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# **Sustainability Appraisal of the Hertsmere Local Plan: Potential Sites for Housing and Employment**

## **Sustainability Appraisal Report**

Prepared by LUC  
October 2018

Draft Only

**Project Title:** Sustainability Appraisal of the Hertsmere Local Plan

**Client:** Hertsmere Borough Council

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Planning & EIA  
Design  
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# 1 Introduction

- 1.1 This Sustainability Appraisal Report has been prepared by LUC on behalf of Hertsmere Borough Council as part of the integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Hertsmere Local Plan.
- 1.2 This report presents an assessment of the potential sites for housing and employment being considered for inclusion in the emerging Hertsmere Local Plan.

## Context for the Hertsmere Local Plan

- 1.3 Hertsmere is located in southern Hertfordshire on the outer fringes of London and borders the London Boroughs of Barnet, Harrow and Enfield as well as Welwyn Hatfield, Three Rivers, Watford and St Albans Councils. The population of the Borough is primarily concentrated within the four main settlements of Borehamwood, Bushey, Potters Bar and Radlett, in addition to a number of smaller settlements including Aldenham, Elstree, Letchmore Heath, South Mimms, Ridge and Shenley. The Borough has good road and rail links with mainline stations at Elstree and Borehamwood, Potters Bar and Radlett (with Bushey just outside the Borough), as well the M25 running through the Borough with two junctions (23 and 24), the M1, A1(M) and A41.
- 1.4 Nearly 80% of the 100km<sup>2</sup> (38.6 sq. miles) of the Borough comprises land in the Metropolitan Green Belt. Minor amendments to the Green Belt boundary were made in 2016, following the adoption of the Site Allocations and Development Management Policies Plan, resulting in the former Shenley Hospital site (developed for housing in the 1990s) being taken out of the Green Belt as well as an area of safeguarded land for employment (approximately 17 hectares) at Rowley Lane, Borehamwood, along with a number of smaller boundary alterations. The majority of the Borough is located within the Watling Chase Community Forest and despite its proximity to London; there is a predominantly rural character to much of the Borough. There are a number of 'Gateway Sites' to the Watling Chase Community Forest, which provide car free points of entry to the Forest's network of paths and routes, some of which are experiencing significant development and traffic pressure.
- 1.5 Hertsmere has a population of just over 100,000, with a high employment rate and a large proportion of small businesses. The area remains a major hub for UK and international film and TV production in the form of Elstree Studios and BBC Elstree, both located in Borehamwood. A number of nationally significant research institutions are also based in the Borough including the National Institute for Biological Standards and Control (NIBSC), Bio Products Laboratory and Cancer Research UK/University College London.

## The Local Plan

- 1.6 Hertsmere Borough Council is currently preparing a new Local Plan to guide development in the Borough over the next 15 years. Once adopted, the new Local Plan will replace the Hertsmere Local Plan (2012-2027) which consists of the Core Strategy (adopted January 2013), the Elstree Way Corridor Area Action Plan (adopted July 2015), the Site Allocations and Development Management Policies Plan (adopted November 2016) and the Policies Map (published November 2016).
- 1.7 The Core Strategy sets out the Council's vision for the Borough to 2027, providing the foundation for decisions on planning applications and development proposals affecting the area. The adopted Core Strategy seeks to strike a balance between the Borough's housing and economic development needs, social welfare and protection of the environment. The Site Allocations and

Development Management Policies Plan sets out detailed proposals and policies by which the Council sees the aims and objectives of the Core Strategy being best achieved.

- 1.8 The new Local Plan will set out the vision and objectives for the future of Hertsmere up to 2034, and will reconsider housing and employment needs. It will allocate sites for housing, employment and other forms of development and will set out development management policies for the Borough up to 2034.
- 1.9 Having completed a joint Strategic Housing Market Assessment (SHMA) and Economic Study, a Stage 1 Green Belt Assessment and a Gypsy and Traveller Accommodation Needs Study, various other evidence documents are being prepared to support the Local Plan, including a Strategic Flood Risk Assessment, a Stage 2 Green Belt Assessment, an Indoor Sports and Outdoor Playing Field Strategy, a joint Water Cycle Study, a Housing and Employment Land Availability Assessment and a joint Town Centres and Shopping Study. There are also a number of supporting studies jointly commissioned with neighbouring or other authorities including a Green Arc Strategic Green Infrastructure Plan, a Hertfordshire Green Infrastructure Study, a Retail Study and a Hertfordshire Infrastructure and Investment Strategy. A significant amount of the technical work previously commissioned or currently being prepared is being undertaken jointly with neighbouring authorities in South West Hertfordshire, who form part of a common Housing Market Area and Functional Economic Market Area.
- 1.10 The Council intends to consult on five stages of the Local Plan as follows:
  - Issues and Options (February 2018).
  - Potential Sites for Housing and Employment (October 2018)(which this document relates to).
  - Consultation Draft.
  - Proposed Submission Local Plan, also known as Publication or Regulation 19 stage.

## Sustainability Appraisal and Strategic Environmental Assessment

- 1.11 Sustainability Appraisal is a statutory requirement of the Planning and Compulsory Purchase Act 2004. It is designed to ensure that the Plan preparation process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process involves appraising the likely social, environmental and economic effects of the policies and proposals within a plan from the outset of its development.
- 1.12 Strategic Environmental Assessment (SEA) is also a statutory assessment process, required under the SEA Directive<sup>1</sup>, transposed in the UK by the SEA Regulations (Statutory Instrument 2004, No 1633). The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment and which set the framework for future consent of projects requiring Environmental Impact Assessment (EIA)<sup>2</sup>. The purpose of SEA, as defined in Article 1 of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans....with a view to promoting sustainable development'*.
- 1.13 SEA and SA are separate processes but have similar aims and objectives. Simply put, SEA focuses on the likely environmental effects of a plan whilst SA includes a wider range of considerations, extending to social and economic impacts. National Planning Practice Guidance<sup>3</sup> shows how it is possible to satisfy both requirements by undertaking a joint SA/SEA process, and to present an SA report that incorporates the requirements of the SEA Regulations. The SA/SEA of the Hertsmere Local Plan is being undertaken using this integrated approach and throughout this report the abbreviation 'SA' should therefore be taken to refer to 'SA incorporating the requirements of SEA'.

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<sup>1</sup> SEA Directive 2001/42/EC

<sup>2</sup> Under EU Directives 85/337/EEC and 97/11/EC concerning EIA.

<sup>3</sup> <http://planningguidance.planningportal.gov.uk/>

## Habitats Regulations Assessment

- 1.14 Under Article 6 (3) and (4) of the Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) land-use plans, including Development Plan Documents, are also subject to Habitats Regulations Assessment (HRA). The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European site and to ascertain whether it would adversely affect the integrity of that site.
- 1.15 The HRA for the Hertsmere Local Plan is being undertaken by LUC on behalf of the Council. While the HRA is reported on separately to the SA, the findings are taken into account in the SA where relevant (for example to inform judgements about the likely effects of the Local Plan on biodiversity).

## Structure of this Report

- 1.16 This report provides a record of the assessment of the potential sites for housing and employment for the Hertsmere Local Plan. **Table 1.1** below signposts how the requirements of the SEA Regulations have been met within this report.

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

SEA Regulation Requirements	Where covered in this SA report
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Art. 5 and Annex I):	
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes	<b>Chapter 3 and Appendix 3</b>
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	<b>Chapter 3 and Appendix 4</b>
c) The environmental characteristics of areas likely to be significantly affected	<b>Chapter 3 and Appendix 4</b>
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	<b>Chapter 3 and Appendix 4</b>
e) The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation	<b>Chapter 3 and Appendix 3</b>
f) The likely significant effects on the environment, such as issues on biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects)	<b>Chapter 4</b>



SEA Regulation Requirements	Where covered in this SA report
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	<b>Chapter 4</b> This will be further considered once the Council has selected which options to take forward.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	<b>Chapter 2</b> provides information about how the assessment was undertaken and difficulties encountered. <b>Chapter 2</b> also provides information about the Council's reasons for identifying the potential sites for housing and employment that are assessed in this document. Information about the reasons for selecting or rejecting site options will be included in the next iteration of the SA report once preferred options have been identified.
i) a description of measures envisaged concerning monitoring in accordance with Art. 10;	To be addressed once the Council has selected which options to take forward.
j) a non-technical summary of the information provided under the above headings	A separate non-technical summary document will be prepared to accompany the SA report for the next stage of the Local Plan.
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Art. 5.2)	Addressed throughout this SA report.
<b>Consultation:</b> <ul style="list-style-type: none"> <li>authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4)</li> </ul>	Consultation on the SA Scoping Report was undertaken between September and October 2017. Comments received and how these have been addressed are recorded in <b>Appendix 1</b> of this document.
<ul style="list-style-type: none"> <li>authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)</li> </ul>	Consultation is being undertaken in relation to the Hertsmere Local Plan and will continue to be for all future stages of the plan. The current consultation document is accompanied by this SA report.

SEA Regulation Requirements	Where covered in this SA report
<ul style="list-style-type: none"> <li>other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Art. 7).</li> </ul>	N/A
<b>Taking the environmental report and the results of the consultations into account in decision-making (Art. 8)</b>	
<p><b>Provision of information on the decision:</b> When the plan or programme is adopted, the public and any countries consulted under Art.7 must be informed and the following made available to those so informed:</p> <ul style="list-style-type: none"> <li>the plan or programme as adopted</li> <li>a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and</li> <li>the measures decided concerning monitoring (Art. 9)</li> </ul>	To be addressed after the Local Plan is adopted.
<b>Monitoring</b> of the significant environmental effects of the plan's or programme's implementation (Art. 10)	To be addressed after the Local Plan is adopted.
<b>Quality assurance:</b> environmental reports should be of a sufficient standard to meet the requirements of the SEA Directive (Art. 12).	This report has been produced in line with current guidance and good practice for SEA/SA and this table demonstrates where the requirements of the SEA Directive have been met.

1.17 This section has introduced the SA process for the Hertsmere Local Plan. The remainder of the report is structured into the following sections:

- **Chapter 2: Methodology** describes the approach that is being taken to the SA of the Local Plan.
- **Chapter 3: Sustainability Context for Development in Hertsmere** describes the relationship between the Hertsmere Local Plan and other relevant plans, policies and programmes; summarises the social, economic and environmental characteristics of the district and identifies the key sustainability issues.
- **Chapter 4: Sustainability Appraisal Findings for Potential Sites for Housing and Employment** summarises the SA findings for the site options.
- **Chapter 5: Conclusions** summarises the key findings from the SA of the potential sites for housing and employment and describes the next steps to be undertaken.

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

- **Appendix 1** presents the **consultation responses** that were received in relation to the SA Scoping Report and Issues and Options SA Report and explains how each one has been addressed.
- **Appendix 2** presents excerpts of the SA of the Issues and Options document that have been updated in response to consultation comments.
- **Appendix 3** presents the **review of relevant plans, policies and programmes**, including updates in response to comments on the SA Scoping Report.

- **Appendix 4** presents the **updated baseline information**, taking into account comments on the SA Scoping Report.
- **Appendix 5** presents the **assumptions** that were applied during the appraisal of the site options.
- **Appendix 6** presents the detailed **SA matrices** for potential sites for housing and employment.

