant within site area	Comments
Potential Natural Ground Stability Hazards		
Shrink-Swell	Yes	Level C = Potential for hazard to become active is at a level where it should be considered in decisions about construction, building maintenance and land use.
Landslides (slope instability)	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Soluble Rocks (dissolution)	No	Level A = Potential for hazard to be active is either zero or insignificant.
Compressible Ground	No	Level A = Potential for hazard to be active is either zero or insignificant.
Collapsible Deposits	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Running Sand	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Other Potential Hazards		
Mining	No	None
Flooding	Yes	There is the potential for groundwater flooding to occur at the surface within the northern end of the site.
Natural Land Gas	No	Unlikely to encounter gas from bedrock and coal mining; unlikely to encounter gas from peat.
Radon		Level of protective measures: NO

4.5 Hydrogeology

In lowland areas of the UK with little topographic variation, groundwater is likely to be found at shallow depths of only a few metres. Water table fluctuations will be small as they will be constrained by the ground surface and the base level of the local perennial streams and rivers.

In upland areas, precipitation is usually high and the dominantly metamorphic and igneous rocks often have relatively shallow groundwater levels.

This is due to preferential groundwater storage in near-surface weathered and fractured zones with limited drainage into the underlying un-weathered lower permeability rock. Exceptions can occur where higher permeability rocks, such as sandstone or limestone, allow faster through flow of groundwater towards the nearest stream or other discharge point.

Perched water tables occur where a less permeable horizon (e.g. a clay layer) in an otherwise permeable sequence retains a body of groundwater above the level of the regional water table. They usually occur at shallow depths in alluvial and glacial sediments and can be difficult to identify or to delimit.

An aquifer becomes confined when it is overlain by a less permeable horizon that restricts the upward movement of groundwater. When this less permeable horizon is penetrated (e.g. by drilling), the groundwater level rises above where struck to a level controlled by the hydrostatic pressure. If this is above ground level, overflowing artesian conditions will be encountered. Confined conditions should be anticipated, where possible, in order to plan for the problems they can generate.

Individual sites will always require more detailed assessments to determine the specific impact on groundwater resources. The maps represent conditions only at the ground surface. Where the soil and/or underlying formations have been disturbed or removed the vulnerability class may have been changed and site specific data will be required. Sites in urban areas and restored or current mineral workings are classified as having high (urban) soil leaching potential until proved otherwise.

The site lies on the Environment Agency’s Groundwater Vulnerability Map of Leicestershire (Sheet 30). However, this was based on older geological mapping and classified the area as Non Aquifer (undifferentiated Mercia Mudstone Group). These maps have now been superseded by Aquifer Designation maps that are consistent with the Water Framework Directive, the explanation of which can be found at: <http://apps.environment-agency.gov.uk/wiyby/117020.aspx>.

These classify the superficial head and glaciofluvial deposits as secondary A aquifers and the Thrusington Member as a secondary (undifferentiated) aquifer; the Tarporey Siltstone Formation bedrock is a secondary B aquifer with the mapped sandstone horizons within it a secondary A aquifer.

The hydrological information for the site is summarised in Table 3.

Table 3. Hydrogeology summary

Geological unit	Groundwater potential	Water level and strikes	Quality	EA groundwater vulnerability classification
Head	May contain small amounts of groundwater with intergranular flow	No information but if any present, water may be encountered at shallow depths as along the valley.	No information.	Secondary A aquifer.
Glacio-fluvial deposits.	Permeable sands and gravels with intergranular flow. Occurs under higher ground, so may drain easily, but likely to contain some residual groundwater for at least part of year.	Water likely to drain out around margins of deposit, but thin saturated zone likely to be present at least for part of the year.	No information, but water from glacial deposits is often ferruginous.	Secondary A aquifer.

Thrussington Member	Not generally regarded as an aquifer but capable of containing small amounts of groundwater if more sandy / gravelly horizons present.	Likely to be dry, unless sand and gravel horizons present.	Any groundwater present may be ferruginous and mineralised due to low permeability.	Low permeability superficial deposits.
Tarporley Siltstone Formation	Some groundwater likely to be present in the siltstone and sandstone units, particularly the mapped sandstone unit that traverses the site.	Water levels within the siltstone and sandstone horizons may rise above where first struck. Water level possibly within a few metres of the ground surface.	Groundwater present within siltstone and sandstone horizons may be of good quality but likely to be hard.	Secondary B aquifer associated with the siltstone and sandstone units

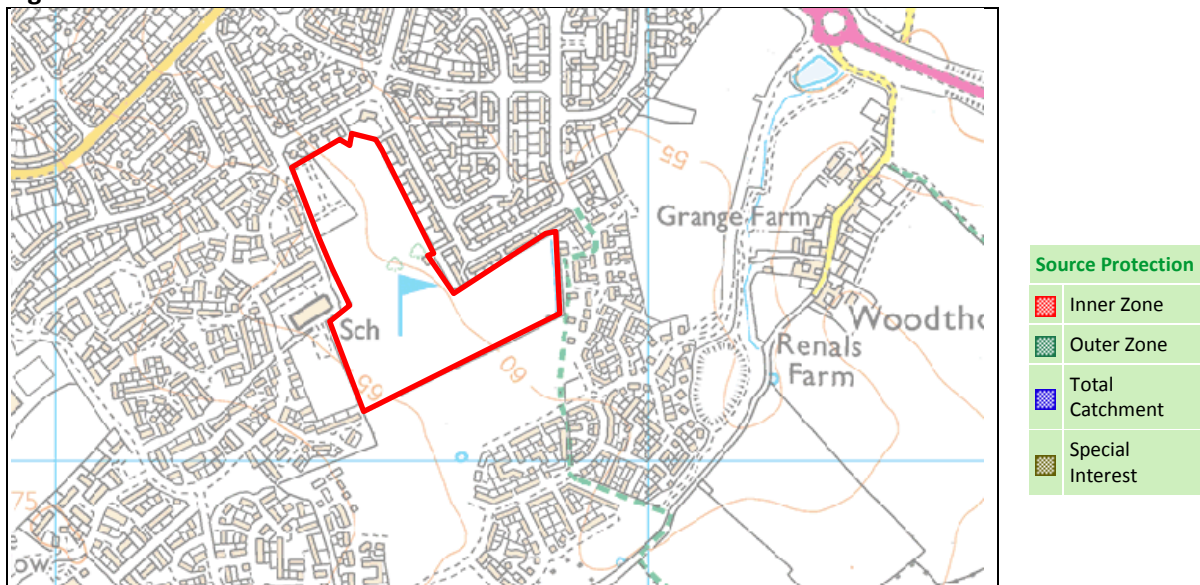
4.5.1 Groundwater vulnerability

This section reviews all components of hydrology, geology and top soil surface water drainage to assess risk notably to groundwater.

4.5.2 Source Protection Zones

The position of the site relative to current ground water protection zones is shown in Figure 11.

Figure 11. Groundwater Source Protection Zones associated with the site



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Source Protection Zones (SPZs) provide an indication of the risk to groundwater supplies that may result from potentially polluting activities and accidental releases of pollutants. Generally the closer the activity or release is to a groundwater source the greater the risk. Three zones (an inner, outer

and total catchment) are usually defined although a fourth zone (zone of special interest) is occasionally defined.

The Agency has subdivided groundwater source catchments into four zones. Two of these are determined by the travel time of potential pollutants, the third by the source catchment area itself and the fourth is a "Zone of Special Interest". This fourth zone highlights areas where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

- *Zone I (Inner Protection Zone)* - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has, as a minimum, a 50-meter radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease.
- *Zone II (Outer Protection Zone)* - This zone is defined by the 400-day travel time, or 25% of the source catchment area, whichever is larger. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants.
- *Zone III (Total catchment)* - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.
- *Zone of Special Interest* - For some groundwater sources an additional Zone of Special Interest may be defined. These zones highlight areas (mainly on non-aquifers) where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

The proposed development site lies outside any Groundwater Source Protection Zone.

4.5.3 Aquifer vulnerability

The Groundwater Vulnerability maps are produced at 1:100,000 scale. They show, by means of colour coding, those areas of the country where water-bearing rocks (aquifers) are present. They also show the vulnerability of groundwater to pollution. The aquifers are classified into major, minor and non-aquifers according to their physical properties and their consequent value as a resource.

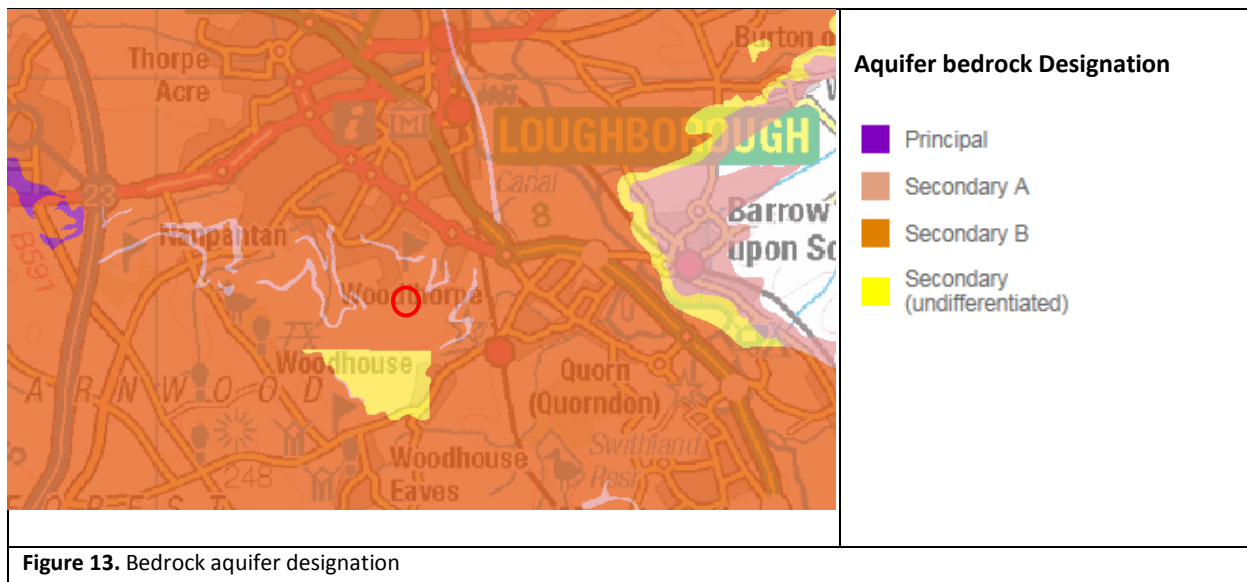
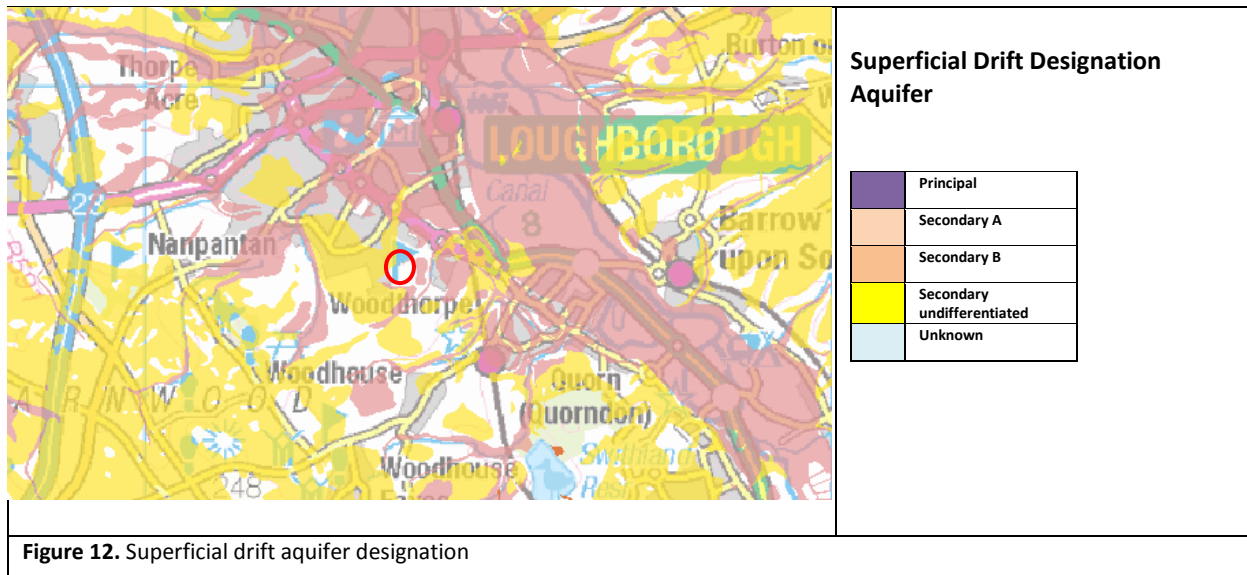
The classification of the land surface reflects the ability of contaminants to leach through the covering soils and pose a potential risk to groundwater at depth. The maps also indicate areas where the presence of low permeability drift may provide additional groundwater protection.

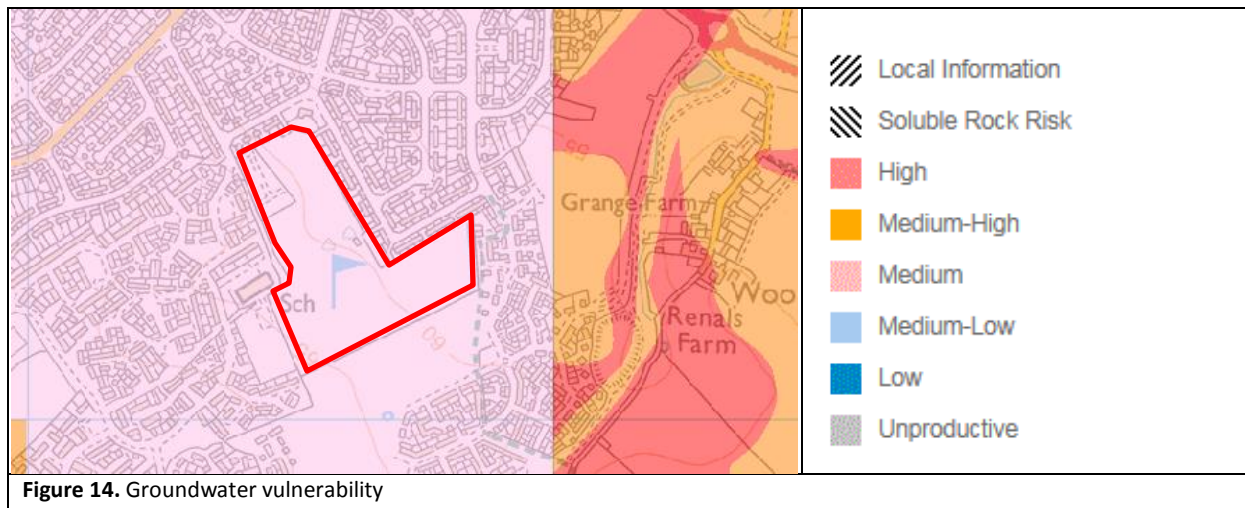
These maps can therefore be used for an initial screening assessment of the vulnerability of groundwater to contaminants applied to the surface of the ground. They do not provide all information relevant to the determination of vulnerability, such as the depth to water table or nature of the drift deposits. Site-specific information would always be needed for a detailed assessment of vulnerability at a given location. The original groundwater vulnerability maps were produced some time ago.

Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have descriptions on them to explain the different aquifer and soil types.

Areas shown as "major aquifers" have strategic significance for water resource; they often support large abstractions for the public water supply.

Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.





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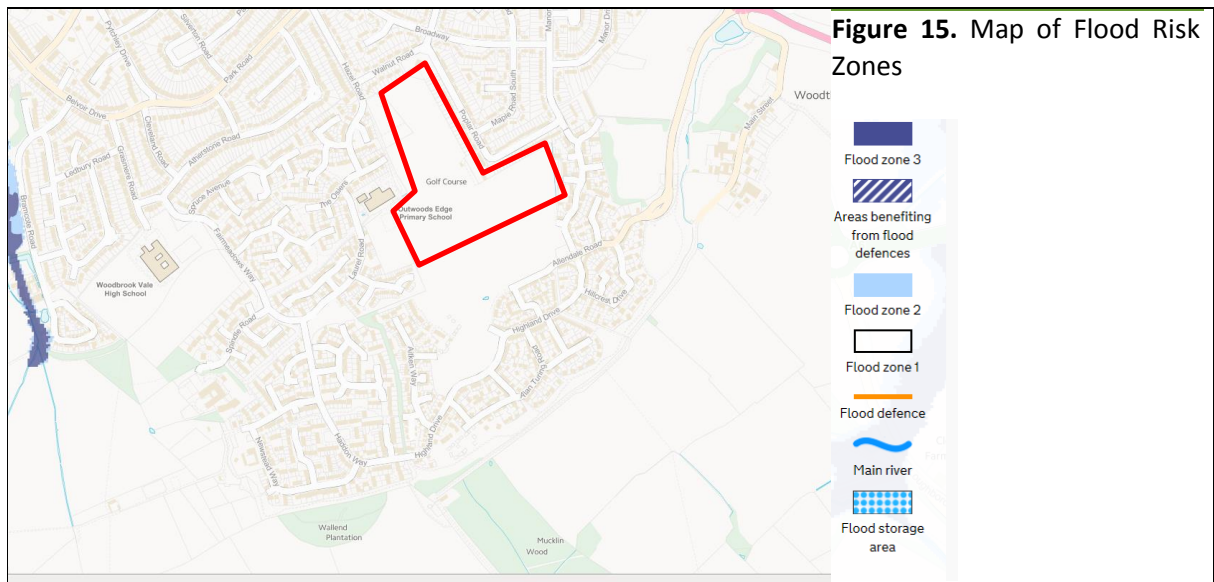
Major and minor aquifers may be important in contributing to the base-flow of streams and rivers. The maps show where groundwater is protected from above by rocks with a low permeability, such as glacial clay. They also show the characteristics of the soil above.

Superficial drift deposits which overlay the solid geological strata can sometimes be substantial in thickness. They are often variable in composition changing from highly permeable outwash gravels to low permeability clays over short distances both laterally and vertically. The presence of permeable drift deposits is recognised as Minor Aquifers except where these overlie a Major Aquifer and they then assume the status of a Major Aquifer.

The site is over a non aquifer associated with the superficial deposits and a Secondary B Aquifer associated with the bedrock. The site is classed as medium vulnerability in respect to groundwater pollution. The site is within a Surface Water Nitrate Vulnerable Zone but is not within a Drinking Water Safeguard Zone.

4.5.4 Flood risk

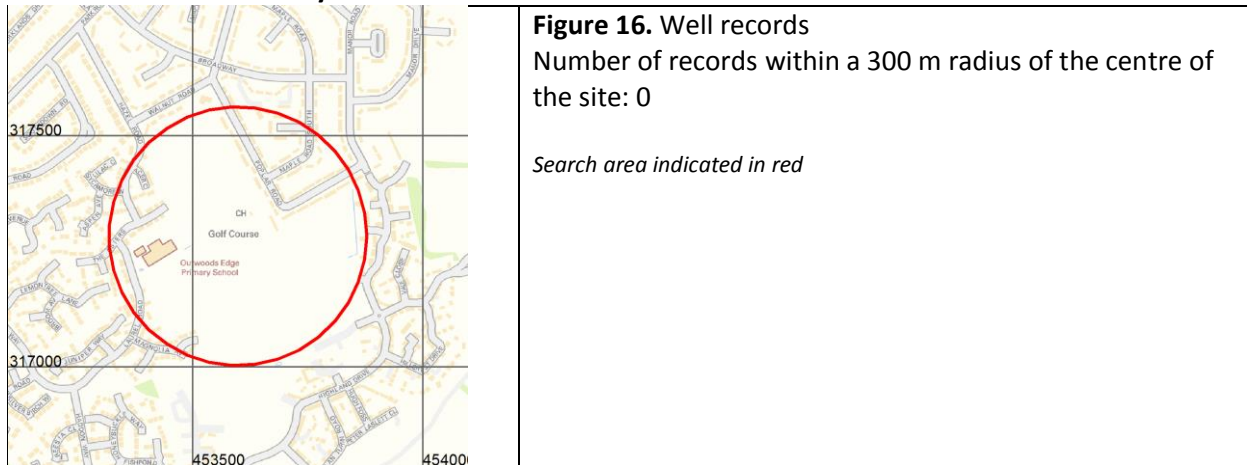
The site is within Flood Zone 1 land which is very low risk – less than 1 in 1000 in any given year (Figure 15). The site is not covered by flood warnings issued by the Environment Agency.



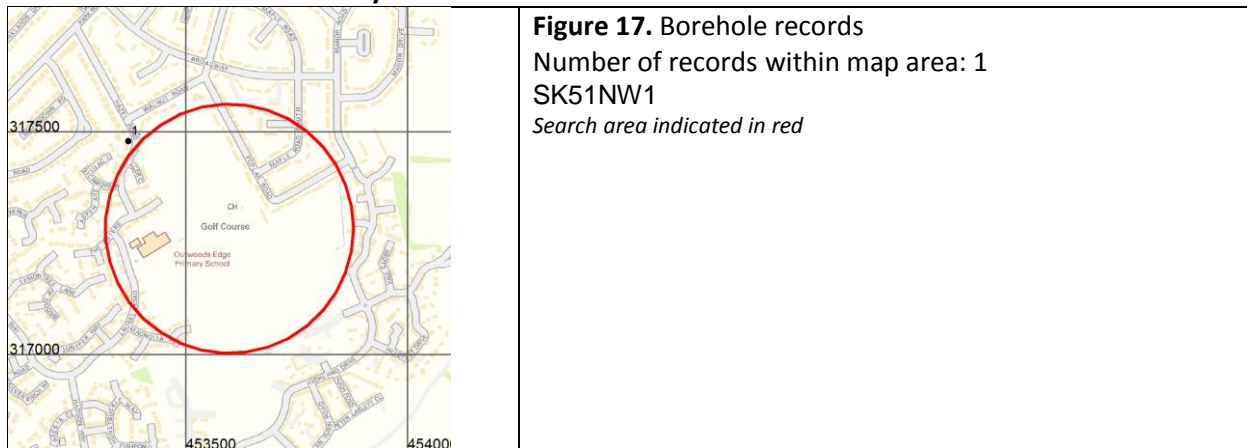
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If areas of impermeable surfaces such as buildings, roads etc. are constructed on a greenfield site, a surface water management system designed in accordance with the principles of Sustainable Urban Drainage Schemes (SUDS) will be required.

4.5.5 Wells in the vicinity of the site



4.5.6 Boreholes in the vicinity of the site

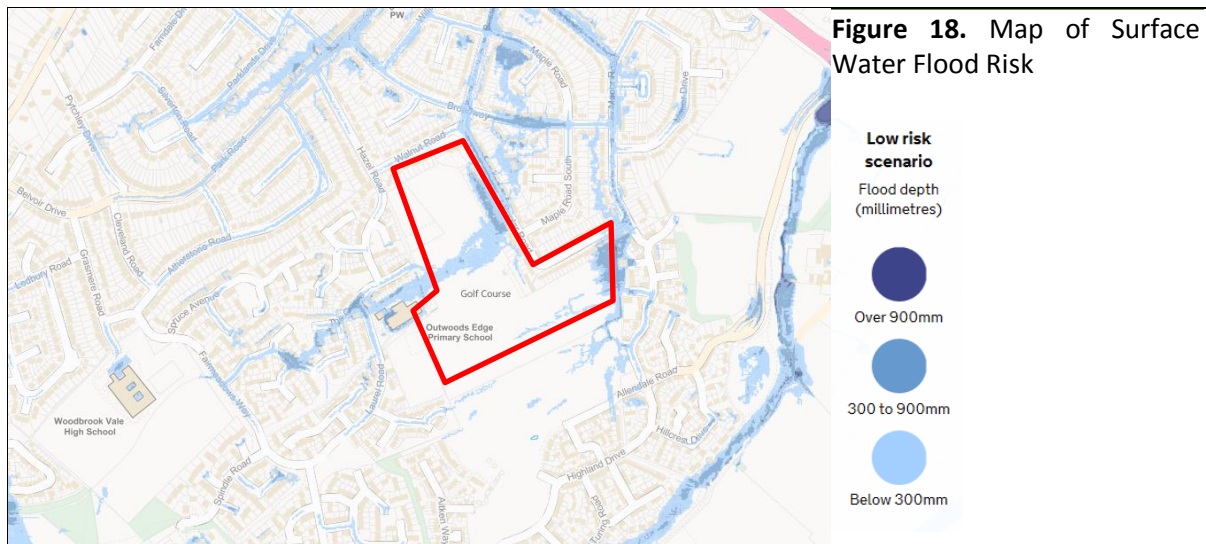


4.6 Meteorological data

The agro climatic index number for this site is 22E with a mean annual rainfall of 627 mm, the Standard Average Annual Rainfall (SAAR) for the site itself is 649 mm.

4.7 Surface water issues

The site generally has a very low risk of surface water flooding with the exception of the areas shown in Figure 18. There is a strip through the centre of the site and along with south eastern boundary where there is a low risk (1% chance of flooding occurring in a given year) of flooding to generally no more than 300 mm deep, though in some places it could be as deep as 900 mm along the eastern boundary. Within these areas there are narrow strips along the eastern boundary which have a high risk of flooding from surface water (a greater than 3.3% chance each year of flooding occurring). Poor surface water drainage associated with these soils is likely to lead to wet conditions under foot frequently through the winter however and where depressions occur in the surface water will pond in these locations and may remain for some time. Any works which might increase the risk of flooding on or off site need to be identified and the risks assessed and mitigated using a suitable SUDS compliant approach. The areas with higher risk of surface water flooding may require enhanced drainage or localised land raising to make them suitable for burials.



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5.0 Pollutant risk

Due to the approximately 60 per annum number of full burials at the site, the cumulative ammoniacal nitrogen concentrations are likely to be high with similar levels of total organic compounds (TOC).

Pathogens

There has been some evidence from recent studies of the occurrence of Enterococci and Clostridium bacteria found in drainage water of cemeteries. Enterococci are bacteria that are commonly found in the bowel of normal healthy individuals. They can cause a range of illnesses including urinary tract infections, bacteraemia (blood stream infections) and wound infections.

The two most common species of Enterococci are *E. faecalis* and *E. faecium*. During the mid-1980s, enterococci with resistance to glycopeptide antibiotics such as vancomycin and teicoplanin emerged, termed glycopeptide-resistant enterococci (GRE). Most GRE are *E. faecium*.

Due to the nature of the soil and geomorphology, there is unlikely to be much movement of pathogenic organisms, notably *Pseudomonas aeruginosa* and Faecal streptococci, other than where burials coincide with any sand lenses that connect to the adjacent watercourses. However pathogens tend to be short lived away from the host and if there is no immediate ground water risk or potable well supply, the risk may therefore be considered acceptably low. This site is underlain by a Secondary A Aquifer in relation to the limited extent of the Head deposits and a Secondary B Aquifer associated with the Tarporley Siltstone Formation. Pollutants entering groundwater within the area of head deposits is likely to be in hydraulic continuity with the water providing base flow to the adjacent streams. The Secondary B Aquifer associated with the siltstone is well protected by the thickness of the siltstone deposits over the water table and the poorly permeable nature of the weathered siltstone deposits generally and as such the site is classed as being moderately vulnerable.

Post-burial accumulation of water around a coffin is likely to be an issue in these soils and to minimise the risks thereafter faced on re-opening a grave it is suggested that backfill over a new burial be compacted well to minimise infiltration through to the burial itself.

6.0 Depth of burial

Based on data from the British Geological Survey, the site is overlain by soils derived from clays and silts. Typically such soils are poorly drained and prone to structural damage if worked when wet. Digging is unlikely to be impacted by the presence of hard rock but running sands may prevent burials if perched water is encountered in any sandy lenses which may occur within burial depth. There appears to be a layer of hard, indurated sandstone running through part of the site and in Pit 3 this was too hard and extensive to dig through. It is possible that in areas affected by this layer it may be difficult to dig graves through the layer and burying directly over it could increase pollution risk to any perched water over this layer.

7.0 Archaeology

It is recommended that consultation with the county archaeological team be undertaken to ascertain any archaeological interest in the area.

8.0 Risk evaluation

Assessment of general hazards

The potential of a number of pollutant pathways and the degree of associated risk assessed numerically on a 0-10 score with 10 being the highest risk is shown in Table 4. From the resultant data, the final values are assessed against burial number and a determinant of risk calculated from EA flow charts and nomographs.

Table 4. Summary of pollution risk associated with the site

Risk	Assessment High, moderate, Low	Comment	Score
Burials per annum	Moderate	Expected to be around 60 per annum	
Drift / superficial data	Moderate	Silty sand head deposits	6-5
Drift thickness	High	Trial pits indicate a drift depth of 1-3m	8-7
Proximity to water course	Very High	Wet ditch present along south eastern site boundary and wet ditch flowing through centre of site	10-9
Proximity to land drains	High	Land has previously been drained	8-7
Depth to Water Table	Moderate	Occasional water strikes within superfcials but volumes low and extent variable.	6-5
Proximity to Wells or potable water source	Very Low	No wells within 500 m radius	2-1
Flow mechanism	Low	Generally Intergranular flow through clay, silt and sand, though flow rates may be locally fast.	4-3
Aquifers	Moderate	Minor aquifer with moderate vulnerability	6-5
SPZ	Very Low	The site for development lies outside any SPZ	2-1
Met data	Moderate	Annual rainfall moderate	N/A
Proximity to housing	Low	Residential housing in close proximity of the site	N/A
SSSI	Low		N/A
Archaeology	Low	None observed but will require County Archaeologist assessment	N/A
		Total	52-43

Table 4 is assessed using the groundwater vulnerability-ranking criteria in Table 5. The total score comes to 52-43 and is considered as a moderate risk. These data are then assessed against the burial rate of 60 per annum on the groundwater risk nomograph p.37 of PP223. The final assessment of risk for this site according to the nomograph (Figure 19), would class it as being **moderate to high**.