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## 2 Methodology

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

**Table 2.1: Corresponding stages in plan making and SA**

<b>Local Plan Step 1: Evidence Gathering and Engagement</b>
SA stages and tasks
<b>Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope</b>
1: Identifying other relevant policies, plans and programmes, and sustainability objectives
2: Collecting baseline information
3: Identifying sustainability issues and problems
4: Developing the SA framework
5: Consulting on the scope of the SA
<b>Local Plan Step 2: Production</b>
SA stages and tasks
<b>Stage B: Developing and refining options and assessing effects</b>
1: Testing the Local Plan objectives against the SA framework
2: Developing the Local Plan options
3: Evaluating the effects of the Local Plan
4: Considering ways of mitigating adverse effects and maximising beneficial effects
5: Proposing measures to monitor the significant effects of implementing the Local Plan
<b>Stage C: Preparing the Sustainability Appraisal Report</b>
1: Preparing the SA Report
<b>Stage D: Seek representations on the Local Plan and the Sustainability Appraisal Report</b>
1: Public participation on Local Plan and the SA Report
2(i): Appraising significant changes
<b>Local Plan Step 3: Examination</b>
SA stages and tasks
2(ii): Appraising significant changes resulting from representations
<b>Local Plan Step 4 &amp; 5: Adoption and Monitoring</b>
SA stages and tasks
3: Making decisions and providing information
<b>Stage E: Monitoring the significant effects of implementing the Local Plan</b>
1: Finalising aims and methods for monitoring
2: Responding to adverse effects

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

### Stage A: Scoping

- 2.3 The SA process began with the production of a Scoping Report for the Hertsmere Local Plan, which was prepared by LUC on behalf of Hertsmere Borough Council in September 2017.

- 2.4 The Scoping stage of the SA involves understanding the social, economic and environmental baseline for the Plan area as well as the sustainability policy context and key sustainability issues. The Scoping Report presented the outputs of the following tasks:
- Policies, plans and programmes of relevance to the Local Plan were identified and the relationships between them were considered, enabling any potential synergies to be exploited and any potential inconsistencies and incompatibilities to be identified and addressed (see **Appendix 3**).
  - Baseline information was collected on environmental, social and economic issues in Hertsmere Borough Council. This baseline information provides the basis for predicting and monitoring the likely effects of options for policies and site allocations and helps to identify alternative ways of dealing with any adverse effects identified (see **Appendix 4**).
  - Key sustainability issues for Hertsmere were identified and their likely evolution without the implementation of the Local Plan was considered (see **Table 3.1**: ).
  - A Sustainability Appraisal framework was presented, setting out the SA objectives against which options and subsequently policies would be appraised. The SA framework provides a way in which the sustainability impacts of implementing a plan can be described, analysed and compared. It comprises a series of sustainability objectives and associated sub-questions that can be used to 'interrogate' options and policies drafted during the plan-making process. These SA objectives define the long-term aspirations of the district with regard to social, economic and environmental considerations. During the SA, the performances of the plan options (and later, policies) are assessed against these SA objectives and sub-questions (see **Table 2.2**).
- 2.5 Public and stakeholder participation is an important part of the SA and wider plan-making processes. It helps to ensure that the SA report is robust and has due regard for all appropriate information that will support the plan in making a contribution to sustainable development. The SA Scoping Report for the Local Plan was published for consultation between September and October 2017 with the three statutory consultees (Natural England, the Environment Agency and Historic England) and a number of other stakeholders identified by the Council.
- 2.6 **Appendix 1** lists the comments that were received during the consultation on the SA Scoping Report and describes how each one has been addressed during the preparation of this SA Report. In light of the comments received, a number of amendments were made to the review of plans, policies and programmes, the baseline information and the key sustainability issues. The updated versions of these are presented in this document. These parts of the Scoping Report will continue to be updated as necessary at each stage of the SA process to ensure that they remain up to date and reflect the current situation in Hertsmere Borough. A number of comments received in relation to the SA Scoping Report and the SA of the Issues and Options Local Plan also related to the SA framework, which prompted a small number of minor changes to the SA framework. These are demonstrated in **Table 2.2** with deletions from the version presented in the SA Scoping Report shown in ~~strikethrough~~ text and any additions shown as underlined text.
- 2.7 The review of plans, policies and programmes and the baseline information are summarised in **Chapter 3**. The full, updated review of plans, policies and programmes and the baseline information are included in **Appendix 3** and **Appendix 4**. These will continue to be updated to account for any new information in future iterations of the SA.
- 2.8 **Table 2.2** overleaf presents the updated SA framework for the Hertsmere Local Plan, which includes 15 SA objectives. The table also shows the appraisal questions and which SEA topics are relevant to each SA objective.

**Table 2.2: SA framework for the Hertsmere Local Plan<sup>4</sup>**

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<b>SA Objective 1</b>	<p><b><u>Education</u></b></p> <p>To improve access to education, training, opportunities for lifelong learning and employability</p>	<p>Provide new and improved education facilities, which will support raising attainment and the development of skills, leading to a work ready population of school and college leavers?</p> <p>Promote the development of education services that retain young people through further and higher education in order to develop and diversify the skills needed to make Hertsmere prosper?</p> <p>Create new opportunities to improve educational attainment, qualification levels and participation in education and training through access to existing or the provision of new educational infrastructure?</p>	Population
<b>SA Objective 2</b>	<p><b><u>Services</u></b></p> <p>To ensure ready access to essential services and facilities<sup>5</sup> for all residents</p>	<p>Provide new and enhance existing leisure facilities, where thresholds/standards require these?</p> <p>Create opportunities to lead healthier lifestyles, including development that enhances existing and /or makes provision for and maintenance towards open spaces, sports and recreational facilities e.g. publicly available pitches, allotments, swimming pools, courts, etc.?</p> <p>Provide new or enhanced local services to support new and growing communities?</p> <p>Provide for the specific needs of disabled and older people?</p>	Population, Human Health

<sup>4</sup> Wording that has been deleted following consultation on the SA Scoping Report is shown in ~~strikethrough~~ text, whereas any additional wording is shown as underlined text.

<sup>5</sup> Essential services and facilities relevant to this objective include those discussed in the appraisal questions, as well as education and health facilities, which are assessed via SA objective 1 and SA objective 5. This objective relates to overall accessibility to a range of services and facilities, whilst SA Objectives 1 and 5 relate to health and education specifically, and will primarily be assessed through consideration of proximity and provision of facilities.

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<b>SA Objective 3</b>	<p><b><u>Housing Provision</u></b></p> <p>To ensure the provision of housing, including affordable housing and a mix that meets local needs</p>	<p>Create developments that make significant contributions to local housing needs?</p> <p><u>Allocate sufficient sites to accommodate the objectively assessed housing need for the District, taking into account any housing need that cannot be met in neighbouring authorities, where appropriate?</u></p> <p><u>Provide a mix of housing suitable for a range of ages and household types, including families with children, older people, students, people with disabilities, service families, travellers, people who rent their homes and people wishing to commission or build their own homes?</u></p> <p>Provide genuinely affordable housing?</p>	Population, Material Assets, Human Health
<b>SA Objective 4</b>	<p><b><u>Community Cohesion</u></b></p> <p>To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces</p>	<p>Create well-designed developments with a sufficient critical mass or density to support local services and public transport provision?</p> <p>Reduce levels of crime, anti-social behaviour and the fear of crime through high quality design and intervention, i.e. street layout, public space provision, passive surveillance, lighting etc.?</p> <p>Make provision for religious places of worship in Shenley and Borehamwood?</p>	Population, Human Health
<b>SA Objective 5</b>	<p><b><u>Health</u></b></p> <p>To improve population's health and reduce inequalities</p>	<p>Provide, steward and maintain green infrastructure assets and networks (including green open space and river/canal corridors), ensuring that these are linked into new and existing developments, to improve the connectivity of green space and green networks?</p> <p>Create opportunities to lead healthier lifestyles, including development that enhances existing and /or makes provision for and maintenance towards open spaces, sports and recreational facilities e.g. publicly available pitches, allotments, swimming</p>	Population, Human Health

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
		<p>pools, courts, etc.?</p> <p>Provide new or enhanced local health services to support new and growing communities?</p>	
<b>SA Objective 6</b>	<p><b><u>Soil and Minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources</p>	<p>Avoid development of high quality agricultural land? Ensure the re-use and redevelopment of brownfield sites?</p> <p>Result in efficient use of recycled/secondary materials?</p> <p><u>Encourage minimisation, reuse and recycling of waste?</u></p> <p>Protect mineral resources and infrastructure?</p> <p>Ensure development avoids sterilisation of local mineral reserves?</p>	Soil
<b>SA Objective 7</b>	<p><b><u>Historic Environment Heritage</u></b></p> <p><del>To protect and enhance historic buildings, heritage assets and archaeological sites<sup>6</sup></del> <u>To protect and, where appropriate, enhance heritage assets<sup>7</sup> and their settings</u></p>	<p><del>Avoid adverse effects on</del> <u>Conserve and, where appropriate, enhance</u> listed buildings (including locally listed buildings), conservation areas, scheduled ancient monuments, registered parks and gardens, and registered battlefields and their settings?</p> <p><u>Seek to understand and manage impacts on the historic environment, particularly in areas with archaeological potential?</u></p> <p>Provide appropriately-scaled, designed and landscaped developments that relate well to and enhance the historic character of the Borough and contribute positively to its distinctive sense of place?</p> <p><del>Promote the</del> <u>greater understanding and enhancement of the Borough's archaeological resource and other aspects of heritage/historic environment</u>, such as parks and open spaces, and areas with a particular <del>historical or cultural association</del> <u>heritage</u></p>	Cultural Heritage, including architectural and archaeological heritage

<sup>7</sup> As per the NPPF (2018) heritage assets are taken to include 'A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest.'



SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
		<p><u>significance (e.g. historic associations etc.)?</u></p> <p><u>Protect archaeological and palaeoenvironmental assets (particularly organic remains) from changes in hydrological conditions and soil chemistry?</u></p> <p><u>Promote access to, as well as the enjoyment and understanding of, the local historic environment (including architectural, archaeological and artistic heritage)?</u></p> <p><u>Ensure climate change mitigation and energy efficiency measures can be sensitively incorporated into the historic environment?</u></p> <p>Improve participation in cultural activities?</p> <p>Help foster heritage-led regeneration?</p> <p>Improve existing and provide new leisure, recreational, or cultural activities related to the historic environment?</p>	
<b>SA Objective 8</b>	<p><b><u>Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape</p>	<p><del>Consider</del> <u>Retain or enhance</u> the existing character, form and pattern of the Borough's landscapes, buildings and settlements?</p> <p>Protect and enhance the local distinctiveness and contribution to a sense of place?</p> <p><u>Promote high quality Green Infrastructure within existing and new development?</u></p>	Landscape

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<b>SA Objective 9</b>	<p><b><u>Greenhouse Gas Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car</p>	<p>Ensure a complementary mix of land uses within compact communities that minimises the length of journeys to services and facilities and employment opportunities, increases the proportion of journeys made on foot or by cycle, and are of a sufficient density to support and enhance local services and public transport provision?</p> <p>Situate development in locations well served by public transport, cycle paths and walking routes?</p> <p>Provide new and improved sustainable transport networks, including cycle and walking routes, to encourage active travel and improve connectivity to local service centres, transport hubs, employment areas and open/green spaces?</p> <p>Improve strategic public transport infrastructure?</p> <p><u>Minimise greenhouse gas emissions from industrial and commercial activities?</u></p> <p><u>Provide roadside green infrastructure, particularly trees, which could help absorb carbon dioxide?</u></p>	Air, Climatic Factors, Human Health
<b>SA Objective 10</b>	<p><b><u>Biodiversity and Geodiversity</u></b></p> <p>To protect and enhance biodiversity and geodiversity</p>	<p>Protect and where possible enhance <u>internationally (including European sites)</u> and nationally designated biodiversity sites and species?</p> <p>Avoid net loss, damage to, or fragmentation of locally designated and non-designated wildlife sites, habitats and species and encourage net gain in biodiversity?</p> <p>Enhance and increase the extent of <u>priority</u> habitats for protected species and priority species identified in the Hertfordshire BAP or the England Biodiversity Strategy 2020, <u>in support of the 25 year Environment Plan?</u></p> <p><u>Seek to secure biodiversity offsetting opportunities where appropriate?</u></p>	Biodiversity, Fauna, Flora