Table 5. Groundwater ranking

Ranking	Very Low 2-1	Low 4-3	Moderate 6-5	High 8-7	Very High 10-9
Drift Type	Clay	Silt	Silty sand	Sand/gravel	Absent
Drift Thickness	>5 m	>3-5 m	3 m	0-3 m	Absent
Depth to water Table	>25 m	11 – 25 m	10 m	5 – 9 m	<5m
Flow mechanism	Intergranular				Fissured
Proximity to wells					Within 250 m from private potable supply
Aquifer type	Non Aquifer		Minor aquifer		Major aquifer
Abstractions and SPZs	Outside Zone 3	Within Zone 3	Close boundary to of Zone 2	Within Zone 2	Within Zone 1
Water courses and springs		>100 m	>50 <70 m	>30 <50 m	<30 m
Drains	>100 m	>40 <100 m	30 – 40 m	>10 <30 m	<10 m

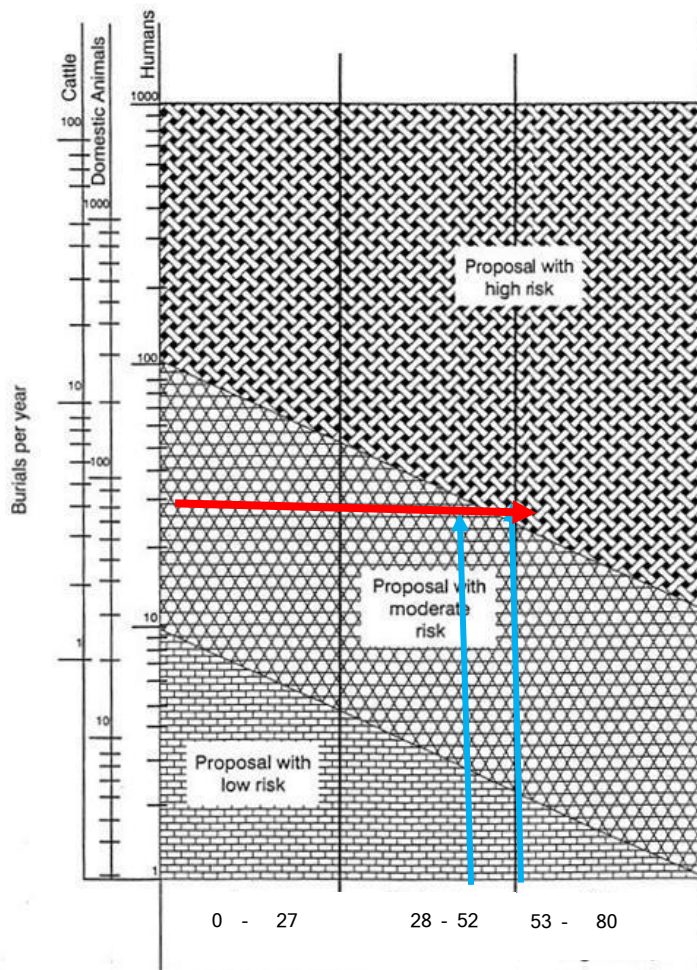


Figure 19. Groundwater risk nomograph

9.0 Conclusion

The site is considered to be **moderate to high risk in the south and eastern sections** of the site and **moderate risk in the northern section** with the risk mainly attributed to the predicted burial numbers generally, the presence of a culverted watercourse through the centre of the site and the likely presence of groundwater within 5m of the surface within the head deposits in the southern and eastern sections. In the areas where glacial till overlies the siltstone, the risks are likely to be much lower as there is no significant perched water within the till based on the trial pits and water movement through the subsoil is likely to be very slow. Based on this, if this site is to be considered for burials it is recommended that only the northern section of the site is suitable as the remaining section offers a possible risk to groundwater and adjacent surface waters and would also be practically difficult to bury into due to the presence of hard rock at, or close to, burial depth and the presence of (slowly) running sands.

Where burials take place into the glacial till soils, water may gather around burials making re-opening potentially difficult. This can be mitigated by compacting backfill over recent burials firmly to reduce the risk of infiltration through the disturbed back-fill material.

By way of grave-specific mitigation if needed, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Rozic et al 2009).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

10.0 Reporting details

Report Author:	Mr Alex Vickers
Verification:	Mr Justin Smith
Date:	5.3.18

Cemetery Development Services - Terms and Conditions

Cemetery Development Services (CDS)
Terms and Conditions for the Supply of Services

Interpretation

In these Conditions

AGREED FEE means the charges agreed between CDS and the Client in relation to the Specified Service

CLIENT means the person named on the Specification Sheet for whom CDS has agreed to provide the Specified Service in accordance with these Conditions

CONTRACT means the contract for the provision of the Specified Service

DOCUMENT includes, in addition to a document in writing, any map, plan, graph, drawing or photograph, any film, negative, tape or other device embodying visual images and any disc, tape or other device embodying any other data

INPUT MATERIAL means any Documents or other materials, and any data or other information provided by the Client relating to the Specified Service

OUTPUT MATERIAL means any Documents or other materials, and any data or other information provided by CDS relating to the Specified Service

SPECIFICATION SHEET means the sheet to which these Conditions are appended

SPECIFIED SERVICE means the service relating to geophysical surveys of land to be provided by CDS for the Client and referred to in the Specification Sheet

CDS means CDS (registered in England under number 05089827) or its subsidiary as stated on the Specification Sheet

The headings in these Conditions are for convenience only and shall not affect their interpretation.

Supply of the Specified Service

CDS shall provide the Specified Service to the Client subject to these Conditions. Any changes or additions to the Specified Service or these Conditions must be agreed in writing by CDS and the Client.

The Client shall allow CDS adequate access to its property at reasonable times and for so long as is necessary to enable CDS to provide the Specified Service in accordance with the Contract.

The Client shall at its own expense supply CDS with all necessary Documents or other materials, and all necessary data or other information relating to the Specified Service, within sufficient time to enable CDS to provide the Specified Service in accordance with the Contract. The Client shall ensure the accuracy of all Input Material.

CDS shall have no liability for any loss or damage, however caused, to the Input Material. All Output Material shall be at the sole risk of the Client from the time of delivery to or to the order of the Client.

The Specified Service shall be provided in accordance with the Specification Sheet subject to these Conditions.

Further details about the Specified Service, and advice or recommendations about its provision or utilisation, which are not given in CDS's brochure or other promotional literature, may be made available on written request.

CDS may correct any typographical or other errors or omissions in any brochure, promotional literature, quotation or other document relating to the provision of the Specified Service without any liability to the Client.

CDS may at any time without notifying the Client make any changes to the Specified Service which are necessary to comply with any applicable safety or other statutory requirements, or which do not materially affect the nature or quality of the Specified Service.

Charges

Subject to any special terms agreed, the Client shall pay the Agreed Fee and any additional sums which are agreed between CDS and the Client for the provision of the Specified Service or which, in CDS's sole discretion, are reasonably incurred as a result of the Client's instructions or lack of instructions, the inaccuracy of any Input Material or any other cause attributable to the Client.

All charges quoted to the Client for the provision of the Specified Service are exclusive of any Value Added Tax, for which the Client shall be additionally liable at the applicable rate from time to time. CDS shall be entitled to invoice the Client on completion of the Specified Service.

The Agreed Fee and any additional sums payable shall be paid by the Client (together with any applicable Value Added Tax, and without any set-off or other deduction) within 30 days of the date of CDS's invoice.

If payment is not made on the due date, CDS shall be entitled, without limiting any other rights it may have, to charge interest on the outstanding amount (both before and after any judgment) at the rate of 4% above the base rate from time to time of Barclays Bank plc from the due date until the outstanding amount is paid in full.

Rights in Input Material and Output Material

The property and any copyright or other intellectual property rights in:

any Input Material shall belong to the Client

any Output Material and any amendments or variations to the Input Material made by CDS shall, unless otherwise agreed in writing between the Client and CDS, belong to CDS, subject only to the right of the Client to use the Output Material for the purposes of utilising the Specified Service.

Any Input Material or other information provided by the Client which is so designated by the Client and any Output Material shall be kept confidential by CDS, and all Output Material or other information provided by CDS which is so designated by CDS shall be kept confidential by the Client; but the foregoing shall not apply to any Documents or other materials, data or other information which are public knowledge at the time when they are so provided by either party, and shall cease to apply if at any future time they become public knowledge through no fault of the other party.

The Client warrants that any Input Material and its use by CDS for the purpose of providing the Specified Service will not infringe the copyright or other rights of any third party, and the Client shall indemnify CDS against any loss, damages, costs, expenses or other claims arising from any such infringement.

Warranties and Liability

CDS warrants to the Client that the Specified Service will be provided using reasonable care and skill and, as far as reasonably possible, in accordance with the Specification and at the intervals and within the times referred to in the Specification Sheet. Where CDS supplies in connection with the provision of the Specified Service any goods (including Output Material) supplied by a third party, CDS does not give any warranty, guarantee or other term as to their quality, fitness for purpose or

otherwise, but shall, where possible, assign to the Client the benefit of any warranty, guarantee or indemnity given by the person supplying the goods to CDS.

CDS shall have no liability to the Client for any loss, damage, costs, expenses or other claims for compensation arising from any Input Material or instructions supplied by the Client which are incomplete, incorrect, inaccurate, illegible, out of sequence or in the wrong form, or arising from their late arrival or non-arrival, or any other fault of the Client.

Except in respect of death or personal injury caused by CDS's negligence, or as expressly provided in these Conditions, CDS shall not be liable to the Client by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, for any loss of profit or any indirect, special or consequential loss, damage, costs, expenses or other claims (whether caused by the negligence of CDS, its servants or agents or otherwise) which arise out of or in connection with the provision of the Specified Service or their use by the Client, and the entire liability of CDS under or in connection with the Contract shall not exceed the amount of CDS's charges for the provision of the Specified Service, except as expressly provided in these Conditions.

CDS shall not be liable to the Client or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of CDS's obligations in relation to the Specified Service, if the delay or failure was due to any cause beyond CDS's reasonable control.

Termination

Either party may (without limiting any other remedy) at any time terminate the Contract by giving written notice to the other if the other commits any breach of these Conditions and (if capable of remedy) fails to remedy the breach within 30 days after being required by written notice to do so.

Insolvency of Client

This clause applies if:

the Client makes any voluntary arrangement with its creditors or (being an individual or firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or an encumbrancer takes possession, or a receiver is appointed, of any of the property or assets of the Client; or

the Client ceases, or threatens to cease, to carry on business; or

CDS reasonably apprehends that any of the events mentioned above is about to occur in relation to the Client and notifies the Client accordingly.

If this clause applies then, without prejudice to any other right or remedy available to CDS, CDS shall be entitled to cancel the Contract or suspend any further provision of services under the Contract without any liability to the Client, and if the Services have been provided but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

General

These Conditions (together with the terms, if any, set out in the Specification Sheet) constitute the entire agreement between the parties, supersede any previous agreement or understanding and may not be varied except in writing between the parties. All other terms and conditions, express or implied by statute or otherwise, are excluded to the fullest extent permitted by law.

Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to the other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving the notice.

No failure or delay by either party in exercising any of its rights under the Contract shall be deemed to be a waiver of that right, and no waiver by either party of any breach of the Contract by the other shall be considered as a waiver of any subsequent breach of the same or any other provision.

If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part, the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected.

Any dispute arising under or in connection with these Conditions or the provision of the Specified Service shall be referred to arbitration by a single arbitrator appointed by agreement or (in default) nominated on the application of either party by the President for the time being of Institute of Arbitrators.

English law shall apply to the Contract, and the parties agree to submit to the non-exclusive jurisdiction of the English courts.

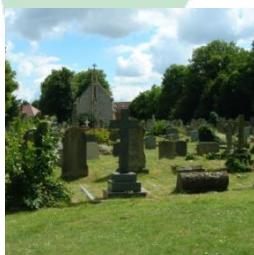


Cemetery Development Services

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A report to Charnwood Borough Council on the suitability of a proposed site for a new cemetery at Hathern, Leicestershire as part of an Environment Agency T2 Audit

January 2018
D1.0



Company Directors: JJ Smith

Registered Office: 28-31 The Stables
Wrest Park, Silsoe
Bedfordshire
MK45 4HR

Registered No: 5048077

Vat No. 0836 4504 25

Charnwood Borough Council

**An Environment Agency T2 assessment for a proposed new
cemetery at Hathern, Leicestershire, LE12 5HU.**

Grid Ref: 449812; 321816

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1.0 Executive summary

The site is considered to be **High risk** with the risk mainly attributed to the predicted burial numbers.

Given that burials are likely to be into the silt and clay-dominated superficial deposits and that no groundwater was struck within 3.5m of the surface (1.7m of the base of a double burial) the risk to groundwater is somewhat mitigated as the silty clay is slowly permeable and will increase pollutant retention time and will also remove some ammonium through cation exchange. Though the source of pollutants is present in the form of burials and the receptor is present in the form of the groundwater and any surface water which it might feed, the pathway is likely to be slow and tortuous due to the presence of the silty clay. To ascertain the nature and extent of any risk more precisely, flux modelling of the major pollutants ammonium and nitrate will be required.

Some low volume perched water was struck towards the top of the hill which may make burials in this area practically difficult. In addition, the presence of an infilled pit at the top of the site further reduces the utility of this area for burials though this area could be used for a car park or similar infrastructure. This is because the nature of the infill is uncertain and it may contain perched water within it making burials difficult.

Where burials take place only in the silty clay dominated soils, water may gather around burials making re-opening potentially difficult. This can be mitigated by compacting backfill over recent burials firmly to reduce the risk of infiltration through the disturbed back-fill material.

By way of grave-specific mitigation if needed, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Rozic et al 2009).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

The site has complex micro-topography which would require extensive groundworks to create a surface which works efficiently as a cemetery. This will add cost and complexity to the project.

2.0 Introduction

Cemetery Development Services Ltd. has been asked to carry out a Tier 2 site screening assessment for a new cemetery on the edge of Hathern, Leicestershire. This site will be considered on the basis of groundwater risk and as part of this, a T2 study based on the criteria required by the Environment Agency has been carried out. This is because sites that do not meet the requirements of the Environment Agency should be ruled out at an early stage since the Agency as Primary Consultees are able to prevent any site being developed should the site be deemed to represent too great a risk in respect to water pollution.

The proposed development area has been assessed on a 1 km area of influence: grid reference 449812; 321816, nearest postcode: LE12 5HU. The site is calculated as being approximately 7.48 hectares (18.48 acres).

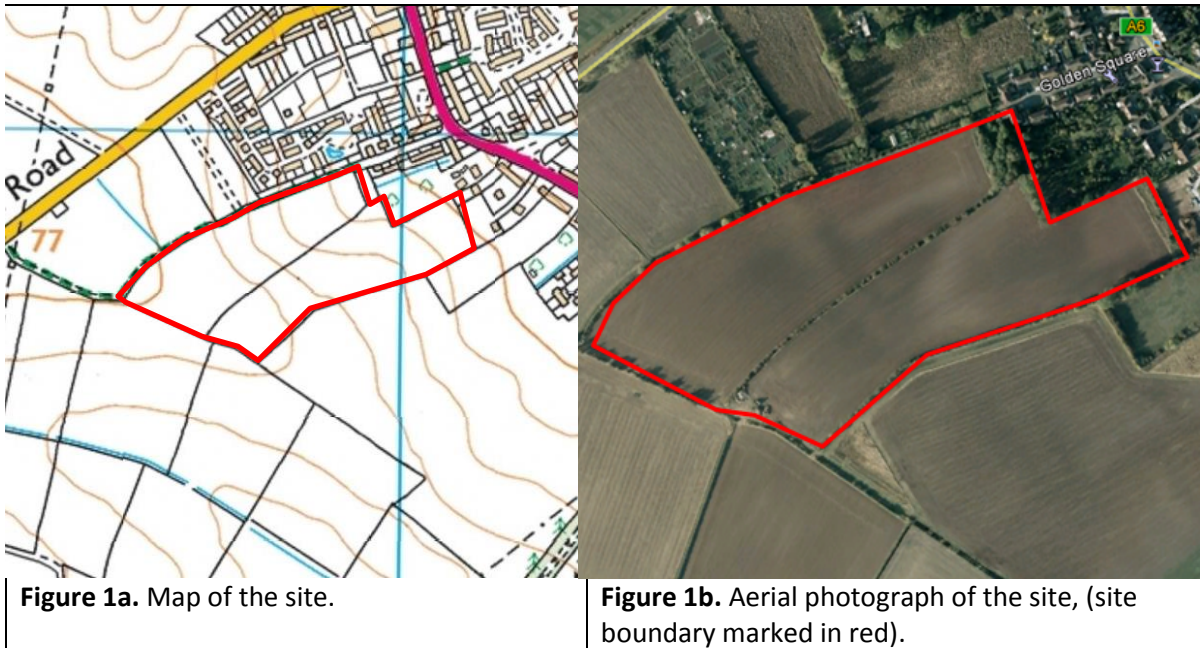


Figure 1a. Map of the site.

Figure 1b. Aerial photograph of the site, (site boundary marked in red).

This report will review the site proposed for use as a burial facility in accordance with the requirements of the Environment Agency's Tier 2 survey. For the purposes of this study the anticipated burial rate for this site is estimated as being in approximately 60 per year.

3.0 Background

New cemetery developments or extensions to existing cemeteries can be very emotive. However, these concerns are often disproportionate to the actual environmental risk.

Whilst the Local Planning Authority is the principal controlling body in determining approval for new sites or site extensions, significant information is required to ensure that the environmental risks are examined and that the Environment Agency's views are considered. Therefore, measures to prevent pollution must be undertaken and reported. Any regulatory decision-making is based on sound scientific knowledge. On this basis, a review of potential pollution from cemeteries was undertaken by the Environment Agency in collaboration with the British Geological Survey.

The aim was to review old and new cemeteries and measure the effects of contamination from viruses, bacteria and other microbiological pathogens and to assess the potential of chemical

contaminants affecting groundwater supplies from decomposition processes. Preliminary results showed that the operating cemetery examined in the study (25 years old) did show some evidence of bacterial contaminants in groundwater derived from corpses. However, no viruses were detected and the overall contaminant loading was found to be low. The studies found that degradation and attenuation was occurring indicating that potential risks were low. Whilst the outcome of this research found contaminant risk to be low, it should be reviewed in the context that natural attenuation processes may have been optimum at these sites. Therefore, to optimise natural attenuation and reduce the risk of possible groundwater contamination, a series of guidelines have been drawn up that are directly applicable to cemeteries.

Failure to manage and reduce any environmental risk to a minimum may result in action being taken under the Groundwater Regulations 1998 and the Anti-pollution Works Notice Regulations 1999.

3.1 Groundwater protection policy

Initial risk screening starts with the tools contained in the Agency's publication, Policy and Practice for the Protection of Groundwater in cemeteries and in the latest GP3 guidance notes.

Tools include Groundwater Vulnerability and Source Protection Zone (SPZ's) maps. These maps highlight where there are likely to be particular risks posed to groundwater from surface activities. Groundwater Vulnerability (GWV) Maps show the damage from pollution to groundwater and the relative importance of the aquifer to water supplies. Risk assessment is made with reference to soil leaching potential and the levels of water tables above major and minor aquifers.

Source Protection Zones are delineated areas around groundwater abstractions used for public consumption and defined by travel, time of biological or chemical contaminants.

The zones are classified in three groups:

- Zone 1 High risk
- Zone 2 Intermediate to high risk
- Zone 3 Intermediate risk

The Environment Agency would be opposed to large graveyards within Zone 1 of an SPZ.

Whilst groundwater is a major part of policy concerns, other water point sources are also considered as requiring an evaluation of risk. These sources include surface water in the form of ditches, spring lines and surface run-off.

The factors influencing the risk of groundwater vulnerability include:

- Soil nature and type
 - Physical, mechanical and chemical properties
- Geomorphology
 - Depth to water table and or height above aquifers
 - Groundwater flow mechanisms
 - Aquifer type
- Abstractions
- SPZ's
- Proximity to water courses, ditches and drains

Therefore, prior to any consent being given by the Environment Agency, an assessment of risk should be undertaken. The degree of assessment is measured through a series of stages namely:

- Hazard identification
- Identification of consequences
- Magnitude of consequences
- Probability of consequences
- Significance of risk

3.2 Tiered risk assessment

There are 3 Tiers of Risk assessment. The associated size and position of the site will in-part determine which Tier is appropriate.

Tier 1

Desktop study of all appropriate documentation including GWV and SPZ maps, topographical, hydrological and geomorphologic maps. After adopting a systematic approach to the assessment of risk, a weighting can be given which is assessed as low, medium or high. If the overall risk is low, the proposal may be accepted by the Agency without further detailed assessment. However, the following practical guidelines would be recommended as appropriate controls to minimize pollution risk:

- 250 m distance from groundwater supply
- 30 m minimum distance from groundwater or spring
- 10 m distance from field drains
- No burials in standing water

For the purposes of this screening study, a T1 assessment is being made of each site. This will be augmented by on-site investigation at the preferred two sites following the conclusion of this study.

Tier 2

Should the risks not be clearly defined by the desktop study then further “ground truthing” might need to be undertaken. This may include field studies and monitoring of groundwater within the proposed area, comprising of the installation of up to three boreholes.

In this case, once the final preferred sites are identified the Environment Agency will be contacted with the site details and asked for a view as to whether boreholes or trial pits will be needed.

Tier 3

If the risk is considered high, i.e. the number of yearly burials exceeds 1,000; a full audit will be required. This would include, but not be limited to, a detailed site investigation including boreholes and monthly monitoring.

3.3 Water Resources Act 1991 – S161A Anti-Pollution Works Notices

The EA has powers under s161A of the Water Resources Act 1991 and the Anti-Pollution Works Regulations 1999, allowing Works Notices to be served to prevent or remedy pollution of controlled waters and under the Groundwater Regulations 1998 to prevent pollution of groundwater.

3.4 Groundwater Regulations 1998

Burial of human corpses can result in discharge of listed substances to groundwater. They are, therefore, covered by the requirements of the Groundwater Regulations. Individual burials spaced out over time will only release trivial amounts of listed substances.

These are considered to fall under the *de minimis exemption*. Large numbers of burials (>100 per annum) in a short time or the cumulative effects of many individual burials may cause groundwater pollution. In this case, the EA will, where appropriate, use their powers under the Groundwater Regulations to control or prohibit the burial. This has specific relevance to policy P12-2 but will apply more generally.

4.0 Site investigation

British Geological Survey and Cranfield University data was used in this report.

4.1 Topography and surface drainage

The site is currently in arable production and is bounded on all sides by further arable fields with the exception of the north west which is a mix of pasture and allotments and the east which is low density residential and woodland / gardens. The site falls from the south west to the north east at a general grade of around 4% which is a moderate slope. Within the general fall, however are a series of smaller, complex cross falls to small valley features within each field. This means the site will require significant land engineering to maximise its potential as a cemetery and to minimise loss of useful burial space. According to OS data there are no water features on the site however a wet ditch flows away to the north east from the north eastern boundary with another wet ditch flowing away to the north west from the north western boundary. A small pond is indicated as being to the immediate north of the site adjacent to the footpath but this is not evident on recent aerial photography and may have been filled in.



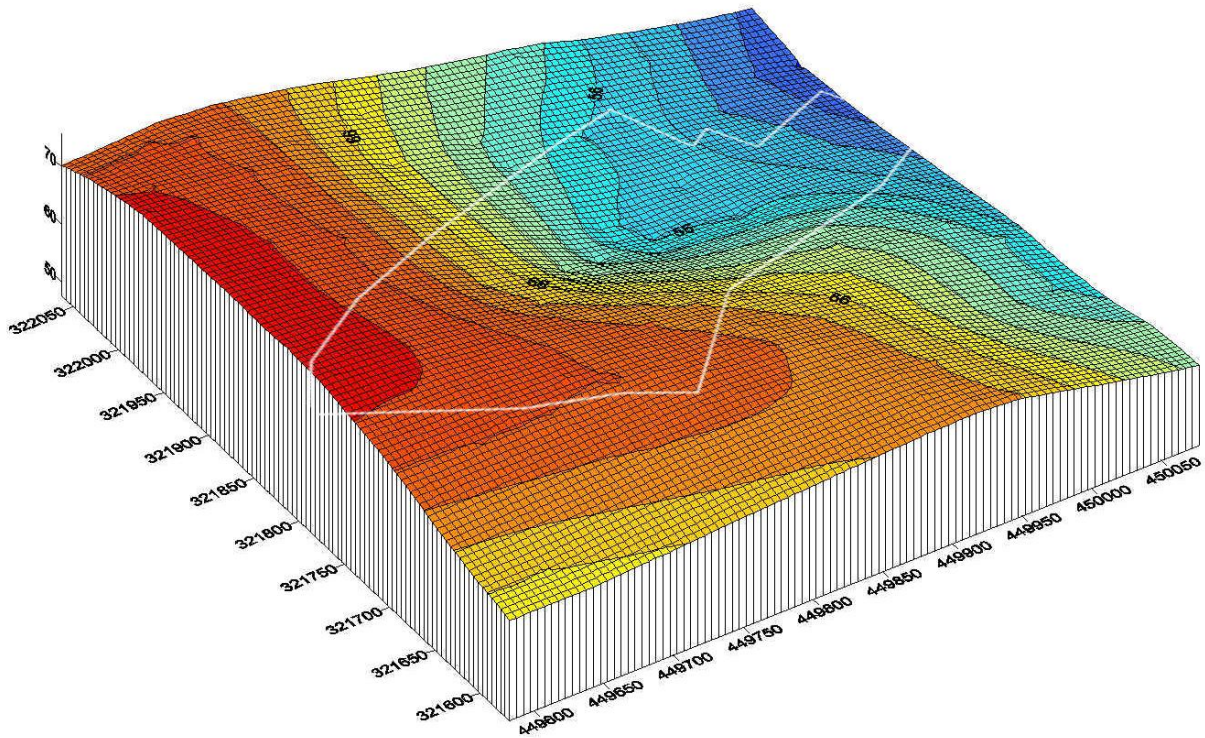


Figure 2. Topography of the site.

4.2 Soil type

The Soil Survey of England and Wales map the site as containing soils belonging to the Flint Association as described in Table 1 and Figure 3.

Figure 3. Soil Associations in the vicinity of the site.

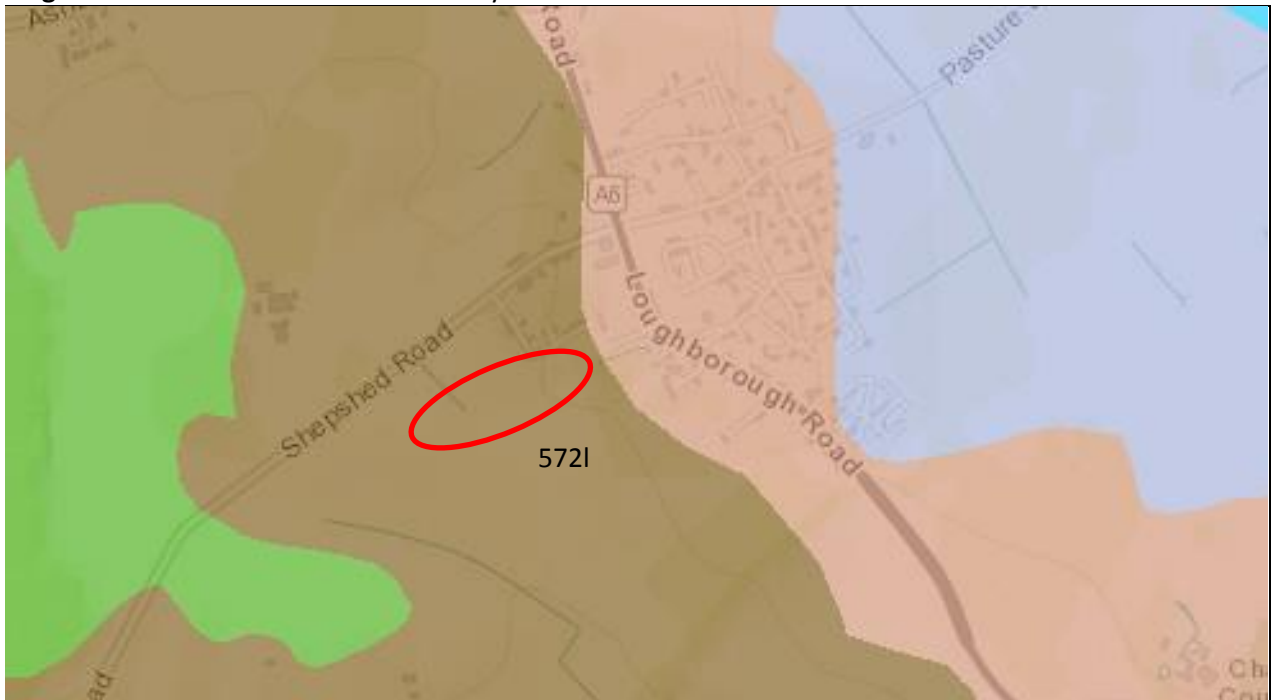


Table 1. Soil Associations in the vicinity of the site.

Soil Association	Sub Groups	Description
572I Flint	Flint Salwick Salop	Reddish fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging. Some similar fine loamy soils and some slowly permeable seasonally waterlogged fine loamy over clayey soils.

The soils on site belong to the Flint Association (572I). These soils are generally silty soils formed over silt and mudstones with slowly permeable subsoils and slight to moderate seasonal waterlogging. These soils can be prone to slumping.

This type of soil is generally suitable for cemeteries but may have some local issues with seepage from more permeable lenses within the subsoil which could flood graves if significant. This can only be confirmed by digging trial pits.

4.2.1 Trial pits

Site investigations were undertaken on 8th January 2018 with 8 trial pits dug to approximately 3.0-3.1 metres depth (Figure 5). Figure 4 shows the profiles of the pits excavated.

Figure 4. Trial pit soil profiles





Pit 3 profile.



Pit 4 profile.



Pit 5 profile.



Pit 6 profile.



Figure 5. Trial pit locations.

The soils were generally typical of those described as belonging to the Curtisden Association, being typically clay and silt dominated (SILTY CLAY LOAMS and CLAY LOAMS) however in some locations where sand lenses extended to the surface the topsoils were SANDY CLAY LOAMS. The subsoils were typically SILTY

SANDY CLAYS but in some locations where sand lenses were struck the subsoils were SANDS or CLAYEY SANDS.

Pits 1 and 2 were similar in form, having very wet (saturated in the Case of Pit 2) topsoil over increasingly drier subsoils. Below 800 mm depth the subsoil becomes weathered silt and mudstones which were very well fractured and loose in places with layers of predominantly greenish gray silt and mudstone interbedded with deep red silt and mudstones. In both pits the material became drier, less plastic and more friable with depth. Pit 1 was dry to depth as was Pit 2, however in Pit 2 some slight flow of water from the saturated topsoil was observed entering the pit though the volume was low and the flow rate very slow. Pit 2 was located in the lowest part of the site and received much of the surface water flow from the rest of the field. With some drainage and diversion of surface water flow routes much of this surface water can be managed but if this site were to be developed into a cemetery it is recommended that the area around Pit 2 be used to locate attenuation ponds or basins in as part of any site SUDS schemes rather than for burials as the risk of surface inundation of graves in this location is high.

Pit 3 was also located towards the base of the slope, though not in the very lowest part of the site. This pit varied in that there was approximately 1.8m of glacial till and colluvial deposits over the underlying weather silt and mudstones. Within the glacial till and colluvial deposits there were distinct layers and lenses of sand within the upper 1.8m. These were irregular in shape and discontinuous in both length and depth rather than being discrete horizons within either the soil or superficial geology. These overlay the clay and silt dominated material below and as such may have held perched water within them though in this case the sands were dry and no flow occurred from this layer into the pit itself, with the pit remaining dry for 15 minutes post excavation with no sign of any seepage into it.

Pit 4 was located in a midslope area immediately below a significant change in slope. This pit was similar to Pit 3 but with a shallower depth of overlying glacial till and colluvium. In this pit there was very slight, irregular seepage into the pit at 2.44m bgl, but flow rates were very slow with little water making it into the base of the pit. The water seemed to be coming from a slightly stonier layer within the weathered silt and mudstones but it was difficult to be certain as flow was so slow and it may just have been a small pocket of water around a large cobble within this material.

Pit 5 was located towards the top of the slope, close to the northern boundary and hedge line. This pit was comprised predominantly of glacial till overlying weathered silt and mudstone at a depth of 2.35m. A clay field drain was struck during excavation which flowed into the pit but otherwise the pit remained dry. The pipe flowed for approximately 20 minutes before flow slowed. Again the pit became drier with depth but in this case also became more dense and more compact to depth. The pit contained occasional stones, cobbles and boulders of rounded sandstone.

Pit 6 and Pit 7 were both located on the crest of the hill and were similar in composition with layers of glacial till extending to the base of the pit with no silt and mudstones encountered. In Pit 6 significant lenses of sand were struck between 520 mm and 2.4m deep. The lenses were of variable thickness and length and did not occur in distinct horizons. The sand was an orange brown fine sand and had thin layers of finer material within it.