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
		<p><u>Connect people with the environment to improve health and wellbeing by promoting the importance of biodiversity and increase opportunities for people to come into contact with resilient wildlife places while encouraging respect for and raising awareness of the sensitivity of these sites and species?</u></p> <p><u>Integrate locally distinctive, biodiverse habitats into new developments, as well as contribute to improvements in ecological connectivity and ecological resilience within and between in rural and urban areas?</u></p> <p><u>Maintain and enhance ecosystem services and ecological networks in the Borough?</u></p> <p><u>Protect sites valued for their geological characteristics?</u></p> <p><b>NB</b> Climate change is likely to impact upon habitats and species and thereby biodiversity. Plan policies that achieve the goals listed above should all help to <u>enhance enable</u> the ability of wildlife to adapt to a changing climate.</p>	
<b>SA Objective 11</b>	<p><b><u>Water Quality and Quantity</u></b></p> <p>To improve water quality and manage water resources sustainably</p>	<p>Ensure that development does not lead to the deterioration of groundwater, surface water or river water quality?</p> <p>Locate development where adequate foul drainage, sewage treatment facilities, <u>adequate potable water supply</u> and surface water drainage can be made available?</p> <p>Incorporate SUDS (including their long-term maintenance) into development, so as to reduce the rate of run-off and the risk of surface water flooding and combined sewer overflow?</p> <p>Increase water efficiency, particularly in new developments?</p>	Water, Biodiversity, Fauna, Flora
<b>SA Objective 12</b>	<p><b><u>Flooding</u></b></p> <p>To minimise the risk of flooding taking account of climate change</p>	<p>Avoid development in locations at risk from flooding or which could increase the risk of flooding elsewhere, taking into account the impacts of climate change?</p> <p>Create development that incorporate SUDS (including their long-</p>	Water, Climatic Factors, Human Health

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
		term maintenance) to reduce the rate of run-off and the risk of surface water flooding and combined sewer overflows?	
<b>SA Objective 13</b>	<b><u>Air Quality</u></b> To improve local air quality	<p><u>Minimise the number of vehicles travelling to, from and through the Borough's AQMAs?</u></p> <p>Situate development in locations well served by public transport, cycle paths and walking routes in order to reduce emissions?</p> <p>Situate developments within walking distance to essential services and facilities?</p> <p>Make provision for new and improved sustainable transport networks, including cycling and walking routes?</p> <p><u>Minimise emissions of air pollutants from industrial activities?</u></p> <p><u>Provide roadside green infrastructure, particularly trees, which could help absorb air pollutants?</u></p>	Air, Human Health
<b>SA Objective 14</b>	<b><u>Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy	<p>Create strategic-scale developments that make significant and lasting contributions to the UK's national carbon target of reducing emissions by at least 80% from 1990 levels by 2050?</p> <p>Create connected energy networks that provide local low carbon and renewable electricity and heat?</p>	Climatic Factors
<b>SA Objective 15</b>	<b><u>Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres	<p>Improve access to jobs for local people from all sectors of the community that will reduce inequality between standards of living?</p> <p>Enhance the vitality and vibrancy of town centres?</p> <p>Provide high quality employment sites and associated infrastructure suitable for the likely continuation in a shift from manufacturing to higher skill, service industries?</p>	Population, Material Assets

- 2.9 The SA framework is designed to strike a balance between providing sufficient detail to identify key effects, whilst keeping analysis at a strategic level. Many of the objectives are cross-cutting, as they relate to a number of SEA topics. In order to avoid repetition and to ensure assessments are effective and useful in decision-making, each SA objective is considered individually. For example, SA Objective 3 relates to provision of suitable homes, including affordable housing. Provision of housing is not a sustainability issue in its own right, but is important in ensuring people have a suitable place to live, which in turn benefits the health and wellbeing of residents and their economic productivity, among other social and economic benefits. As such, these factors are not repeated in the assessment of other SA objectives.

## SA Stage B: Developing and Refining Options and Assessing Effects

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

### Identification and appraisal of options

- 2.15 The Council's starting point for identifying Issues and Options in the Borough was the objectively assessed need for new homes and jobs, as identified in the joint South West Herts SHMA and Economy Study (both 2016)<sup>8</sup>. The current local plan identifies land for around 45% of the housing needed in the Borough by 2027 (as identified through new joint evidence studies with neighbouring councils), because of its focus on protecting the Green Belt and a lower level of objectively assessed housing need, which derived in part from the former Regional Spatial Strategy for the area. As a result, the consideration of issues and options has stemmed from addressing this shortfall of housing and employment sites and identifying the best and most sustainable approaches to delivering the additional number of homes and jobs needed in Hertsmere.
- 2.16 The Council sent a 'Planning for Growth' newsletter to all homes in the Borough at the end of 2016. The letter asked residents for their views on how best to plan for new homes, jobs and infrastructure. This was followed up by presentations to groups of local people, the business

<sup>8</sup> It is acknowledged that the objectively assessed need will now be determined in terms of the Government's standard methodology and updated population projections. This will be assessed when there is more certainty regarding the figure, as updates to the methodology are expected to be published shortly.

community and developers, and a survey of questions about the number of new homes, jobs and local services that should be provided.

### *Issues and Options Local Plan*

- 2.17 Responses to the engagement opportunities described above fed into identifying the issues and options presented in the Issues and Options report (September 2017). This set out a draft vision and priorities for the Local Plan, identified strategic planning issues in the borough and sought views on a range of issues, such as housing and employment need, community facilities and sustainable transport. The Issues and Options Local Plan document also set out five potential development approaches for the broad spatial distribution of development. All options presented were subject to the SA, which was published for consultation in February 2018. Some parts of the document, consisting of open-ended questions, were not subject to SA as they didn't present any particular options.
- 2.18 A number of comments were received in response to this consultation, as summarised in **Appendix 1**. Some of these led to changes to the SA, as presented in **Appendix 2**.
- 2.19 The results of public consultation and the SA, among other factors, fed into the next stages of Local Plan preparation.

### *Potential Sites for Housing and Employment*

- 2.20 This SA Report presents the potential sites for housing and employment being considered for inclusion in the Hertsmere Local Plan. The potential sites for housing each fall within the five potential development approaches presented in the Issues and Options report. These site options were identified through the following:
- A call for sites exercise.
  - Responses to the Issues and Options consultation.
  - Sites allocated in the Elstree Way Corridor Area Action Plan.
  - Council owned assets.

## SA Stage C: Preparing the SA Report

- 2.21 This SA Report describes the process that has been undertaken to date in carrying out the SA of Hertsmere Local Plan. It contains an assessment of the potential sites for housing and employment being considered for inclusion in the Hertsmere Local Plan, highlighting any likely significant effects (both positive and negative, and taking into account the likely secondary, cumulative, synergistic, short, medium and long-term and permanent and temporary effects).

## SA Stage D: Consultation on Local Plan and this SA Report

- 2.22 Hertsmere Borough Council is inviting comments on the Potential Sites for Housing and Employment document (October 2018) and this SA Report. These documents are being published on the Council's website for consultation from 25<sup>th</sup> October 2018.
- 2.23 **Appendix 1** presents the consultation comments that were received in relation to the SA Scoping Report and the SA of Issues and Options and explains how they have been addressed. Information about the consultation responses received in relation to this SA Report and how they have been addressed will be provided in the next iteration of the SA Report to be prepared.

## SA Stage E: Monitoring Implementation of the Local Plan

- 2.24 As no options have been selected at this stage, the effects of the Local Plan are still uncertain. As such, it is not possible to identify suitable monitoring measures to measure the potential effects

of the Local Plan. Once the Council has selected which options to include in the Local Plan, the SA will consider measures to monitor the implementation of the Local Plan.

## Appraisal Methodology

- 2.25 The potential sites for housing and employment have been appraised against the SA objectives in the SA framework (see **Table 2.2** earlier in this section), with scores being attributed to each option to indicate its likely sustainability effects on each objective as follows:

**Figure 2.1: Key to symbols and colour coding used in the SA of Hertsmere's Local Plan**

++	The option is likely to have a <b>significant positive</b> effect on the SA objective(s).
++/-	The option is likely to have a mixture of <b>significant positive</b> and <b>minor negative</b> effects on the SA objective(s).
+	The option is likely to have a <b>minor positive</b> effect on the SA objective(s).
0	The option is likely to have a <b>negligible</b> or no effect on the SA objective(s).
-	The option is likely to have a <b>minor negative</b> effect on the SA objective(s).
--/+	The option is likely to have a mixture of <b>significant negative</b> and <b>minor positive</b> effects on the SA objective(s).
--	The option is likely to have a <b>significant negative</b> effect on the SA objective(s).
?	It is <b>uncertain</b> what effect the option will have on the SA objective(s).
+/- or ++/--	The option is likely to have an equal mixture of <b>both minor or both significant positive and negative</b> effects on the SA objective(s).

- 2.26 Where a potential positive or negative effect is uncertain, a question mark was added to the relevant score (e.g. +? or -?) and the score is colour coded as per the potential positive, negligible or negative score (e.g. green, yellow, orange, etc.).
- 2.27 The plan may affect certain objectives to different degrees, i.e. the magnitude of effects will differ. As the purpose of SA is to identify likely significant effects, the scores (as shown in **Figure 2.1**) only indicate whether an effect is positive or negative (and/or uncertain) and whether it is minor or significant. Differences in the magnitude of similar effects were discussed in the assessment text, where relevant.
- 2.28 The likely effects of options need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. This appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown above. The dividing line in making a decision about the significance of an effect is often quite small. Where either (++) or (--) has been used to distinguish significant effects from more minor effects (+ or -) this is because the effect of an option on the SA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, scores are relative to the scale of proposals under consideration.
- 2.29 SA inevitably relies on an element of subjective judgement. However, in order to ensure consistency in the appraisal of the site options, a detailed set of assumptions was developed and applied. These assumptions are presented in **Appendix 5** and were applied mainly through the use of Geographical Information Systems (GIS) data.
- 2.30 The assumptions were updated following the SA of the Issues and Options, in order to inform the SA of options presented in this document. This is because the Council clarified that it can only be confident that some aspects of infrastructure provision would be delivered on larger sites. Changes in assumptions are specific to site appraisals, rather than general development

approaches, as assessed at the Issues and Options stage. This means that the assessments presented in previous SA reports do not require any changes to be made in light of the updated assumptions.