In Pit 6 the sand began to run when the pit was extended below 2.4m in depth. This marked the boundary between the sand lenses and more uniform silty clay material below. The sands above had some limited perched water within it and though the sand was running, flow rates were slow and the layer within the pit affected was no more than 40 cm thick. Given the very confined lateral extent of this feature it is likely the groundwater encountered is locally perched and hydraulically isolated and as such is unlikely to pose a risk to adjacent surface waters.

Pit 7 also had some small, irregular sand lenses within it but in this case the pit was dry to depth with no flow observed into the pit at all.

The final pit was excavated in the midslope of the lower field and again comprised glacial till to the base of the pit at 3.07m. This pit was dominated by silty Sandy clays with occasional stones, cobbles and boulders of rounded sandstone and some chalk. There was a more distinct sand layer between 2.47m and 2.82m depth but this layer was dry. Indeed the entire pit remained dry with no seepage observed.

As expected, some small sand lenses were observed in most of the pits however with the exception of Pit 6 all were dry suggesting that any perched water on this site is of limited extent and volume. Based on this and given the presence of significant amounts of clay to depth the site is likely to be well suited to use as a cemetery in respect to minimizing pollution risk to groundwater and adjacent surface waters. That said, the complex and in places steep slopes will make it hard to use efficiently for burials without a significant amount of cut and fill works to re-shape the site. It is possible that given presence of some water-bearing lenses that small sections of the site might not be suitable for burials – especially around Pit 6.

4.3 Geology

The following headings cover the aspects of geology of the immediate area of the proposed development.

4.3.1 Artificial ground

This is ground at or near the surface that has been modified by man. It includes ground that has been deposited (Made Ground), landscaped, disturbed, excavated (Worked Ground) or some combination of these (Figure 6).

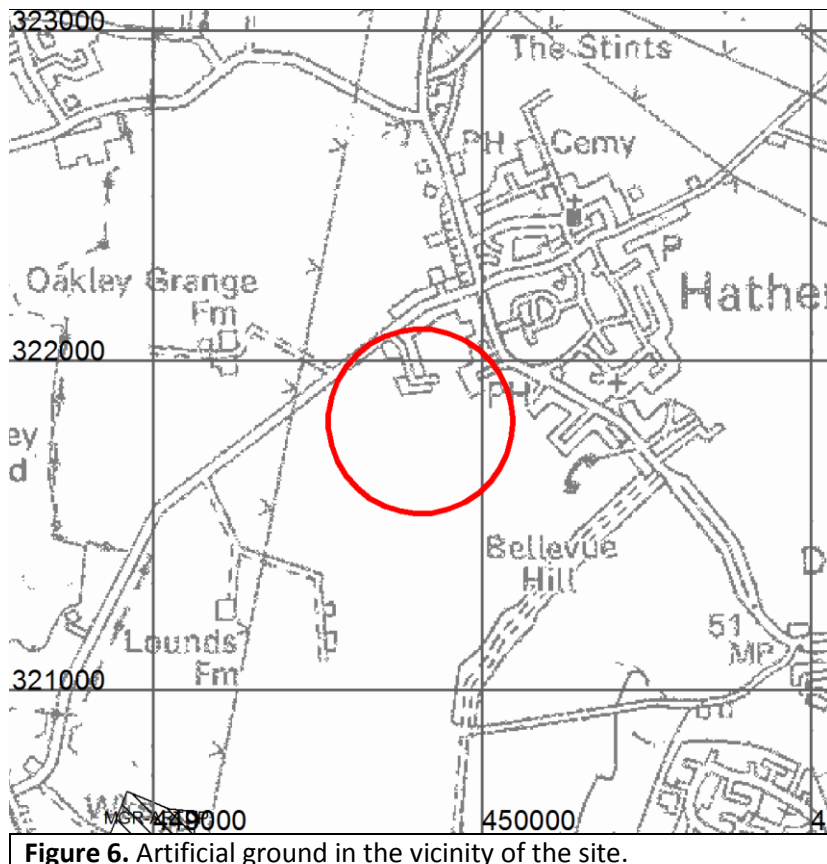





Figure 6. Artificial ground in the vicinity of the site.

Search area indicated in red

Map colour	Computer Code	Name of geological unit	Composition
	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

No Artificial ground is shown on the 1:50,000 scale data in this report within the site area and historic maps dated 1883 to 1938 show no development of the site. However, a more detailed, more recent map (1:10,000 scale) shows an area of Worked Ground within the centre of the site. This has been removed from the 1:50,000 scale data shown above because the area is too small to be shown clearly

at that scale. This Worked Ground represents a disused clay pit which is no longer visible on aerial photographs of the area. Elevation data show that the pit is represented by a depression in the ground surface, however it is likely that the pit was originally larger. The pit sides are likely to have degraded but the pit may also have been partially, or fully, infilled with industrial or agricultural waste with unknown and variable composition. It should be borne in mind that such deposits may well be highly variable in character and potentially locally compressible if consisting of constructional fill (e.g. crushed brick, wood, etc.). This area occurs at the top of the slope, at the north western boundary. It is still used as a site for agricultural waste to be stored and should not be used for burials but rather for a car park should this site be developed.

4.3.2 Superficial deposits

These are relatively young geological deposits formerly known as 'Drift', which lie on the bedrock in many areas. They include deposits such as unconsolidated sands and gravels formed by rivers and clayey tills formed by glacial action. They may be overlain by landslide deposits, by artificial deposits or both (Figure 7).

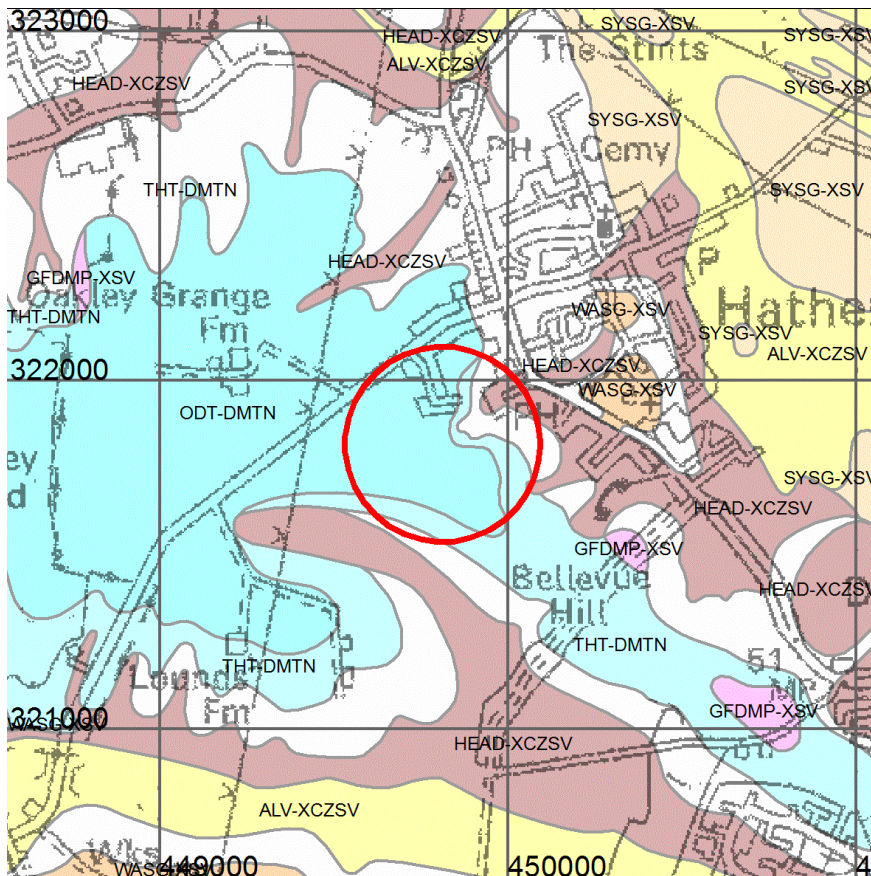









Figure 7. Superficial deposits in the vicinity of the site.

Search area indicated in red

Key to Superficial deposits:

Map colour	Computer Code	Name of geological unit	Composition
	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
	SYSG-XSV	SYSTON MEMBER	SAND AND GRAVEL
	WASG-XSV	WANLIP MEMBER	SAND AND GRAVEL
	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL
	ODT-DMTN	OADBY MEMBER	DIAMICTON
	THT-DMTN	THRUSSTON MEMBER	DIAMICTON

The western two thirds of the site is underlain by glacial till (a mixture of clay, pebbles and sand), divided into two members of the Wolston Formation of Pleistocene age. The Oadby Member is a grey, chalky till and overlies the Thrussington Member which is distinctively red-brown. The thickness of these tills is likely to vary but could be expected to be up to about 15 m in total. Till can be prone to shrink-swell behaviour.

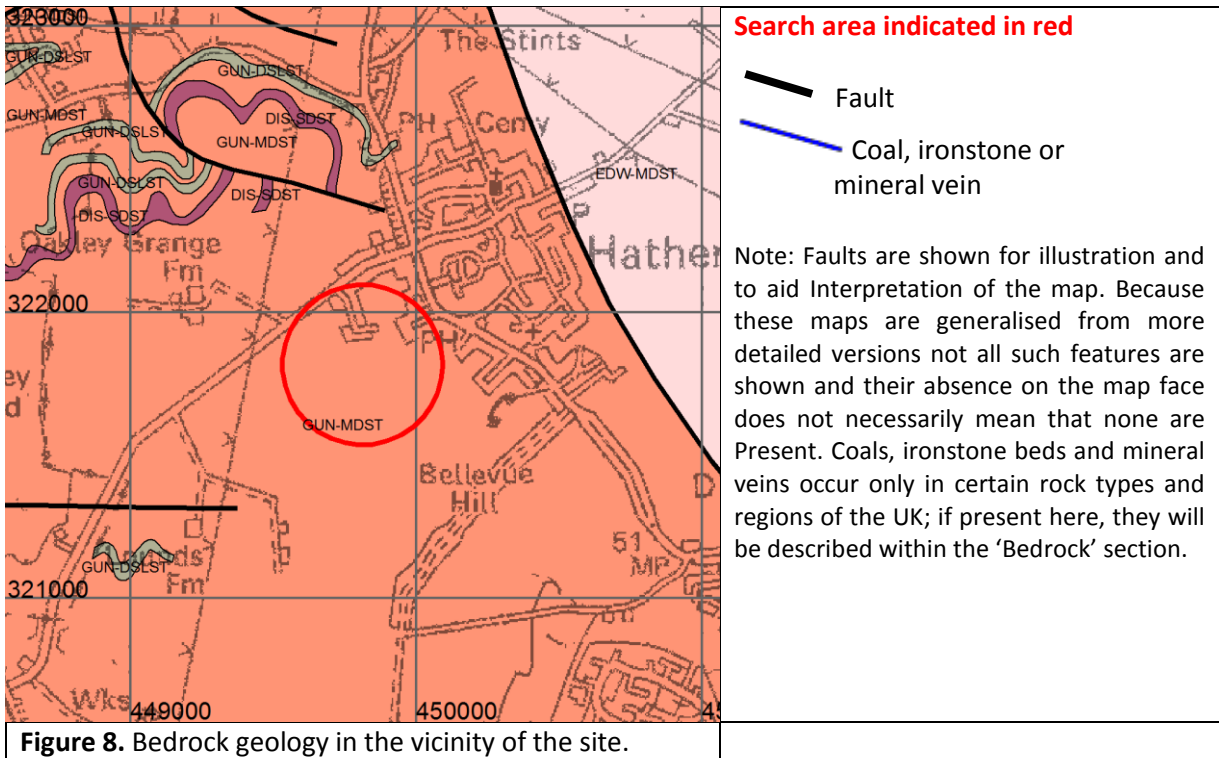
Head is present at the eastern edge of the site. This is a solifluction deposit of Quaternary age composed of poorly sorted sand, gravel, silt and clay. Within the site area, Head would not be expected to be more than about 1-3 m in thickness.

4.3.3 Rockhead depth

Bedrock is mapped at outcrop across the eastern third of the site, where rockhead is expected to be at or near the surface. Where superficial deposits are mapped, the depth to rockhead (base of superficial deposits) is not known with any degree of certainty, but it is likely to be in the range of 1 to 15 m, increasing westwards.

4.3.4 Bedrock geology

The site is underlain by the Gunthorpe Member of the Sidmouth Mudstone Formation (Mercia Mudstone Group) of Triassic age. The Gunthorpe Member consists of redbrown mudstone with subordinate dolomitic siltstone and fine-grained sandstone horizons, being greenish grey with common gypsum veins and nodules. It is likely in this area that the Gunthorpe Member is up to 75 m thick.



Key to Bedrock geology:

Map colour	Computer Code	Name of geological unit	Rock type
	EDW-MDST	EDWALTON MEMBER	MUDSTONE
	GUN-MDST	GUNTHORPE MEMBER	MUDSTONE
	GUN-DSLST	GUNTHORPE MEMBER	SILTSTONE, DOLOMITIC
	DIS-SDST	DISEWORTH SANDSTONE	SANDSTONE

4.3.5 Schematic geological cross-section

This sketch (Figure 9) represents an interpretation of the geometrical relationships of the main rock units described in the text. It is not to scale. The blue line indicates 'rockhead'; that is the base of superficial deposits. This is the 'geological rockhead', as distinct from the 'engineering rockhead', which is the base of 'engineering soil' (in the sense of BS5930:1999).

Not to scale

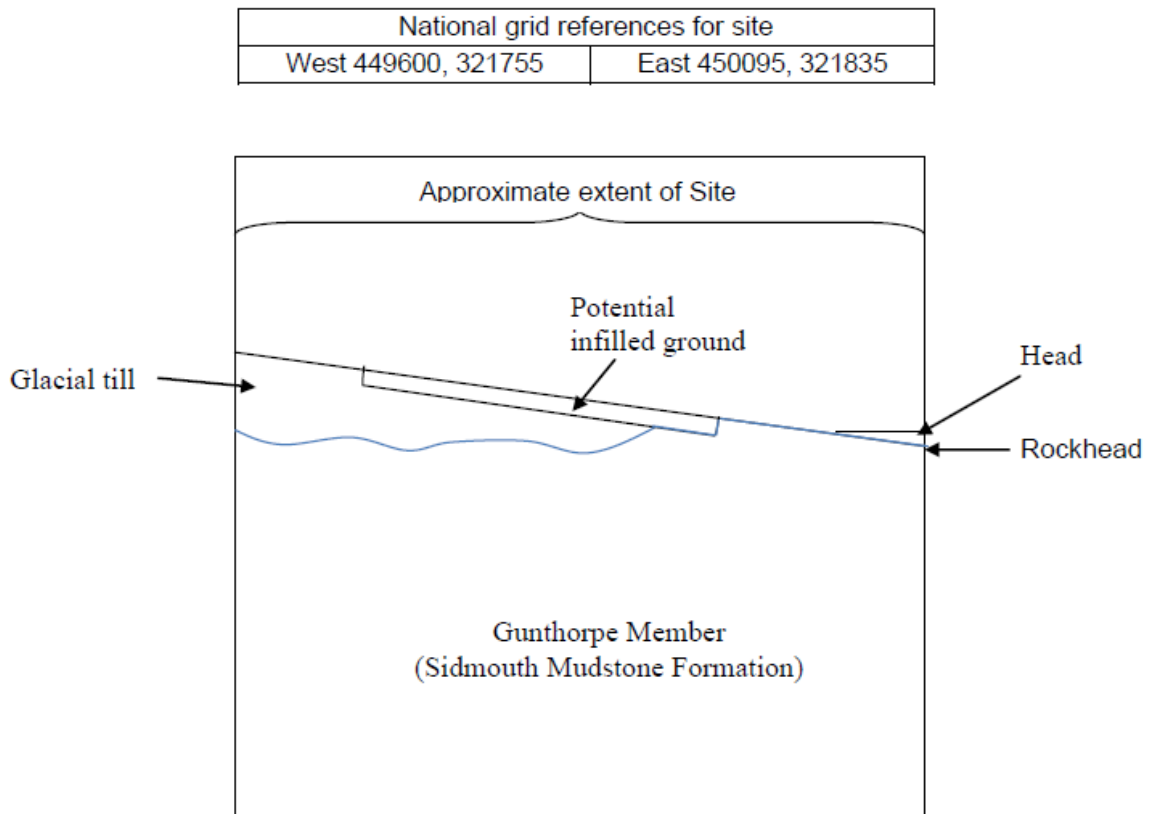
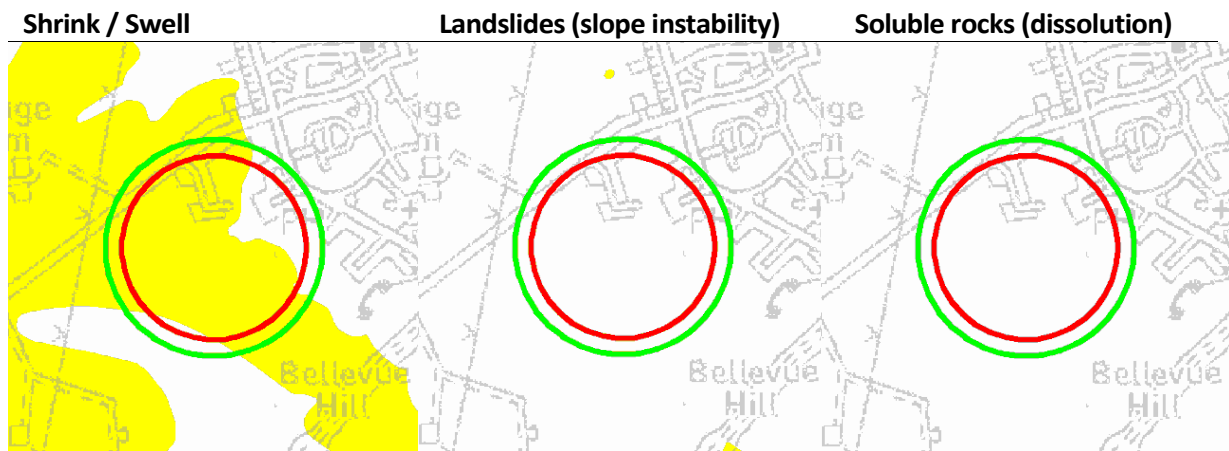


Figure 9. A schematic representation of the underlying geology.

4.4 Additional geological considerations

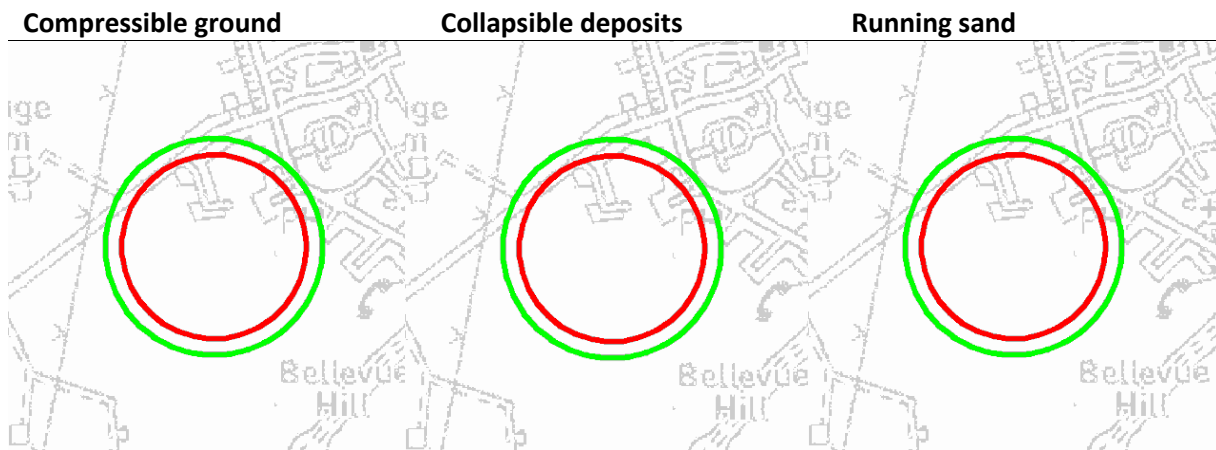
Figure 10. A summary of the geological hazards associated with the site.



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The hazard levels are described as A (least) to E (greatest), or as 'No Hazard'. Levels A and B are not considered significant and are not shown on the maps.



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The geological hazards found on the site are explained in Table 2.

Table 2. Geohazard summary

Geological hazard	May be significant within site area	Comments
Potential Natural Ground Stability Hazards		
Shrink-Swell	Yes	Level C = Potential for hazard to become active is at a level where it should be considered in decisions about construction, building maintenance and land use.
Landslides (slope instability)	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Soluble Rocks (dissolution)	No	Level A = Potential for hazard to be active is either zero or insignificant.
Compressible Ground	Yes	Level C = Potential for hazard to become active is at a level where it should be considered in decisions about construction, building maintenance and land use. This relates to the potentially infilled ground explained in the Artificial Ground section.
Collapsible Deposits	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Running Sand	No	Level B = Potential for hazard is not significant and is at a level such as to cause problems only in exceptional circumstances.
Other Potential Hazards		
Mining	No	None.
Flooding	No	None.
Natural Land Gas	No	Unlikely to encounter gas from bedrock and coal mining; unlikely to encounter gas from peat.
Radon		Level of protective measures: NO

4.5 Hydrogeology

In lowland areas of the UK with little topographic variation, groundwater is likely to be found at shallow depths of only a few metres. Water table fluctuations will be small as they will be constrained by the ground surface and the base level of the local perennial streams and rivers.

In upland areas, precipitation is usually high and the dominantly metamorphic and igneous rocks often have relatively shallow groundwater levels.

This is due to preferential groundwater storage in near-surface weathered and fractured zones with limited drainage into the underlying un-weathered lower permeability rock. Exceptions can occur where higher permeability rocks, such as sandstone or limestone, allow faster through flow of groundwater towards the nearest stream or other discharge point.

Perched water tables occur where a less permeable horizon (e.g. a clay layer) in an otherwise permeable sequence retains a body of groundwater above the level of the regional water table.

They usually occur at shallow depths in alluvial and glacial sediments and can be difficult to identify or to delimit.

An aquifer becomes confined when it is overlain by a less permeable horizon that restricts the upward movement of groundwater. When this less permeable horizon is penetrated (e.g. by drilling), the groundwater level rises above where struck to a level controlled by the hydrostatic pressure. If this is above ground level, overflowing artesian conditions will be encountered. Confined conditions should be anticipated, where possible, in order to plan for the problems they can generate.

Individual sites will always require more detailed assessments to determine the specific impact on groundwater resources. The maps represent conditions only at the ground surface. Where the soil and/or underlying formations have been disturbed or removed the vulnerability class may have been changed and site specific data will be required. Sites in urban areas and restored or current mineral workings are classified as having high (urban) soil leaching potential until proved otherwise.

The site lies on the Environment Agency's Groundwater Vulnerability Map of Leicestershire (Sheet 30). These maps have now been superseded by Aquifer Designation maps that are consistent with the Water Framework Directive, the explanation of which can be found at: <http://apps.environment-agency.gov.uk/wiyby/117020.aspx>. These classify the superficial deposits of head and glacial till, (Oadby Member and Thrussington Member) as secondary (undifferentiated) aquifers and the Gunthorpe Member bedrock as a secondary B aquifer.

The contents of any Infilled Ground, are unknown and extend to an unknown depth. It is possible that they may contain some groundwater, possibly contained by surrounding low permeability clay till and bedrock. However, it is also possible that some groundwater may move from the area of Infilled Ground, via more-permeable horizons, into other parts of the site. The two "issues" marked on the map (see "Setting" section above) appear within head deposits along valleys. They may purely be surface water related or could include a component of groundwater (indicating some potential for water movement through head deposits).

There is no borehole information in the vicinity. A line of site investigation-type boreholes along the M1 into till, about 1.5 km to west of the site, were all recorded as dry down to a maximum depth of 16.3 m. There are no mapped sandstone and siltstone horizons in the Gunthorpe Member present at the ground surface within the confines of the site.

The hydrological information for the site is summarised in Table 3.

Table 3. Hydrogeology summary

Geological unit	Groundwater potential	Water level and strikes	Quality	EA groundwater vulnerability classification
Potential infilled ground.	Unknown, will depend on composition of infill. If infill more permeable than the directly underlying till and bedrock, then it may contain some perched groundwater.	Unknown, but some possibly shallow groundwater may be present.	Unknown, but depending on nature of infill could potentially be of poor quality (contaminated).	Not classified.
Head	May contain small amounts of groundwater with intergranular flow.	No information, but if present water may be encountered at shallow depths along valley.	No information	Not shown on map.
Oadby Member	Not generally regarded as an aquifer, but may contain some groundwater in more sandy / gravelly horizons.	Likely to be dry unless sand and gravel horizons present.	No information but likely to be ferruginous and may be mineralised due to low permeability.	Low permeability superficial deposits, however some groundwater flow may still occur and this should be taken into consideration when assessing persistent pollutants.
Thrussington Member				
Gunthorpe Member (Sidmouth Mudstone Formation)	Not generally regarded as an aquifer but may contain groundwater in subordinate sandstone and siltstone horizons.	No information available, however some groundwater may be contained in the subordinate sandstone and siltstone horizons. Water levels may rise above where first struck.	No information, but likely to be hard and mineralised due to presence of gypsum in the rock.	Non-aquifer however some groundwater flow may still occur and this should be taken into consideration when assessing persistent pollutants.

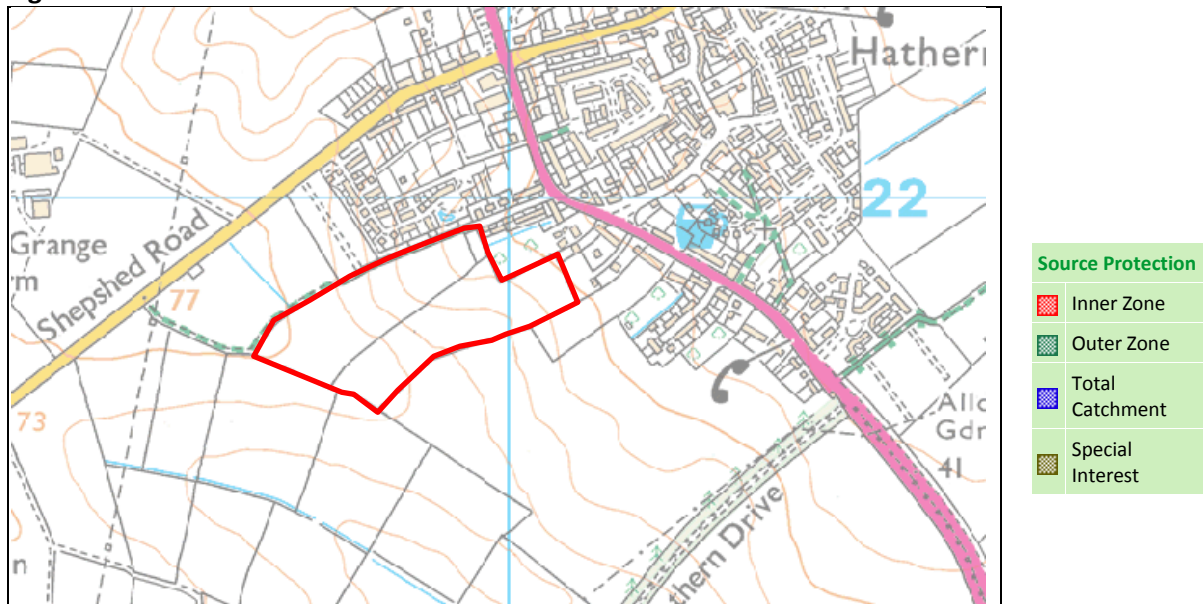
4.5.1 Groundwater vulnerability

This section reviews all components of hydrology, geology and top soil surface water drainage to assess risk notably to groundwater.

4.5.2 Source Protection Zones

The position of the site relative to current ground water protection zones is shown in Figure 11.

Figure 11. Groundwater Source Protection Zones associated with the site



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Source Protection Zones (SPZs) provide an indication of the risk to groundwater supplies that may result from potentially polluting activities and accidental releases of pollutants. Generally the closer the activity or release is to a groundwater source the greater the risk. Three zones (an inner, outer and total catchment) are usually defined although a fourth zone (zone of special interest) is occasionally defined.

The Agency has subdivided groundwater source catchments into four zones. Two of these are determined by the travel time of potential pollutants, the third by the source catchment area itself and the fourth is a "Zone of Special Interest". This fourth zone highlights areas where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

- *Zone I (Inner Protection Zone)* - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has, as a minimum, a 50-meter radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease.
- *Zone II (Outer Protection Zone)* - This zone is defined by the 400-day travel time, or 25% of the source catchment area, whichever is larger. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants.
- *Zone III (Total catchment)* - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.
- *Zone of Special Interest* - For some groundwater sources an additional Zone of Special Interest may be defined.

These zones highlight areas (mainly on non-aquifers) where known local conditions mean that potentially polluting activities could impact on a groundwater source even though the area is outside the normal catchment of that source.

The proposed development site lies outside any Groundwater Source Protection Zone.

4.5.3 Aquifer vulnerability

The Groundwater Vulnerability maps are produced at 1:100,000 scale. They show, by means of colour coding, those areas of the country where water-bearing rocks (aquifers) are present. They also show the vulnerability of groundwater to pollution. The aquifers are classified into major, minor and non-aquifers according to their physical properties and their consequent value as a resource.

The classification of the land surface reflects the ability of contaminants to leach through the covering soils and pose a potential risk to groundwater at depth. The maps also indicate areas where the presence of low permeability drift may provide additional groundwater protection.

These maps can therefore be used for an initial screening assessment of the vulnerability of groundwater to contaminants applied to the surface of the ground. They do not provide all information relevant to the determination of vulnerability, such as the depth to water table or nature of the drift deposits. Site-specific information would always be needed for a detailed assessment of vulnerability at a given location. The original groundwater vulnerability maps were produced some time ago.

Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have descriptions on them to explain the different aquifer and soil types.

Areas shown as "major aquifers" have strategic significance for water resource; they often support large abstractions for the public water supply.

Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.