- 2.31 Assessments of housing and employment options have been carried out on the basis of their red line boundary and taking into account any infrastructure provision requirements set out in **Table 2.3** below. Assessments have followed the precautionary principle, in that a maximum case (or 'worst-case') scenario is assumed. This allows the SA to identify all potential effects that could occur as a result of development at a particular site and, in line with the PPG, focus on those effects that are likely to be significant.
- 2.32 It may be possible to mitigate many of the negative effects identified. For example, preservation of those elements of the heritage asset's setting that contributes to its significance, or the understanding of that significance, through the careful siting and design of development, could mitigate negative effects on the historic environment. However, it cannot be known what measures will be brought forward, such as siting, layout and design of development, at any particular site. In order to ensure assessments are comparable between all options, potential mitigation measures have not been taken into account in the assessments. Once the Council has selected which options to take forward for inclusion in the Local Plan, the SA will set out measures that could avoid, reduce or mitigate negative effects of the emerging Local Plan.
- 2.33 The Issues and Options document describes the infrastructure each potential development approach would be expected to provide. This information has been set out in **Table 2.3** for reference and has been taken into account in the assessments of the development location options presented in this report. It has been assumed that the provision of any new infrastructure would be of a sufficient scale and appropriately located to meet the needs of the new development.

**Table 2.3: Infrastructure requirements for the development approaches, based on those set out in the Hertsmere Local Plan Issues and Options document (2017)<sup>9</sup>**

Development approach	Required infrastructure
<b>Redevelopment of urban brownfield sites</b>	<p>New education facility (if providing 500 homes or more)</p> <p>Additional healthcare provision</p> <p>Improved pedestrian/cycle connectivity</p> <p>Improvements to bus services within and between towns</p> <p>Local highway network improvements and more electric charging points</p> <p>Potential improvements to the wider strategic highway network</p> <p>Open space, leisure, recreation and community facilities</p> <p>Enhanced green infrastructure within new developments (including parks, greenspaces and other natural features)</p> <p>High speed broadband network improvements</p> <p>New local centre (if providing 500 homes or more)</p> <p>New employment provision (if providing 750 homes or more)</p>
<b>Growth through new garden suburbs</b>	<p>New education facility (if providing 500 homes or more)</p> <p>Additional healthcare provision</p> <p>Policy compliant number of affordable homes</p>

<sup>9</sup> Updates have been made where the Council has clarified that some aspects of infrastructure provision will only be provided on larger sites.



Development approach	Required infrastructure
	<p>Strategic pedestrian/cycle connectivity</p> <p>Improvements to inter-urban bus services</p> <p>Local highway network improvements</p> <p>Potential improvements to the wider strategic highway network</p> <p>New local centre (if providing 500 homes or more)</p> <p>Open space, leisure, recreation and community facilities</p> <p>Enhanced green infrastructure network (including parks, green spaces and other natural features)</p> <p>New employment provision (if providing 750 homes or more)</p>
<b>Supporting larger rural communities and growth of key villages</b>	<p>New education facility (if providing 500 homes or more)</p> <p>Additional healthcare provision</p> <p>Policy compliant number of affordable homes</p> <p>Strategic pedestrian/cycle connectivity</p> <p>Improvements to inter-urban bus services</p> <p>Local highway network improvements</p> <p>Potential improvements to the wider strategic highway network</p> <p>New local centre (if providing 500 homes or more)</p> <p>Open space, leisure, recreation and community facilities</p> <p>Enhanced green infrastructure network (including parks, green spaces and other natural features)</p> <p>High speed broadband network improvements</p> <p>New employment provision (if providing 750 homes or more)</p>
<b>Meeting the needs of other villages</b>	<p>New education facility (if providing 500 homes or more)</p> <p>Additional healthcare provision</p> <p>Policy compliant number of affordable homes</p> <p>Strategic pedestrian/cycle connectivity</p> <p>Improvements to bus services</p> <p>Local highway network improvements</p> <p>Potential improvements to the wider strategic highway network</p> <p>New local centre (if providing 500 homes or more)</p> <p>Open space, leisure, recreation and community facilities</p> <p>Enhanced green infrastructure network (including parks, green spaces and other natural features)</p> <p>High speed broadband network improvements</p>
<b>New garden village</b>	<p>New education facility (if providing 500 homes or more)</p> <p>New healthcare provision</p> <p>Policy compliant number of affordable homes</p>

Development approach	Required infrastructure
	<p>New pedestrian and cycle routes</p> <p>Bus routes with possible guided busways to connect with other town centres</p> <p>Local highway network improvements</p> <p>Detailed investigations, including the modelling of the motorway junction capacity and the surrounding strategic road network</p> <p>New local centre (if providing 500 homes or more)</p> <p>Open space, leisure and sports facilities</p> <p>Enhanced green infrastructure network (including parks, green spaces and other natural features)</p> <p>High speed broadband network improvements</p> <p>New employment provision (if providing 750 homes or more)</p>

## Difficulties Encountered and Limitations

- 2.34 It is a requirement of the SEA Regulations that consideration is given to any data limitations or other difficulties that are encountered during the SA process. The high-level nature of the spatial distribution options meant that at times it was difficult to assess in detail the likely effects of the options on each SA objective.
- 2.35 There was a need to ensure that a large number of site options could be appraised consistently. This was achieved by the use of assumptions relating to each SA objective, as described above.
- 2.36 The options for different housing quanta are not associated with any particular spatial pattern or location of development. As such, it was difficult to assess these figures against the baseline as spatial implications of each are unknown. As such, whilst the SA generally assesses each option individually against the baseline, the assessments of these options are necessarily comparative to an extent. The SA also took into account the source of the different housing quanta options, i.e. how they were generated through the SHMA. For example, the economic-led growth scenario is expected to have more positive effects on SA objective 15 than the other scenarios, as it would be expected to provide housing at a level that supports and promotes economic growth.
- 2.37 With regards to assessment of the historic environment (SA objective 7), due to the absence of detailed information on the significance and sensitivity of assets and the way their setting contributes to their significance, as well as the lack of information regarding development proposals, and the probable magnitude of effect, a certain level of uncertainty is attached to every historic environment SA effect. In light of the absence of detailed information, a maximum case scenario is generally assumed; however, mitigation by design and additional mitigation measures may help reduce some effects. The high-level assessment provided herein is indicative only, and more detailed assessment of the effects on the historic environment should be undertaken as part of the planning process.
- 2.38 Information regarding undesignated historic environment assets was obtained from the online resource - Heritage Gateway. It is acknowledged that, in comparison to Hertfordshire Historic Environment Records, this resource may not hold up to date records and that those it does hold may be abridged. However, the use of Heritage Gateway is not considered a significant limitation as the assessments set out in this report are high level and do replace the requirement for the further more detailed assessment as required by the planning process.
- 2.39 There could be undiscovered archaeological features at any location within the Borough. For the purposes of this SA, we have focused on assessing the likely effects of development on known

archaeological sites, but further archaeological work may be necessary prior to any development in order to avoid loss of archaeological resources.

- 2.40 In preparing this SA it has not been possible to access information regarding contaminated land in the Borough. However, it has been assumed that any contamination present can and will be remediated to safe levels prior to development of any site. If this is not possible, it has been assumed that the Council would not consider such sites to be reasonable options for development.
- 2.41 The assumptions presented in **Appendix 5** include a range of distance thresholds. These are based on the suggested acceptable walking distances presented in Guidelines for Providing for Journeys on Foot (The Institution of Highways and Transportation, 2000). It cannot be known which route people will take and this is likely to vary depending on the starting point of each individual's journey. Therefore, for consistency, these thresholds will use straight line measurements from the boundary of a site.

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### 3 Sustainability Context for Development in Hertsmere

#### Review of Plans, Policies and Programmes

- 3.1 The Hertsmere Local Plan is not prepared in isolation, being greatly influenced by other plans, policies and programmes and by broader sustainability objectives. It must be consistent with international and national guidance and strategic planning policies and should contribute to the goals of a wide range of other programmes and strategies, such as those relating to social policy, culture and the historic environment. It must also conform to environmental protection legislation and the sustainability objectives established at an international, national and regional level.
- 3.2 During the Scoping stage of the SA, a review was undertaken of the other plans, policies and programmes that are relevant to the Local Plan. The key findings are summarised below and the full, updated review can be found in **Appendix 3**.
- 3.3 Annex 1 of the SEA Directive requires:
- (a) *"an outline of the...relationship with other relevant plans or programmes"*; and
  - (e) *"the environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation"*
- 3.4 It is necessary to identify the relationships between the Hertsmere Local Plan and the relevant plans, policies and programmes so that any potential links can be built upon and any inconsistencies and constraints addressed.

#### *Key international plans, policies and programmes*

- 3.5 At the international level, Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') are particularly significant as they require Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) to be undertaken in relation to the emerging Local Plan. These processes should be undertaken iteratively and integrated into the production of the plan in order to ensure that any potential negative environmental effects (including on European-level nature conservation designations) are identified and can be mitigated.
- 3.6 There are a wide range of other EU Directives relating to issues such as water quality, waste and air quality, most of which have been transposed into UK law through national-level policy.

#### *Key national plans, policies and programmes*

- 3.7 The most significant development in terms of the policy context for the Hertsmere Local Plan is the National Planning Policy Framework (NPPF), which first replaced the suite of Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs) in 2012. The purpose of the NPPF was to streamline national planning policy and the subsequent National Planning Practice Guidance (PPG) expands significantly on how national policy requirements are to be applied locally. The Local Plan must be consistent with the requirements of the NPPF, which was updated and revised in July 2018. The NPPF sets out information about the purposes of local plan-making, stating that:
- "Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area."*

*Decision-makers at every level should seek to approve applications for sustainable development where possible."*

- 3.8 The NPPF also requires Local Plans to be 'prepared positively, in a way that is aspirational but deliverable'. This means that opportunities for appropriate development should be identified in order to achieve net gains in terms of sustainable social, environmental and economic development; however significant adverse impacts in any of those areas should not be allowed to occur.
- 3.9 The NPPF requires local planning authorities to set out the strategic priorities for the area in the Local Plan. This should include strategic policies to deliver sufficient provision for:
- housing (including affordable housing), employment, retail, leisure and other commercial development;
  - infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
  - community facilities (such as health, education and cultural infrastructure); and
  - conservation and enhancement of the natural, built and historic environment, including landscapes, green infrastructure, and planning measures to address climate change mitigation and adaptation.
- 3.10 In addition, Local Plans should:
- make explicit which policies are strategic policies;
  - be prepared with the objective of contributing to the achievement of sustainable development;
  - look ahead over a minimum 15 year period from adoption, to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvement in infrastructure;
  - be based on co-operation with neighbouring authorities, public, voluntary and private sector organisations;
  - indicate broad locations for strategic development on a key diagram and land-use designations and allocations identified on a policies map;
  - provide a clear strategy for bringing sufficient land forward, and at a sufficient rate, to address objectively assessed needs over the plan period, in line with the presumption in favour of sustainable development;
  - include planning for and allocating sufficient sites to deliver the strategic priorities of the area (except insofar as these needs can be demonstrated to be met more appropriately through other mechanisms, such as brownfield registers or non-strategic policies);
  - identify land where development would be inappropriate, for instance because of its environmental or historic significance; and
  - contain a clear strategy for conserving and enhancing the natural, and historic environment, and setting out other development management policies.

#### *Neighbouring Local Plans*

- 3.11 Throughout the preparation of the Local Plan and the SA process, consideration will be given to the local plans being prepared by the authorities around Hertsmere. The development proposed in those authorities could give rise to in-combination effects with the effects of the Hertsmere Local Plan, and the effects of the various plans may travel across local authority boundaries. There are seven authorities that border Hertsmere: the London Boroughs of Barnet, Harrow and Enfield as well as Welwyn Hatfield, Three Rivers, Watford and St Albans Councils. In addition, Hertfordshire County Council has responsibility for waste and minerals planning in the area.

## Baseline Information

- 3.12 Baseline information provides the context for assessing the sustainability of proposals in the Hertsmere Local Plan and it provides the basis for identifying trends, predicting the likely effects of the plan and monitoring its outcomes. The requirements for baseline data vary widely, but it must be relevant to environmental, social and economic issues, be sensitive to change and should ideally relate to records which are sufficient to identify trends.
- 3.13 Schedule 2 of the SEA Regulations requires data to be gathered on biodiversity, population, human health, flora, fauna, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the inter-relationship between the above factors. As an integrated SA and SEA is being carried out, baseline information relating to other sustainability topics has also been included; for example information about housing, education, transport, energy, waste and economic growth. This information was originally presented in the September 2017 Scoping Report and an updated version has been included in **Appendix 4**

## Key Sustainability Issues

- 3.14 A set of key sustainability issues for Hertsmere was identified during the Scoping stage of the SA and was presented in the Scoping Report.
- 3.15 Identification of the key sustainability issues and consideration of how these issues might develop over time if the Local Plan is not prepared, help meet the requirements of Annex 1 of the SEA Directive to provide information on:
- "the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan; and any existing environmental problems which are relevant to the plan."*
- 3.16 In recognition of the SEA Regulation requirement (Schedule 2) that the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme must be described in the Environmental Report, **Table 3.1:** overleaf describes the likely evolution of each key sustainability issue if the Local Plan were not to be adopted. Note that this has been amended slightly since it was originally presented in the SA Scoping Report in response to consultation comments received on the SA Scoping Report.
- 3.17 The information in **Table 3.1:** shows that, in general, the current trends in relation to the various social, economic and environmental issues affecting Hertsmere would be more likely to continue without the implementation of the Local Plan. In addition, it is likely that policy changes and updates to housing need calculations will mean that the housing provision in the current local plan no longer reflects local housing needs. This could result in development outside of the current Local Plan and/or a lack of suitable and sustainable development. In most cases, the emerging Local Plan offers opportunities to directly and strongly affect existing trends in a positive way, through an up-to-date plan that reflects the requirements of the NPPF.

**Table 3.1: Key sustainability issues for Hertsmere and likely evolution without the Local Plan**

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p><b>Housing Provision (Supply)</b> – There is a need to ensure sufficient land is available to meet future housing need within Hertsmere.</p>	<p>Policy CS1 of the Core Strategy states that the Council will make provision for at least 3,990 additional dwellings within the Borough between 2012 and 2027, at a development rate of a minimum of 266 dwellings per year. The Site Allocations and Development Management Policies Plan (SADMPP) (2016) demonstrates a supply of 4,177 dwellings between 2012 and 2027, averaging 278.5 dwellings per year and allocates specific sites for development through Policy SADM1.</p> <p>The SHMA<sup>10</sup> found identified a housing need in Hertsmere of 599 dwellings per year. The revised NPPF (para 60) states that assessments of local housing need should use the standard method in national planning guidance, unless exceptional circumstances justify an alternative approach. The Potential Sites for Housing and Employment document suggests that the standard methodology suggests there is a need in Hertsmere of 444 homes per year, although this figure is subject to ongoing updates.</p> <p>Without the emerging Local Plan, there may be a shortfall in appropriate housing and an increased risk of speculative and piecemeal windfall developments, including permitted development conversion schemes.</p>
<p><b>Housing Provision (Affordable Housing)</b> – There is a need for affordable housing across Hertsmere due to the fact that average earnings are below the county average yet house prices are above regional and national averages.</p>	<p>Policy CS4 of the Core Strategy states that developments of 5 self-contained residential units or more (gross), or residential sites of more than 0.2 hectares, should make provision for 35-40% Affordable Housing dependent upon post codes area.</p> <p>The recently published SHMA<sup>11</sup> found Hertsmere requires 434 affordable dwellings per year, equating to 72% of the Objectively Assessed Need.</p> <p>Without the emerging Local Plan, there would be a shortfall in affordable housing with many of the windfall developments coming forward, including permitted development conversion schemes, failing to deliver on-site</p>

<sup>10</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

<sup>11</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p><b>Housing Provision (Mix)</b> – There is the need for a mix of housing types including one to three bedroom houses.</p>	<p>affordable homes.</p> <p>Policy CS7 of the Core Strategy states that housing developments in excess of 10 units (gross) are required to contain some variation within their housing mix, with sites over 25 units or 1 hectare reflecting identified variations within the Borough’s housing need, and that on large sites allocated in the Site Allocations DPD and large windfall sites, the need for a proportion of sheltered or extra care housing is considered as part of the overall housing mix.</p> <p>The Elstree Way Corridor Area Action Plan (EWCAAP) (2015) Policy EWC3 requires a mix of homes to be provided in the AAP area. Housing developments of over 25 units must contain variation in type and size, including a proportion of three bed units.</p> <p>The recently published SHMA<sup>12</sup> found there is a high overall need for three bedroom homes and one to three bedroom affordable homes. It also found there is a residential care housing need of 669 units from 2013-2026.</p> <p>Without the emerging Local Plan, it is uncertain whether the appropriate housing mix would be delivered during the plan period of the current Local Plan (until 2027), as needs are likely to have changed since that plan was prepared. Following this, without a planned local approach to development, the appropriate housing mix may not be delivered.</p>
<p><b>Service Accessibility</b> – Promote vibrant inclusive communities with good accessibility to services, education and employment.</p>	<p>Policy CS18 of the Core Strategy states that the Council will require new development to contribute to the Community Strategy aim of achieving fair access to key community facilities, and where necessary provide key community facilities.</p> <p>Policy CS19 of the Core Strategy states that proposals for the provision or dual use of key community facilities will be supported, and that the loss of facilities will not be permitted.</p>

<sup>12</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)



Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>Policy SADM32 supports provision and enhancement of community facilities and identifies specific proposals for provision of community facilities. Policy SADM33 also supports provision and enhancement of facilities in which faith communities can meet and worship. Policy SADM42 supports specific proposals to improve facilities, functions and environment of town centres. Policy SADM45 aims to protect class A1 shops in local and neighbourhood centres, neighbourhood parades and for individual shops. Policies SADM46, SADM47 and SADM48 give further details on appropriate development in such areas.</p> <p>The EWCAAP Policy EWC4 promotes retention and enhancement of community facilities and provision of new facilities where a need has been identified.</p> <p>The recently published SHMA<sup>13</sup> found that Hertsmere needs 599 dwellings per year, the residents of which will require additional accessible services.</p> <p>Without the emerging Local Plan, it is uncertain whether services would be retained and provided during the plan period of current Local Plan (until 2027), as needs are likely to have changed since that plan was prepared. In addition, it is recognised that a time lag between the development of new homes and the provision of additional infrastructure may occur in some locations. Following this, without a planned local approach to development, the required accessible services may not be delivered.</p>
<p><b>Health</b> – There is a need to reduce health inequalities within Hertsmere.</p>	<p>Policy SP1 of the Core Strategy states that all development should ensure healthy living environments for residents and users of development. Policy CS19 also states that healthcare facilities should be retained.</p> <p>SADMPP Policy SADM20 works to maintain health and amenity by ensuring development of sensitive uses in proximity to AQMAs are only permitted where it will not result in an undue impact on health. In addition, this policy states that new residential development should not be exposed to</p>

<sup>13</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>existing significant sources of noise pollution and light installations should not harm the amenity of residents. Policy SADM30 is also expected to contribute to retaining residential amenity.</p> <p>Life expectancy in Hertsmere is 9.3 years lower for men and 6.3 years lower for women in the most deprived areas of Hertsmere compared to the least deprived areas. Additionally, the rates of smoking, excess weight in adults, physically active adults, dementia diagnoses, diabetes diagnoses, excess winter deaths and deaths and injuries on roads are above the England average. Local priorities include reducing obesity, increasing physical activity, reducing smoking, and helping the growing older population maintain their health<sup>14</sup>.</p> <p>Without the emerging Local Plan, these issues are likely to continue, although the SADMPP is expected to safeguard residential amenity throughout the current Local Plan period (until 2027).</p>
<p><b>Biodiversity</b> – Although there are no EU level designations in Hertsmere, a number of habitats have been identified as internationally important under the EU Habitats Directive.</p>	<p>Policy CS12 of the Core Strategy states that developments should conserve and enhance the natural environment of the Borough, including biodiversity, habitats, protected trees, landscape character, and sites of ecological and geological value. It also requires developments to identify opportunities for habitat creation and enhancement.</p> <p>Policy SADM10 of the SADMPP requires developers to avoid significant harm to sites of importance for biodiversity and geodiversity in the first instance or implement mitigation or compensatory measures where this is not possible and the benefits of development clearly outweigh any harm. SADMPP Policy SADM12 requires healthy, high quality trees and hedgerows to be retained. SADM 13 and SADM16 may also retain the quality of watercourses, by requiring development to have regard to its impact on these. SADM28 requires the Watling Chase Community Forest Plan and supplementary planning guidance to be material considerations for the</p>

<sup>14</sup> Public Health England: Hertsmere District Health Profile 2018

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>determination of planning applications in the Forest area.</p> <p>A number of habitats have been identified as internationally important under the EU Habitats Directive. These include characteristic oak-hornbeam woodlands, the natural stand type found within Hertsmere<sup>15</sup>. Additionally, Redwell Wood SSSI is located in Hertsmere and over 40% of this site is in an unfavourable - recovering condition<sup>16</sup>.</p> <p>Without the emerging Local Plan, habitats are likely to be protected during the plan period of the current Local Plan (until 2027). Following this, without a planned local approach to development, habitat and biodiversity may be at risk from poorly planned development and their conditions could degrade. This may exacerbate degradation due to changes to or a decline in habitat management. Whilst habitat management is expected to be largely outside the scope of the Local Plan, site and habitat management can play an important role in improving habitat condition.</p>
<p><b>Historic environment</b> – Hertsmere has a large number of listed buildings, designated conservation areas, four Registered Parks and Gardens and four Scheduled Monuments.</p>	<p>Policy CS14 of the Core Strategy states that development proposals must conserve or enhance the historic environment of the Borough. Additionally, it states that developments should be sensitively designed to a high quality and not cause harm to identified, protected sites, buildings or locations of heritage or archaeological value including Conservation Areas, Listed Buildings, Historic Parks and Gardens, Scheduled Ancient Monuments or their setting, and identified and as yet unidentified Archaeological Remains.</p> <p>SADMPP Policy SADM29 states that the Council will not permit development proposals that fail to protect or enhance the setting, significance, character and appearance of a heritage asset, including nationally and locally listed buildings and historic parks and gardens. It states that historic features, open spaces and views should be retained within Conservation Areas. It also states that developers will be required to undertake an archaeological field assessment prior to the Council granting planning permission.</p>

<sup>15</sup> Hertsmere Borough Council: Biodiversity, Trees and Landscape SPD (2010)