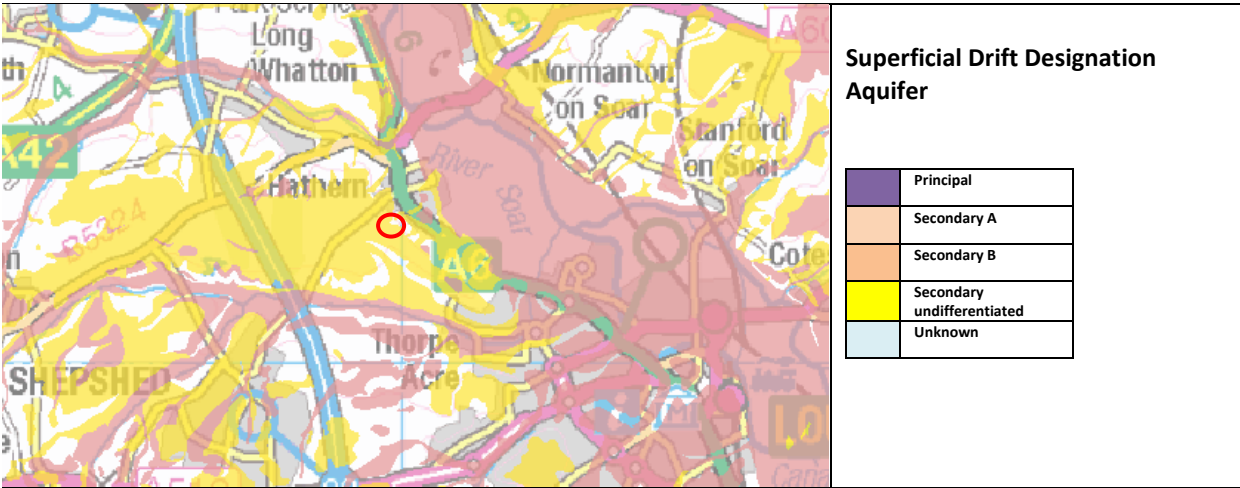


Figure 12. Superficial drift aquifer designation

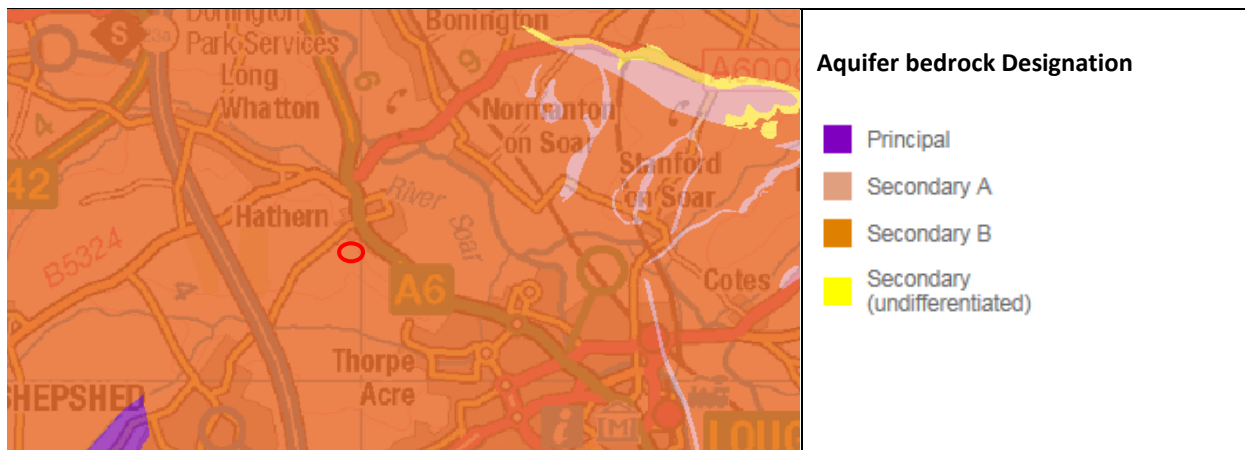


Figure 13. Bedrock aquifer designation

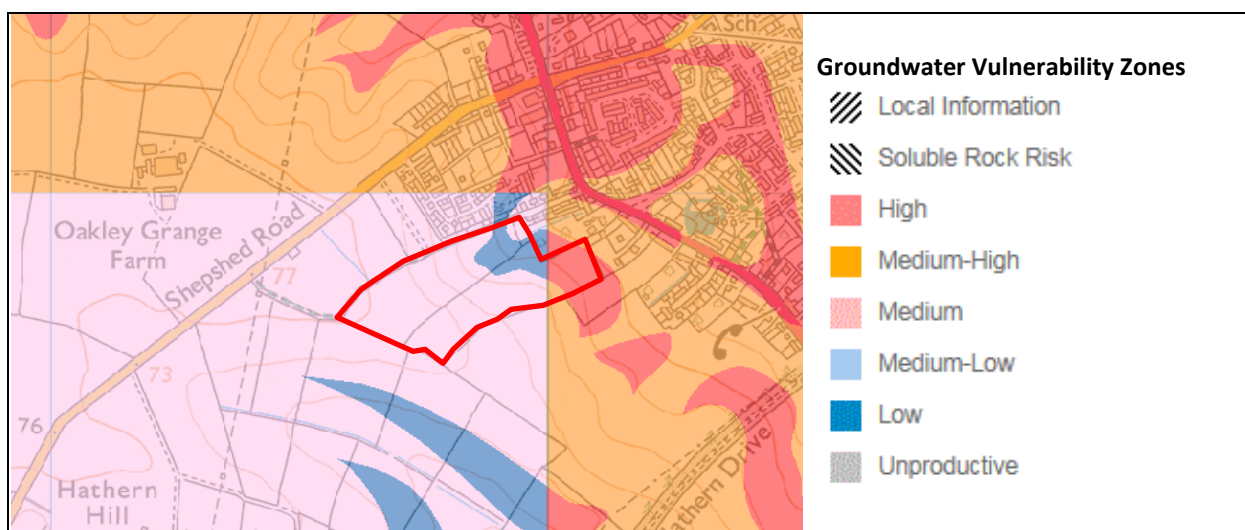


Figure 14. Groundwater vulnerability

Groundwater Vulnerability Maps provide information on how significant the ground waters are likely to be and if they are vulnerable to pollution occurring at the land surface. The maps have descriptions on them to explain the different aquifer and soil types. Areas shown as "major aquifers" have strategic significance for water resources, they often support large abstractions for the public water supply. Minor aquifers have a more localised significance to domestic, agricultural and industrial users (although they may still be used for drinking water). Non-aquifers do not store significant amounts of groundwater. However, in some areas they can support local supplies: e.g. small springs feeding individual properties.

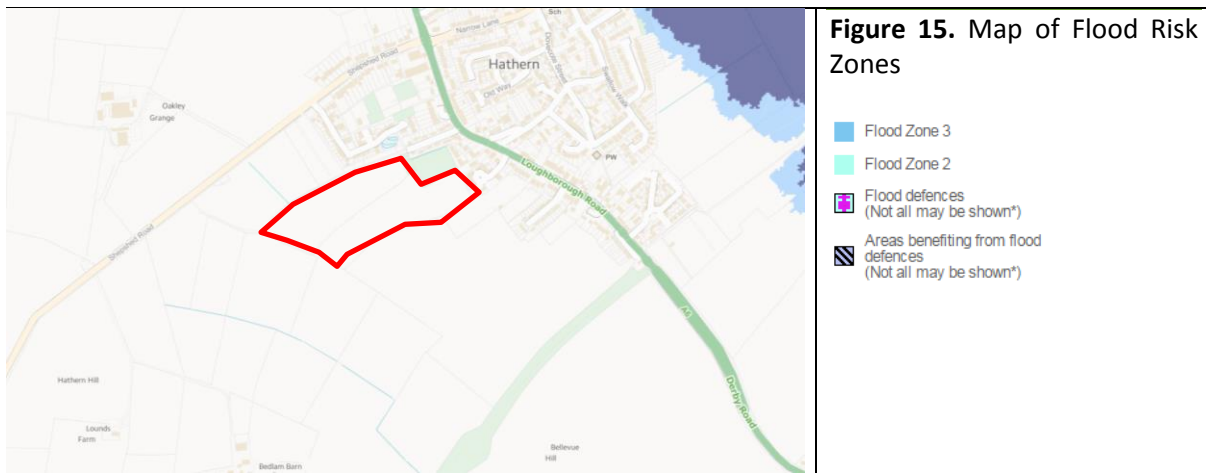
Major and minor aquifers may be important in contributing to the base-flow of streams and rivers. The maps show where groundwater is protected from above by rocks with a low permeability, such as glacial clay. They also show the characteristics of the soil above.

Superficial drift deposits which overlay the solid geological strata can sometimes be substantial in thickness. They are often variable in composition changing from highly permeable outwash gravels to low permeability clays over short distances both laterally and vertically. The presence of permeable drift deposits is recognised as Minor Aquifers except where these overlie a Major Aquifer and they then assume the status of a Major Aquifer.

The site is over a Secondary undifferentiated Aquifer associated with the superficial deposits and a Secondary B Aquifer associated with the bedrock. The site is classed as having a range of vulnerabilities from high to medium with most of the site either medium – high or medium vulnerability in respect to groundwater pollution. The site is not within a drinking water safeguard zone but is within a Surface Water Nitrate Vulnerable Zone.

4.5.4 Flood risk

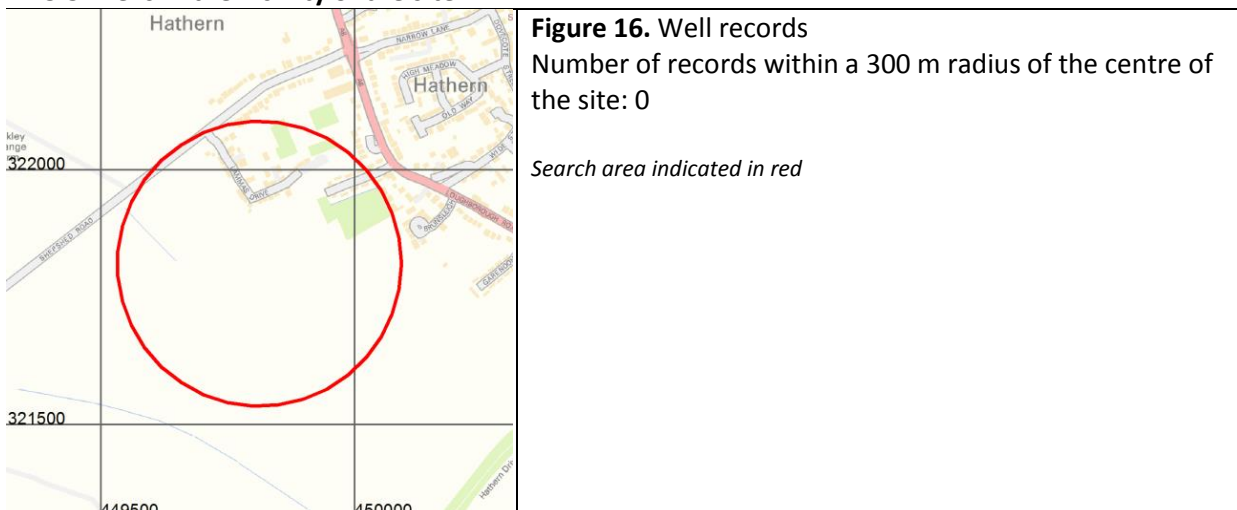
The site is within Flood Zone 1 land which is very low risk – less than 1 in 1000 in any given year (Figure 15). The site is not covered by flood warnings issued by the Environment Agency.



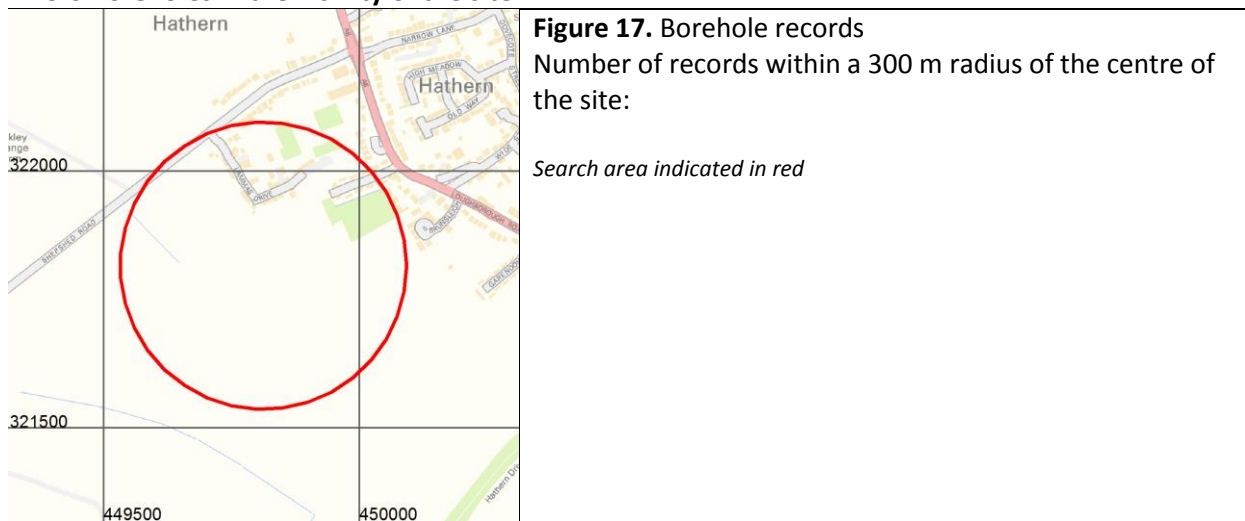
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If areas of impermeable surfaces such as buildings, roads etc. are constructed on a greenfield site, a surface water management system designed in accordance with the principles of Sustainable Urban Drainage Schemes (SUDS) will be required.

4.5.5 Wells in the vicinity of the site



4.5.6 Boreholes in the vicinity of the site

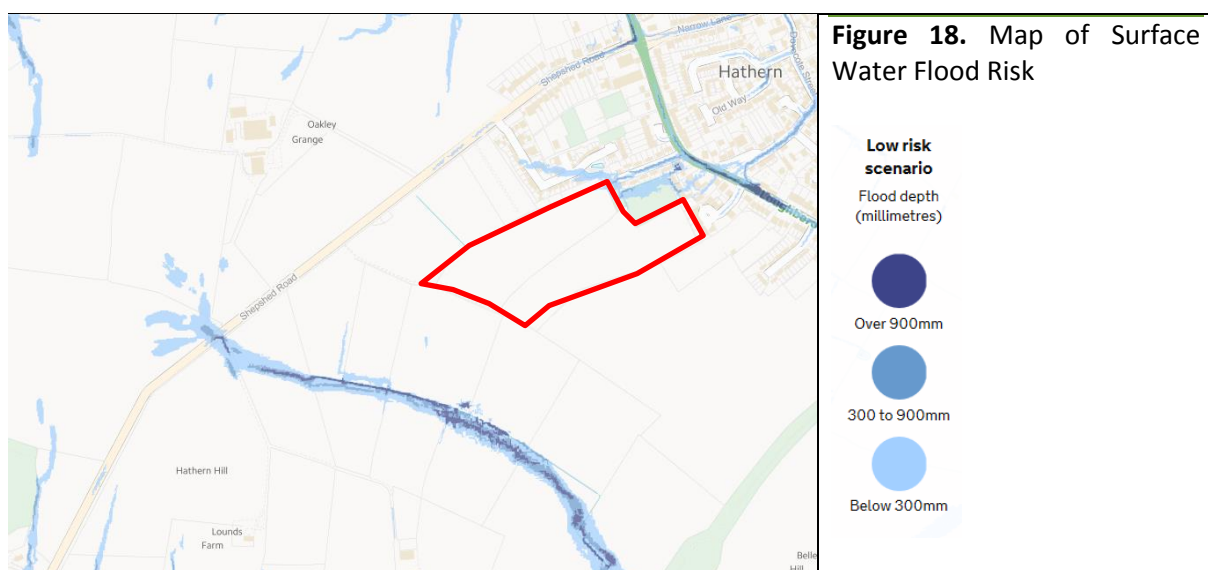


4.6 Meteorological data

The agro climatic index number for this site is 22E with a mean annual rainfall of 627 mm, the Standard Average Annual Rainfall (SAAR) for the site itself is 631 mm.

4.7 Surface water issues

The site has a very low risk (less than 0.1% chance) of surface water flooding occurring in any year. Occasionally poor surface water drainage associated with these soils may lead to wet conditions under foot when there is prolonged rainfall, however this is likely to be limited in extent and most problematic along the downslope edge of the site. Any works which might increase the risk of flooding on or off site need to be identified and the risks assessed and mitigated using a suitable SUDS compliant approach.



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5.0 Pollutant risk

Due to the approximately 60 per annum number of full burials at the site, the cumulative ammoniacal nitrogen concentrations are likely to be high with similar levels of total organic compounds (TOC).

Pathogens

There has been some evidence from recent studies of the occurrence of Enterococci and Clostridium bacteria found in drainage water of cemeteries. Enterococci are bacteria that are commonly found in the bowel of normal healthy individuals. They can cause a range of illnesses including urinary tract infections, bacteraemia (blood stream infections) and wound infections.

The two most common species of Enterococci are *E. faecalis* and *E. faecium*. During the mid-1980s, enterococci with resistance to glycopeptide antibiotics such as vancomycin and teicoplanin emerged, termed glycopeptide-resistant enterococci (GRE). Most GRE are *E. faecium*.