<sup>16</sup> Natural England: Redwell Wood SSSI - SSSI Condition Summary

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>Development on or affecting the setting of the site of the Battle of Barnet (1471) is not permitted.</p> <p>Hertsmere contains numerous historic features which could be adversely affected by poorly planned development.</p> <p>Without the emerging Local Plan, the historic environment is likely to be protected during the plan period of the current Local Plan (until 2027). Following this, without a planned local approach to development, heritage assets and their settings may be at risk from poorly planned development. In addition, transport issues are likely to continue and transport-related emissions are likely to increase in the absence of the plan. This could affect the historic environment as traffic may detract from the settings of historic and heritage assets and increases in pollution may damage their fabric. Changes in noise and light pollution, landscape and townscape and climate change are also likely to affect the historic environment.</p>
<p><b>Transport</b> – Issues associated with road links being better than access to public transport is reflected in high levels of car ownership and traffic congestion. However, traffic congestion will continue without intervention. Additionally, there is a severe deficit in rail services both for passengers and freight.</p>	<p>Policy CS24 of the Core Strategy requires new development to comply with the Hertfordshire Local Transport Plan, provide a Travel plan, and contribute to the provision or funding of new infrastructure or improved public transport services and non-motorised routes.</p> <p>Policy CS25 of the Core Strategy make requirements for the quantity of off-street parking for all modes of transport to be provided at new developments.</p> <p>Policy CS26 of the Core Strategy states that the Council will support a wide range of measures to provide safer and more reliable alternatives to the car, including improved public transport facilitates and routes, and the enhancement, additional and safeguarding of non-motorised links.</p> <p>SADMPP Policy SADM38 aims to direct new development to the appropriate category of road in the road hierarchy, which may contribute to reducing congestion. Policy SADM39 directs major trip generating development to town centres and Transport Development Areas, where the access to</p>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>sustainable transport is likely to be better.</p> <p>Policy EWC1 of the EWCAAP requires development proposals to provide access across the Elstree Way Corridor by sustainable modes of transport. EWC5 supports promotion of safer and more attractive routes for pedestrians, cyclists and public transport users.</p> <p>CO<sub>2</sub> emissions for transportation alone in Hertsmere (382.9 kt CO<sub>2</sub> in 2016) are significantly higher than the average for Hertfordshire (278.05 in 2016). Moreover, transport emissions in Hertsmere have been increasing from 2013-2016<sup>17</sup>. Additionally Hertsmere contains eight AQMAs.</p> <p>Without the emerging Local Plan, transport issues are likely to continue, notably following the plan period of the current Local Plan (until 2027), and transport related emissions likely to continue to rise.</p>
<p><b>Climate Change Adaptation and Mitigation</b> - There is the need to address issues related to climate change and low carbon development and to reduce pollution and emissions including those from transport methods.</p>	<p>Policy CS17 of the Core Strategy states that residential development must achieve minimum levels of the Code for Sustainable Homes and Part L of the Buildings Regulations. It also requires all new non-domestic development to achieve, as a minimum, CO<sub>2</sub> emissions reductions in-line with the Building Regulations Part L. Additionally, it requires large scale developments to incorporate on-site renewable energy generation.</p> <p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising pollution, using locally sourced materials where possible in line with the requirements of BREEAM on sustainable design, as well as achieving reduced levels of energy consumption and the use of energy from renewable resources.</p>

<sup>17</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2016 (2018) <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>SADMPP Policies SADM13 and SADM15 are likely to contribute to climate change adaptation by minimising future increases in flood risk. Policies SADM34, SADM35, SADM36 and SADM37 may also contribute to climate change adaptation and mitigation as these promote retention, enhancement and creation of green space.</p> <p>Although decreasing, CO<sub>2</sub> emissions in Hertsmere (722.7 kt CO<sub>2</sub> in 2016) are higher than the average for Hertfordshire (609.02 kt CO<sub>2</sub> in 2016)<sup>18</sup>.</p> <p>Without the emerging Local Plan, the NPPF and Buildings Regulations will enforce energy efficiency and carbon reduction requirements on developments. Also, the environmental requirements of the current Local Plan will remain in force over its plan period (until 2027). Without a planned approach to development through the emerging Local Plan however, there is less opportunity to adopt a co-ordinated, spatial approach that would help to manage health and environmental risks and require higher efficiency and environmental standards. Therefore, issues regarding greenhouse gas emissions and the effects of climate change may continue.</p>
<p><b>Resource Efficiency</b> - There is a need to reduce energy demand, improve energy efficiency and the use of low carbon and renewable resources.</p>	<p>Policy CS17 of the Core Strategy states that residential development must achieve minimum levels of the Code for Sustainable Homes (although the Code was withdrawn in 2014) and Part L of the Buildings Regulations. It also requires all new non-domestic development to achieve as a minimum CO<sub>2</sub> emissions reductions in-line with the Building Regulations Part L. Additionally, it requires large scale developments to incorporate on-site renewable energy generation.</p> <p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This</p>

<sup>18</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2016 (2018) <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>includes minimising pollution, using locally sourced materials where possible in line with the requirements of BREEAM on sustainable design, as well as achieving reduced levels of energy consumption and the use of energy from renewable resources.</p> <p>SADMPP Policy SADM17 requires wastewater efficiency measures to be incorporated into the development. This policy also requires non-residential development to enable achievement of the BREEAM 'Excellent' standard or the best practice level of the Association for Environment Conscious Building Water Standards or equivalent.</p> <p>Although decreasing, CO<sub>2</sub> emissions in Hertsmere (722.7 kt CO<sub>2</sub> in 2016) are higher than the average for Hertfordshire (609.02 kt CO<sub>2</sub> in 2016<sup>19</sup>). Additionally Hertsmere contains 8 AQMAs.</p> <p>Without the emerging Local Plan, the NPPF and Buildings Regulations will enforce energy efficiency and carbon reduction requirements on developments. Also, the environmental requirements of the current Local Plan will remain in force over its plan period (until 2027). Without a planned approach to development through the emerging Local Plan however, there is less opportunity to adopt a co-ordinated, spatial approach that would help to manage health and environmental risks and require higher efficiency and environmental standards. Therefore, issues regarding resource efficiency may continue.</p>
<p><b>Water Supply</b> – Affinity Water who provide the mains water supply in Hertsmere do not have sufficient water to meet their customers' future needs for water.</p>	<p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes improving water efficiency through measures such as water saving devices in line with the Code for Sustainable Homes and BREEAM as a minimum requirement and incorporating the use of Sustainable Urban</p>

<sup>19</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2016 (2018) <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>Drainage Systems.</p> <p>SADMPP Policy SADM13 supports effective use of the water supply and does not permit development that may affect the water table.</p> <p>Affinity Water provides the mains water supply in Hertsmere Borough. However, their Water Resources Management Plan found that their Central and Southeast regions do not have sufficient water for the whole of the 25-year planning period to meet their customers' need for water<sup>20</sup>.</p> <p>Without the emerging Local Plan, water efficiency measures will be implemented over the plan period of the current Local Plan (until 2027). Following this, without a Local Plan there may be water supply shortages due to inappropriate development. The absence of a Local Plan after 2027 will reduce the ability of Affinity Water to plan for necessary strategic infrastructure and increases in water demand, due to a lack of information and certainty regarding the locations and quantities of planned future development.</p>
<p><b>Open Space</b> – There is a shortage of open space across the whole of Hertsmere, particularly the availability of play facilities.</p>	<p>Policy CS15 of the Core Strategy states the council will safeguard, enhance and facilitate access to parks and open spaces, as well as to rural visitor attractions and the wider local countryside.</p> <p>SADMPP Policy SADM34 encourages development to improve the quality, quantity and/or accessibility of open space, sports and leisure facilities and to not exacerbate existing deficits of open space and leisure facilities. Policies SADM35 and SADM36 require developments to retain Local Green Space and Minor Amenity Land in most circumstances. Policy SADM37 requires larger developments to provide new open space on site.</p> <p>Hertsmere has a diverse distribution of different types of open space. However, compared to the proposed standards there are a number of deficiencies within Hertsmere<sup>21</sup>.</p>

<sup>20</sup> Final Water Resources Management Plan, 2015-2020 (2014) <https://stakeholder.affinitywater.co.uk/docs/FINAL-WRMP-Jun-2014.pdf>

<sup>21</sup> Hertsmere Borough Council: Open Space Study (2011)



Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>Without the emerging Local Plan, open spaces are likely to be protected and enhanced during the plan period of the current Local Plan (until 2027). Following this, without a planned local approach to development, open spaces may be at risk from poorly planned and located development, with potential pressure to build on some existing open spaces. Moreover, due to the increased housing need, demand for open space by residents will likely increase and may result in open space deficiencies.</p>
<p><b>Air quality</b> – Hertsmere Council has measured concentrations of NO<sub>2</sub> above the annual mean objective within and outside of existing AQMAs.</p>	<p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising air pollution.</p> <p>Policy SADM20 of the SADMPP does not permit development that would significantly exacerbate poor air quality in AQMAs and requires that sensitive development located in or adjacent to AQMAs will not result in an undue impact on health.</p> <p>Hertsmere contains eight AQMAs designated due to nitrogen dioxide pollutants. Four of these were designated in 2003, two in 2005<sup>22</sup>, and two in 2016<sup>23</sup>.</p> <p>Whilst the SADMPP is expected to ensure that poor air quality is not exacerbated in the Borough, air quality may deteriorate after the current Local Plan period (until 2027). Without the Local Plan, and its planned approach to development, air pollution issues may continue. The new Local Plan could act to improve air quality, rather than just ensuring it does not deteriorate further.</p>
<p><b>Flooding</b> – Surface water flooding is highlighted as a major cause of frequent flooding in Hertsmere and often occurs in combination with groundwater flooding.</p>	<p>Surface water flooding is highlighted as a major cause of frequent flooding in the Borough and often occurs in combination with groundwater</p>

<sup>22</sup> Defra: Air Quality Areas - Hertsmere Borough Council

<sup>23</sup> Air Quality Consultants (2017) 2016 Air Quality Annual Status Report (ASR): Hertsmere Borough Council

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p>Drainage infrastructure flooding has also been recorded in all urban areas across the Borough.</p>	<p>flooding<sup>24</sup>.</p> <p>Waste water has a detrimental impact on water quality, with over 2,000 residential properties and six large sewage treatment works discharging treated water into local rivers in the catchment. In addition, challenges caused when intermittent sewage is discharged (under license) during storm events, can also impact on groundwater<sup>25</sup>.</p> <p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes incorporating the use of Sustainable Urban Drainage Systems and avoiding development in floodplains.</p> <p>SADMPP Policy SADM13 directs development towards Flood Zone 1. This policy does not permit new development in Flood Zone 3b and will only support redevelopment in this zone if for a compatible use. Policy SADM14 requires development to be located within areas of lower flood risk. It also requires that development does not increase risk of flooding elsewhere and requires development at risk of flooding to be flood resilient, resistant and safe. In addition, Policy SADM15 promotes use of SuDS for flood attenuation and reduction in flood risk.</p> <p>Without the Local Plan, the Core Strategy may successfully limit the impacts of flooding over its plan period. Following this, without a planned approach to development via the local plan, issues regarding flooding may continue due to inappropriate development.</p> <p>Pollution reduction measures will be implemented over the plan period of the current Local Plan (until 2027). However, without a planned approach to development via the emerging Local Plan, particularly following the plan</p>

<sup>24</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>25</sup> Catchment Data Explorer: Colne Operational Catchment (2017) <http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3096/Summary>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>period of the Core Strategy, there may be continued and increasing issues with regard to water pollution due to inappropriate development.</p>
<p><b>Deprivation</b> – Hertsmere’s average deprivation rank is below the county average, with one Lower Super Output Area (LSOA) falling in the top 10% most deprived nationally.</p>	<p>There are no policies directly regarding deprivation in the current Local Plan (until 2027).</p> <p>Life expectancy in Hertsmere is 9.3 years lower for men and 6.3 years lower for women in the most deprived areas of Hertsmere than in the least deprived areas. Additionally, 13.1% of children are in low income families<sup>26</sup>. One LSOA within Hertfordshire falls within the top 10% most deprived LSOAs nationally<sup>27</sup>.</p> <p>Without the emerging Local Plan, these issues are likely to continue. It is recognised that the Local Plan is only part of the solution to tackling deprivation and that there are a range of factors that may need to be addressed outside the scope of the Local Plan.</p>
<p><b>Soil and minerals</b> – Development on previously developed land should continue to be prioritised to decrease pressure on Hertsmere’s best and most versatile agricultural land. Sand and gravel reserves in the Borough will need to be safeguarded from development.</p>	<p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising soil pollution and remediating land affected by instability and contamination.</p> <p>Policy CS12 of the Core Strategy states proposals will only be permitted where there is no likelihood of the land being sterilised for future agriculture or mineral extraction.</p> <p>SADMPP Policy SADM18 states that development within the Mineral Consultation Area will not be permitted to sterilise or prevent the future extraction of the mineral resource.</p>

<sup>26</sup> Public Health England: Hertsmere District Health Profile 2018

<sup>27</sup> DCLG: English indices of deprivation 2015

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>The Borough contains areas of high quality agricultural land as well as important reserves of sand and gravel, which have been identified by Hertfordshire County Council as 'preferred areas' for future mineral extraction in its Minerals Local Plan<sup>28</sup>.</p> <p>Without the emerging Local Plan, agricultural land and sand and gravel reserves will be protected over the plan period of the current Local Plan (until 2027). Following this, without a planned approach to development via the local plan, high quality agricultural land and mineral reserves may be at risk from inappropriate development.</p>

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<sup>28</sup> Hertsmere Local Plan: Core Strategy (2013)

## 4 Sustainability Appraisal Findings for Potential Sites for Housing and Employment

- 4.1 This chapter presents the findings of the SA of the potential sites for housing and employment being considered for inclusion in the emerging Hertsmere Local Plan. **Table 4.2** and **Table 4.3** show how each option scored against each SA objective. These tables are intended as a high-level snapshot of the effects of each site option and should be read alongside the justification text. This chapter includes a summary of effects and the detailed SA matrices for each site option can be found in **Appendix 6**.
- 4.2 **Table 4.1** presents the reference ID by which each site is referred to, as well as giving details of the estimated number of dwellings to be provided at each site and which of the development approaches from the Issues and Options report the site falls under.

**Table 4.1: Site references, dwelling numbers and relevant development approaches**

ID	Location	Estimated dwelling number	Development approach
<b>Housing sites</b>			
<b>BE5</b>	Elstree Way Corridor	585	Redeveloped urban brownfield site
<b>PB1</b>	Wrotham Park west of Baker Street	1,300	Growth through new garden suburbs
<b>PB2</b>	Potters Bar Golf Course	570	
<b>PB3</b>	Wrotham Park, west Barnet Road, east Baker Street	880	
<b>PB4</b>	Land east of Southgate Road	440	
<b>BE1</b>	Land south of Allum Lane	280	
<b>BE2</b>	Land North of Stapleton Road	350	
<b>BE3</b>	Land to north east of Cowley Hill	800	
<b>BE4</b>	Land at Well End Road	600	
<b>BE6</b>	Land north of Barnet Lane	320	
<b>B0</b>	Land south of Elstree Road & Gravel Allotments	250	
<b>B1</b>	Land at Little Bushey Lane	240	
<b>B2</b>	Land adj Little Bushey Lane & Bournehall Avenue	850	
<b>B3<sup>29</sup></b>	Bushey Golf and Country Club	300-500	
<b>R1</b>	Kemprow Farm	500	Supporting larger rural communities and growth of key villages
<b>R2</b>	Home Farm	560	
<b>S1</b>	Land to West of Shenley	530	
<b>S2</b>	Harperbury Hospital	230	
<b>S3</b>	Rectory Farm Land	370	
<b>S4</b>	Shenley Grange	380	
<b>E1</b>	Edwarebury farm	550	
<b>SM1</b>	South Mimms growth area, southern plot	450	
<b>SM2</b>	South Mimms growth area, western plot	390	

<sup>29</sup> Whilst it is recognised that there is some uncertainty as to how the site could be utilised, it has been considered in this SA as a strategic housing site option. Whilst this site has not been allocated an 'issues and options site category' in the Potential Sites for Housing and Employment document, the Council has advised that it would most appropriately be classed as a 'Growth through new garden suburbs' option by virtue of its location on the edge of Bushey. In line with the description of 'Growth through new garden suburbs' in the Issues and Options document, we have assumed the site would provide between 300 and 500 homes.

ID	Location	Estimated dwelling number	Development approach
<b>SM3</b>	South Mimms growth area, eastern plot	270	
<b>H1</b>	Rabley Green	1,500	New garden village
<b>H2</b>	Tyttenhanger Estate	4,000+	
<b>H3</b>	Fields south of Letchmore Heath	500	Meeting the needs of other villages
<b>Employment sites<sup>30</sup></b>			
<b>EMP1</b>	Centennial Land	N/A	N/A
<b>EMP2</b>	Elton Way Sanders Laing (Land NE side of Western Avenue lies entirely within this site)		
<b>EMP3</b>	Land east of Rowley Lane		
<b>EMP3 (safeguarded)</b>	Rowley Lane (Safeguarded Site)		
<b>EMP4</b>	Land adj to Elstree Road, A41 and Dagger Lane		
<b>EMP5</b>	Wrotham Park west of Baker Street		
<b>EMP6</b>	Aldenham Reservoir		

<sup>30</sup> Note that the Potential Sites for Housing and Employment document (October 2018) also includes employment site EMP7. This has not been assessed separately in this SA as it forms part of site H2. As a large site and new garden village option, the assessment of H2 takes into account the fact that employment land will be provided. The Council has clarified that employment development at EMP7 would not come forward independently of the development of H2, therefore it is not considered to be a separate option in SA terms.

**Table 4.2: SA Scores for potential sites for housing**

	SA 1: Education	SA 2: Services	SA 3: Housing Provision	SA 4: Community Cohesion	SA 5: Health	SA 6: Soil and Minerals	SA 7: Historic Environment	SA 8: Landscape	SA 9: Greenhouse Gas Emissions	SA 10: Biodiversity and Geodiversity	SA 11: Water Quality and Quantity	SA 12: Flooding	SA 13: Air Quality	SA 14: Energy Efficiency	SA 15: Economy
'Redeveloped urban brownfield site' options															
BE5	++	++	++	+	++/--	+	0?	+/-?	++/-	+	0	0	--/+	0	++/-?
'Growth through new garden suburbs' options															
PB1	++	++	++	+	++/--	-	--?	--?/+?	+/-	--?/+?	-?	0	--/+	0	++
PB2	++	++	++	+	++/--	-	-?	+?/-?	+/-	--?/+?	-?	-	+/-	0	++
PB3	++	++	++	++	++/--	-	0?	+?/-?	+/-	--?/+?	0	0	--/+	0	++
PB4	+/-	+	+	+	++/--	-	0?	+?/-?	+/-	+?/-?	0	0	--/+	0	+/-
BE1	+/-	+	+	+	++/-	-	-?	+?/-?	+/-	+?/-?	0	0	--/+	0	+
BE2	+/-	+	+	+	++/-	-	-?	+?/-?	+/-	--?/+?	0	0	--/+	0	+/-
BE3	++	++	++	+	++/-?	-	-?	+?/-?	+/-	+?/-?	0	0	--/+	0	++
BE4	++	++	++	+++	++/--	-	-?	+?/-?	+/-	--?/+?	0	0	+/-	0	++
BE6	++/-	+	+	+	++/--	-	0?	+?/-?	+/-	--?/+?	0	0	+/-	0	++

	SA 1: Education	SA 2: Services	SA 3: Housing Provision	SA 4: Community Cohesion	SA 5: Health	SA 6: Soil and Minerals	SA 7: Historic Environment	SA 8: Landscape	SA 9: Greenhouse Gas Emissions	SA 10: Biodiversity and Geodiversity	SA 11: Water Quality and Quantity	SA 12: Flooding	SA 13: Air Quality	SA 14: Energy Efficiency	SA 15: Economy
B0	--	+/-	+	+	++/--	-	-?	+?/-?	+/-	+?/-?	0	0	--/+	0	++
B1	+/-	+	+	+	++/--	-	-?	+?/-?	+/-	+?/-?	0	0	+/-	0	+/-
B2	++	++	++	+	++/--	-	-?	+?/-?	+/-	--?/+?	-?	0	+/-	0	++
B3	++?/-?	+?	+?	+?	++?/-?	-	--?	+?/-?	+?/-?	+?/-?	0	0	+?/-?	0	+?/-?
R1	++	++	++	++?	++/-	-	-?	+?/-?	+/-	--?/+?	-?	0	+/-	0	+
R2	++	++	++	++	++/--	--	-?	+?/-?	--/+	+?/-?	0	0	--/+	0	--/+
'Supporting larger rural communities and growth of key villages' options															
S1	++	++	++	++	++/-	-	--?	+?/-?	+/-	--?/+?	0	0	+/-	0	+
S2	+/-	--/+	+	+	++/--	-	-?	+?/-?	+/-	--?/+?	-?	0	+/-	0	+/-
S3	+/-	+	+	+	++/-?	-	-?	+?/-?	+/-	-?/+?	-?	0	+/-	0	+
S4	+/-	+/-	+	+	++/-	-	--?	+?/-?	+/-	--?/+?	0	0	--/+	0	--/+
E1	++	++	++	+	++/--	-	--?	+?/-?	+/-	+?/-?	0	0	--/+	0	++
SM1	+/-	+	+	+	++/--	-	--?	+?/-?	+/-	+?/-?	-?	-	--/+	0	+/-



	SA 1: Education	SA 2: Services	SA 3: Housing Provision	SA 4: Community Cohesion	SA 5: Health	SA 6: Soil and Minerals	SA 7: Historic Environment	SA 8: Landscape	SA 9: Greenhouse Gas Emissions	SA 10: Biodiversity and Geodiversity	SA 11: Water Quality and Quantity	SA 12: Flooding	SA 13: Air Quality	SA 14: Energy Efficiency	SA 15: Economy
SM2	+/-	+	+	+	++/--	-	-?	+?/-?	+/-	--?/+?	-?	-	--/+	0	+/-
SM3	+/-	+	+	+	++/-?	-	-?	+?/-?	+/-	--?/+	-?	-	--/+	0	+/-
'New garden village' options															
H1	++	++	+++?	++	++/--	-	--?	--?/+?	+/-	--?/+?	-?	0	--/+	0	++
H2	++	++	+++?	++	++/--	--	--?	--?/+?	+/-	--?/+?	-?	-	--/+	0	++
'Meeting the needs of other villages' options															
H3	++	++	++	++	++/-	-	-?	+?/-?	+/-	+?/-?	-?	0	+/-	0	+?/-

## Summary of SA findings for housing sites

### SA Objective 1: Education

- 4.3 Sites with a proposed capacity of 500 or more homes would be expected to provide new education facilities to meet the needs of the new development. Some 14 of the 27 housing site options would provide this amount of housing, resulting in a significant positive effect is for SA1: Education. Ten sites will be within 1km of a secondary school or college or within 500m of a primary school, giving a minor positive effect; however a minor negative effect is also recognised due to the pressure that new housing development, which does not provide new facilities, could place on existing facilities. Mixed effects are therefore given for these sites. Sites BE6 and B3 will have significant positive effects mixed with minor negative effects as they are within 1km of at least one secondary school and 500m of at least one primary school giving a significant positive effect, however as less than 500 new homes would be developed on the sites, the pressure of these new homes on existing facilities is also recognised. The effects for site B3 are uncertain as, whilst it is assumed that the site would be used for housing, this is currently unconfirmed by the council<sup>31</sup>. Only site B0 will have a significant negative effect as it is not within 1km of a secondary school or 500m of a primary school.