Due to the nature of the soil and geomorphology, there is unlikely to be much movement of pathogenic organisms, notably *Pseudomonas aeruginosa* and Faecal streptococci, other than where burials coincide with any sand lenses that connect to the adjacent watercourses and given the presence only of a shallow field ditch and the highly localised nature of any sand lenses, this is considered unlikely. However pathogens tend to be short lived away from the host and if there is no immediate ground water risk or potable well supply, the risk may therefore be considered acceptably low. This site is underlain by a Secondary Undifferentiated Aquifer in relation to the superfcials and a Secondary B Aquifer associated with the bedrock. Pollutants entering groundwater within the superficial deposits may be in hydraulic continuity with the water providing base flow to the adjacent streams but again, due to the highly localised nature of any sand lenses and the general lack of perched water this is considered unlikely. The Secondary B Aquifer associated with the bedrock is reasonably well protected by both the depth of superfcials and the relatively low permeability of the superficial deposits.

Post-burial accumulation of water around a coffin is unlikely to be an issue in these soils but to minimise this and the risks thereafter faced on re-opening a grave it is suggested that backfill over a new burial be compacted well to minimise infiltration through to the burial itself.

6.0 Depth of burial

Based on data from the British Geological Survey and from the trial digs, the site is overlain by soils derived from silt and some clay but which also contains locally variable sand lenses. Typically such soils are moderately to poorly drained and prone to structural damage if worked when wet. Digging is unlikely to be impacted by the presence of hard rock but running sands may prevent burials if perched water is encountered in any sandy lenses which occur within burial depth.

7.0 Archaeology

It is recommended that consultation with the county archaeological team be undertaken to ascertain any archaeological interest in the area.

8.0 Risk evaluation

Assessment of general hazards

The potential of a number of pollutant pathways and the degree of associated risk assessed numerically on a 0-10 score with 10 being the highest risk is shown in Table 4. From the resultant data, the final values are assessed against burial number and a determinant of risk calculated from EA flow charts and nomographs.

Table 4. Summary of pollution risk associated with the site

Risk	Assessment High, moderate, Low	Comment	Score
Burials per annum	Moderate	Expected to be around 60 per annum	
Drift / superficial data	Low	Clay, silt and sand dominated glacial till	4-3
Drift thickness	Low	Varies between 15m and 1m but the majority of the site between 3 and 5 m	4-3
Proximity to water course	High	Wet ditches flow along the western boundary – probably surface water fed, not groundwater.	8-7
Proximity to land drains	High	Shallow land drains present in field (0.5m)	8-7
Depth to Water Table	Low	Occasional water strikes within superfcials but volumes low and extent variable. No recorded groundwater struck within 16m of the surface.	4-3
Proximity to Wells or potable water source	Very Low	No wells within 500 m radius	2-1
Flow mechanism	Low	Generally Intergranular flow through clay, silt and sand, though flow rates may be locally fast.	4-3
Aquifers	Low	Secondary undifferentiated aquifer over a Secondary B / non aquifer with low vulnerability	4-3
SPZ	Very Low	The site for development lies outside any SPZ	2-1
Met data	Moderate	Annual rainfall moderate	N/A
Proximity to housing	Low	Residential housing in close proximity of the site	N/A
SSSI	Low		N/A
Archaeology	Low	None observed but will require County Archaeologist assessment	N/A
		Total	40-31

Table 4 is assessed using the groundwater vulnerability-ranking criteria in Table 5. The total score comes to 40 - 31 and is considered as a low to moderate risk. These data are then assessed against the burial rate of 60 per annum on the groundwater risk nomograph p.37 of PP223. The final assessment of risk for this site according to the nomograph (Figure 19), would class it as being **High**.

Table 5. Groundwater ranking

Ranking	Very Low 2-1	Low 4-3	Moderate 6-5	High 8-7	Very High 10-9
Drift Type	Clay	Silt	Silty sand	Sand/gravel	Absent
Drift Thickness	>5 m	>3-5 m	3 m	0-3 m	Absent
Depth to water Table	>25 m	11 – 25 m	10 m	5 – 9 m	<5m
Flow mechanism	Intergranular				Fissured
Proximity to wells					Within 250 m from private potable supply
Aquifer type	Non Aquifer		Minor aquifer		Major aquifer
Abstractions and SPZs	Outside Zone 3	Within Zone 3	Close boundary to of Zone 2	Within Zone 2	Within Zone 1
Water courses and springs		>100 m	>50 <70 m	>30 <50 m	<30 m
Drains	>100 m	>40 <100 m	30 – 40 m	>10 <30 m	<10 m

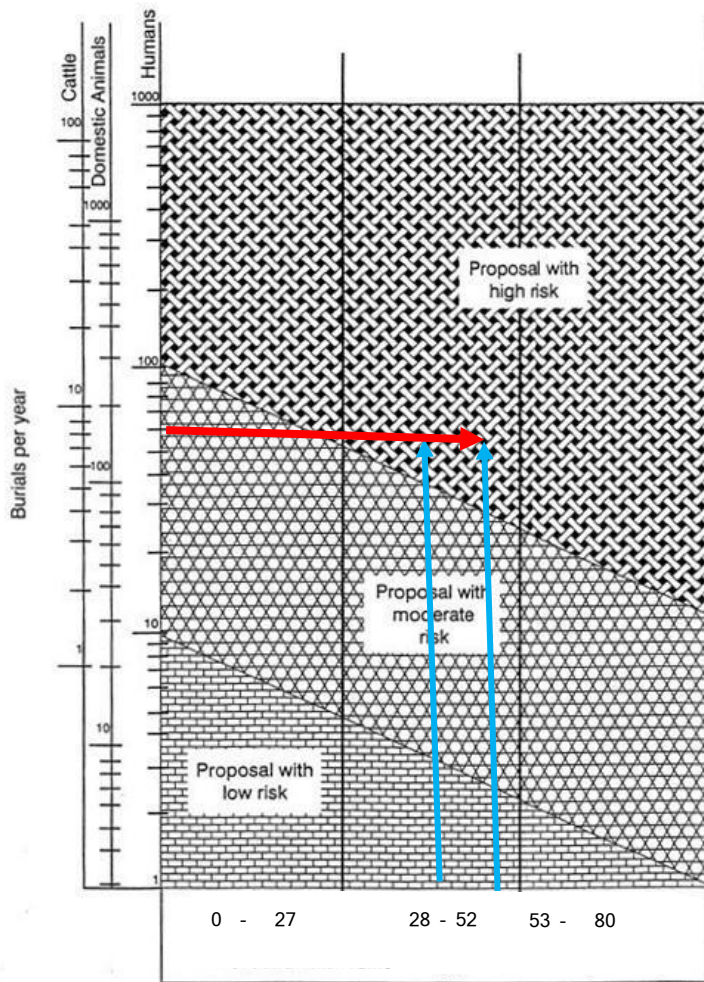


Figure 19. Groundwater risk nomograph

9.0 Conclusion

The site is considered to be **High risk** with the risk mainly attributed to the predicted burial numbers.

Given that burials are likely to be into the silt and clay-dominated superficial deposits and that no groundwater was struck within 3.5m of the surface (1.7m of the base of a double burial) the risk to groundwater is somewhat mitigated as the silty clay is slowly permeable and will increase pollutant retention time and will also remove some ammonium through cation exchange. Though the source of pollutants is present in the form of burials and the receptor is present in the form of the groundwater and any surface water which it might feed, the pathway is likely to be slow and tortuous due to the presence of the silty clay. To ascertain the nature and extent of any risk more precisely, flux modelling of the major pollutants ammonium and nitrate will be required.

Some low volume perched water was struck towards the top of the hill which may make burials in this area practically difficult. In addition, the presence of an infilled pit at the top of the site further reduces the utility of this area for burials though this area could be used for a car park or similar infrastructure. This is because the nature of the infill is uncertain and it may contain perched water within it making burials difficult.

Where burials take place only in the silty clay dominated soils, water may gather around burials making re-opening potentially difficult. This can be mitigated by compacting backfill over recent burials firmly to reduce the risk of infiltration through the disturbed back-fill material.

By way of grave-specific mitigation if needed, the addition of Zeolitic compounds could be added to the base of graves. Zeolites such as Clinoptilolite have CEC values exceeding 150 meq/l and when placed in the base of the grave will absorb significant amounts of Ammonium via cation exchange processes in addition to the existing capacity of the clay soil (Rozic et al 2009).

Calculations would suggest that at least 90% of the human nitrogen (1.8 kg) release could be absorbed by 150 kg of Clinoptilolite or a high CEC clay material such as Bentonite.

The site has complex micro-topography which would require extensive groundworks to create a surface which works efficiently as a cemetery. This will add cost and complexity to the project.

10.0 Reporting details

Report Author: Mr Alex Vickers

Verification: Mr Justin Smith

Date: 28.1.18

Cemetery Development Services - Terms and Conditions

Cemetery Development Services (CDS)
Terms and Conditions for the Supply of Services

Interpretation

In these Conditions

AGREED FEE means the charges agreed between CDS and the Client in relation to the Specified Service

CLIENT means the person named on the Specification Sheet for whom CDS has agreed to provide the Specified Service in accordance with these Conditions

CONTRACT means the contract for the provision of the Specified Service

DOCUMENT includes, in addition to a document in writing, any map, plan, graph, drawing or photograph, any film, negative, tape or other device embodying visual images and any disc, tape or other device embodying any other data

INPUT MATERIAL means any Documents or other materials, and any data or other information provided by the Client relating to the Specified Service

OUTPUT MATERIAL means any Documents or other materials, and any data or other information provided by CDS relating to the Specified Service

SPECIFICATION SHEET means the sheet to which these Conditions are appended

SPECIFIED SERVICE means the service relating to geophysical surveys of land to be provided by CDS for the Client and referred to in the Specification Sheet

CDS means CDS (registered in England under number 05089827) or its subsidiary as stated on the Specification Sheet

The headings in these Conditions are for convenience only and shall not affect their interpretation.

Supply of the Specified Service

CDS shall provide the Specified Service to the Client subject to these Conditions. Any changes or additions to the Specified Service or these Conditions must be agreed in writing by CDS and the Client.

The Client shall allow CDS adequate access to its property at reasonable times and for so long as is necessary to enable CDS to provide the Specified Service in accordance with the Contract.

The Client shall at its own expense supply CDS with all necessary Documents or other materials, and all necessary data or other information relating to the Specified Service, within sufficient time to enable CDS to provide the Specified Service in accordance with the Contract. The Client shall ensure the accuracy of all Input Material.

CDS shall have no liability for any loss or damage, however caused, to the Input Material. All Output Material shall be at the sole risk of the Client from the time of delivery to or to the order of the Client.

The Specified Service shall be provided in accordance with the Specification Sheet subject to these Conditions.

Further details about the Specified Service, and advice or recommendations about its provision or utilisation, which are not given in CDS's brochure or other promotional literature, may be made available on written request.

CDS may correct any typographical or other errors or omissions in any brochure, promotional literature, quotation or other document relating to the provision of the Specified Service without any liability to the Client.

CDS may at any time without notifying the Client make any changes to the Specified Service which are necessary to comply with any applicable safety or other statutory requirements, or which do not materially affect the nature or quality of the Specified Service.

Charges

Subject to any special terms agreed, the Client shall pay the Agreed Fee and any additional sums which are agreed between CDS and the Client for the provision of the Specified Service or which, in CDS's sole discretion, are reasonably incurred as a result of the Client's instructions or lack of instructions, the inaccuracy of any Input Material or any other cause attributable to the Client.

All charges quoted to the Client for the provision of the Specified Service are exclusive of any Value Added Tax, for which the Client shall be additionally liable at the applicable rate from time to time.

CDS shall be entitled to invoice the Client on completion of the Specified Service.

The Agreed Fee and any additional sums payable shall be paid by the Client (together with any applicable Value Added Tax, and without any set-off or other deduction) within 30 days of the date of CDS's invoice.

If payment is not made on the due date, CDS shall be entitled, without limiting any other rights it may have, to charge interest on the outstanding amount (both before and after any judgment) at the rate of 4 % above the base rate from time to time of Barclays Bank plc from the due date until the outstanding amount is paid in full.

Rights in Input Material and Output Material

The property and any copyright or other intellectual property rights in:

any Input Material shall belong to the Client

any Output Material and any amendments or variations to the Input Material made by CDS shall, unless otherwise agreed in writing between the Client and CDS, belong to CDS, subject only to the right of the Client to use the Output Material for the purposes of utilising the Specified Service.

Any Input Material or other information provided by the Client which is so designated by the Client and any Output Material shall be kept confidential by CDS, and all Output Material or other information provided by CDS which is so designated by CDS shall be kept confidential by the Client; but the foregoing shall not apply to any Documents or other materials, data or other information which are public knowledge at the time when they are so provided by either party, and shall cease to apply if at any future time they become public knowledge through no fault of the other party.

The Client warrants that any Input Material and its use by CDS for the purpose of providing the Specified Service will not infringe the copyright or other rights of any third party, and the Client shall indemnify CDS against any loss, damages, costs, expenses or other claims arising from any such infringement.

Warranties and Liability

CDS warrants to the Client that the Specified Service will be provided using reasonable care and skill and, as far as reasonably possible, in accordance with the Specification and at the intervals and within the times referred to in the Specification Sheet. Where CDS supplies in connection with the provision of the Specified Service any goods (including Output Material) supplied by a third party, CDS does not give any warranty, guarantee or other term as to their quality, fitness for purpose or

otherwise, but shall, where possible, assign to the Client the benefit of any warranty, guarantee or indemnity given by the person supplying the goods to CDS.

CDS shall have no liability to the Client for any loss, damage, costs, expenses or other claims for compensation arising from any Input Material or instructions supplied by the Client which are incomplete, incorrect, inaccurate, illegible, out of sequence or in the wrong form, or arising from their late arrival or non-arrival, or any other fault of the Client.

Except in respect of death or personal injury caused by CDS's negligence, or as expressly provided in these Conditions, CDS shall not be liable to the Client by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, for any loss of profit or any indirect, special or consequential loss, damage, costs, expenses or other claims (whether caused by the negligence of CDS, its servants or agents or otherwise) which arise out of or in connection with the provision of the Specified Service or their use by the Client, and the entire liability of CDS under or in connection with the Contract shall not exceed the amount of CDS's charges for the provision of the Specified Service, except as expressly provided in these Conditions.

CDS shall not be liable to the Client or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of CDS's obligations in relation to the Specified Service, if the delay or failure was due to any cause beyond CDS's reasonable control.

Termination

Either party may (without limiting any other remedy) at any time terminate the Contract by giving written notice to the other if the other commits any breach of these Conditions and (if capable of remedy) fails to remedy the breach within 30 days after being required by written notice to do so.

Insolvency of Client

This clause applies if:

the Client makes any voluntary arrangement with its creditors or (being an individual or firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or an encumbrancer takes possession, or a receiver is appointed, of any of the property or assets of the Client; or

the Client ceases, or threatens to cease, to carry on business; or

CDS reasonably apprehends that any of the events mentioned above is about to occur in relation to the Client and notifies the Client accordingly.

If this clause applies then, without prejudice to any other right or remedy available to CDS, CDS shall be entitled to cancel the Contract or suspend any further provision of services under the Contract without any liability to the Client, and if the Services have been provided but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

General

These Conditions (together with the terms, if any, set out in the Specification Sheet) constitute the entire agreement between the parties, supersede any previous agreement or understanding and may not be varied except in writing between the parties. All other terms and conditions, express or implied by statute or otherwise, are excluded to the fullest extent permitted by law.

Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to the other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving the notice.

No failure or delay by either party in exercising any of its rights under the Contract shall be deemed to be a waiver of that right, and no waiver by either party of any breach of the Contract by the other shall be considered as a waiver of any subsequent breach of the same or any other provision.

If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part, the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected.

Any dispute arising under or in connection with these Conditions or the provision of the Specified Service shall be referred to arbitration by a single arbitrator appointed by agreement or (in default) nominated on the application of either party by the President for the time being of Institute of Arbitrators.

English law shall apply to the Contract, and the parties agree to submit to the non-exclusive jurisdiction of the English courts.