### SA Objective 2: Services

- 4.4 Sites providing 500 or more homes would be expected to provide a new local centre to ensure that new residents have access to sufficient services to meet their day to day needs. They would also provide a range of services including education, healthcare, open space, leisure, recreation, community facilities and strategic pedestrian/cycling facilities regardless of which site option category they fall within. This is the case for 14 of the 27 housing site options, therefore a significant positive effect is identified for SA2: Services for these. Ten of the sites are either within an area with a medium/high accessibility score or would provide a range of services including education, healthcare, open space, leisure, recreation, community facilities and strategic pedestrian/cycling facilities (but not a local centre) and so a minor positive effect is identified. Sites B0 and S4 are assessed as having low accessibility giving a minor negative effect, although this is mixed with a minor positive effect as the sites would also be expected to provide some new services, as listed above. Site S2 was the only site option within an area of very low accessibility that is not expected to provide a new local centre and so has been assessed as having a significant negative effect. However, again the contribution that this site will have to providing new services is recognised and this is mixed with a minor positive effect.

### SA Objective 3: Housing Provision

- 4.5 Sites providing 500 or more homes are considered to have the potential to significantly contribute towards housing provision in the borough. This is the case for 14 sites, and a significant positive effect is identified for SA4: Housing Provision for these. Uncertainty is attached to the significant positive effect for sites H1 and H2, as they are part of new garden villages. Large scale housing provision on these sites may require a longer lead in period, including in terms of infrastructure provision, to accommodate such a scale, and so homes within new garden villages may not be delivered until the latter phases of the Local Plan period as a result. All of the remaining sites are likely to provide less than 500 homes, and so are assessed as having a minor positive effect.

### SA Objective 4: Community Cohesion

- 4.6 All options are expected to have positive effects with regards to SA4: Community Cohesion, as each development approach option makes provision for community spaces including open space, leisure, recreation and community facilities. Some sites are large (over 500 new homes) and would be expected to provide a new local centre. Where these are also within the 20% most deprived areas in terms of access to housing and services, development could help overcome

<sup>31</sup> All positive and negative effects for site B3 are recognised as being uncertain across all 15 SA objectives. This has not been repeated throughout the summary text above in the interest of avoiding repetition.

barriers to housing and services in these areas, therefore significant positive effects are expected. This is the case for eight of the 27 sites. Uncertainty is attached to the significant positive effects for sites BE4 and R1 as the site is only partly within a 20% most deprived area. The effect would therefore depend on which part of the site is developed.

### **SA Objective 5: Health**

- 4.7 All sites scored a significant positive effect in relation to SA5: Health. This is because each site is within 800m of, and would provide new, sports and recreation facilities. The 'new garden village' options would be expected to provide new healthcare facilities, whereas all other options would be expected to contribute to additional healthcare provision. Some 18 of the sites are assessed as having a significant negative effect mixed with the significant positive effect, as they are either within 200m of the strategic road network (an A Road or motorway) which could have adverse effects on health in terms of noise and air pollution, or, in the case of site PB2, will result in the loss of an existing facility. Minor negative effects (mixed with the significant positive effects) have been identified for nine sites as they are either further than 800m from a NHS GP surgery or hospital, are outside Potters Bar and Bushey Village (where there is currently healthcare capacity), or are in close proximity to an anaerobic digestion facility or other waste management facility (500m and 250m respectively).

### **SA Objective 6: Soil and minerals**

- 4.8 Two sites (R2 and H2) are expected to have a significant negative effect in relation to SA6: Soil and minerals because they include Grade 2 agricultural land, which could be lost to development. The remaining sites, with the exception of BE5, scored a minor negative effect because they contain Grade 3 agricultural land and/or fall within a Minerals Consultation Area. Site BE5 consists of brownfield land, which would represent a more efficient use of land compared with development on greenfield land. This would also reduce the loss of agricultural land.

### **SA Objective 7: Historic Environment**

- 4.9 There are several sites that are highly sensitive in relation to the Historic Environment, these include: B3, SM1, H1, PB1, S1, S4, E1, H2, and H1. Significant negative effects have been predicted for these sites; typically, as a result of the potential for substantial harm to designated heritage assets located within them.
- 4.10 Minor negative effects that equate to either substantial or lesser harm to non-designated assets of low significance, or to less than substantial harm to assets of higher importance, are also predicted for several sites. These include: H3, SM3, SM2, PB2, BE1, BE2, BE3, BE4, B0, B1, B2, S3, B2, R1, R2, and S2. These effects relate to either setting impacts to designated assets or physical and setting impacts to non-designated assets. Where there are physical impacts to heritage assets, the authority's historic environment advisers should be consulted as to the requirements of an appropriately staged programme of works.
- 4.11 Sites where there is the potential for negligible effects to the historic environment either physically or in terms of setting include BE5, PB3, PB4, and BE6.
- 4.12 It should be noted that all effects on the historic environment are considered to be uncertain as they frequently depend on the exact location, size and design of development. Additionally, there is always the risk of encountering previously unknown archaeological remains within a site.

### **SA Objective 8: Landscape**

- 4.13 Each development approach category requires enhancements to be made to the green infrastructure network (including parks, green spaces and other natural features), which would enhance visual amenity, and so each site is identified as having a minor positive effect on this objective. Such minor positive effects are uncertain, depending on the use of green infrastructure and its contribution to the setting of the site. Large sites which are considered to be at odds with the current landscape, or which would effectively join two or more settlements together, are assessed as having significant negative effects, although this is uncertain and dependent on the

design, scale and layout of development which is not yet known. This is the case for three of the 27 sites, including large-scale garden village options (H1 and H2).

- 4.14 All remaining sites are expected to have a mixed minor positive uncertain effect and minor negative uncertain effect in relation to SA8: Landscape. These minor negative effects relate to the fact that development at each site would result in a loss of countryside that falls within a Landscape Character Area considered 'Moderate' or 'Strong' with regard to strength of character. Sites SM1, SM2 and SM3 are within a Landscape Character Area which has a 'Weak' strength of character. However, minor negative effects are still recorded as development of these sites would constitute substantial extensions to South Mimms.

#### **SA Objective 9: Greenhouse Gas Emissions**

- 4.15 One site (R2) is expected to have a mixed significant negative and minor positive effect in relation to SA9: Greenhouse Gas Emissions, because provision will be made for strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. However, the site is not located within close proximity to any existing sustainable transport links.
- 4.16 One site (BE5) is expected to have a mixed significant positive and minor negative effect in relation to SA9: Greenhouse Gas Emissions, because, due to the urban location of the site, services and facilities, as well as employment opportunities and sustainable transport links are likely to be within walking distance of the development. However, the development of 585 homes at this site is expected to significantly increase the amount of cars on the road overall.
- 4.17 The remaining sites are expected to have a mixed minor positive and minor negative effect because they would make provision for pedestrian/cycle connectivity, as well as improvements to bus services. However, improvements will also be made to the strategic highway network which may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions.

#### **SA Objective 10: Biodiversity and Geodiversity**

- 4.18 Some 15 of the sites are expected to have a mixed significant negative uncertain and minor positive uncertain effect in relation to SA10: Biodiversity and Geodiversity, because they each contain biodiversity designations and/or BAP Priority Habitats which could be lost to or damaged by development. However, all sites, regardless of development approach category, would make enhancements to the green infrastructure network, which may lead to habitat improvements and therefore could benefit biodiversity.
- 4.19 The remaining sites, with the exception of BE5, are expected to have a mixed minor positive uncertain and minor negative uncertain effect because they do not contain biodiversity designations and/or BAP Priority Habitats. They do, however, lie within close proximity to biodiversity designations and/or BAP Priority Habitats, which could still be damaged or degraded by development.
- 4.20 Site BE5 is expected to have a minor positive effect in relation to SA10: Biodiversity and Geodiversity, because the redevelopment of an urban brownfield site minimises the amount of development on greenfield land, which is likely to have higher biodiversity value. Additionally, development of site BE5 is required to enhance the green infrastructure network. Brownfield land can, however, also be important for wildlife and redevelopment may result in a loss of biodiversity. The effect is therefore uncertain.

#### **SA Objective 11: Water quality and quantity**

- 4.21 Twelve sites are expected to have a minor negative effect in relation to this SA objective because they are located within Source Protection Zones, however the effect is currently uncertain and dependent on the exact location and design of development. The remaining sites are expected to have a negligible effect as they are not located within Source Protection Zones.

### **SA Objective 12: Flooding**

- 4.22 Only four sites (SM2, SM3, H2 and SM1) are likely to have a minor negative effect on SA12: Flooding as either more than 25% of their area is within Flood Zone 2, or between 5% and 25% of their area is within Flood Zone 3. All other sites are expected to have a negligible effect in relation to this objective.

### **SA Objective 13: Air Quality**

- 4.23 All development approaches categories would be required to provide pedestrian/cycle connectivity, as well as improvements to inter-urban bus services which may minimise greenhouse gas emissions by reducing dependence on the private car. Additionally, improvements to the wider strategic highway network may reduce congestion, again minimising greenhouse gas emissions. This will have positive effects for all sites. For 16 of the sites, effects are expected to be mixed significant negative and minor positive effect in relation to SA13: Air Quality. This is because each site is likely to generate traffic that uses a route with an AQMA as its primary access. The remaining sites are expected to have a mixed minor positive and minor negative effect on SA13: Air Quality. Whilst they will not generate significant additional traffic through an AQMA, improvements to the wider strategic highway network is recognised as potentially making driving a more attractive mode of travel, which could increase car use, leading to adverse effects on air quality.

### **SA Objective 14: Energy Efficiency**

- 4.24 All sites are expected to have a negligible effect in relation to SA14: Energy Efficiency because their location will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development.

### **SA Objective 15: Economy**

- 4.25 Eleven sites are expected to have a significant positive effect in relation to SA Objective 15: Economy, because they would be expected to make provision for new employment (because they would provide 750 homes or more), or are less than 500m from an existing employment area or key employment site.
- 4.26 Site BE5 is expected to have a mixed significant positive and minor negative effect. This is because development of site BE5 would include industrial and commercial development that would provide for a vital and viable town centre, due to an increase in the number of people living within proximity to Borehamwood Town Centre. Site BE5 is also located adjacent to the existing Elstree Way employment site. However, the redevelopment of some parts of the site may result in the loss or relocation of existing small business.
- 4.27 Two sites (R2 and S4) are expected to have a mixed significant negative and minor positive effect because, although they are all located over 2,000m from an existing or key employment area, they are within 800m of a sustainable transport link, providing access to employment opportunities throughout the borough.
- 4.28 Sites BE1, R1, S1 and S3 are expected to have a minor positive effect because they are either within 800m of sustainable transport links or a town centre or are between 501-1000m from an existing or key employment area.
- 4.29 Sites PB4, BE2, B1, B3, S2, SM1, SM2, SM3, H3 and S4 are expected to have a mixed minor positive and minor negative effect because, although the sites are within 800m of a sustainable transport mode, they are either further than 800m from a town or local centre or are between 1001m and 2000m from an existing or key employment area and 500m from an existing local employment site.

**Table 4.3: SA Scores for potential sites for employment**

	SA 1: Education	SA 2: Services	SA 3: Housing Provision	SA 4: Community Cohesion	SA 5: Health	SA 6: Soil and Minerals	SA 7: Historic Environment	SA 8: Landscape	SA 9: Greenhouse Gas Emissions	SA 10: Biodiversity and Geodiversity	SA 11: Water Quality and Quantity	SA 12: Flooding	SA 13: Air Quality	SA 14: Energy Efficiency	SA 15: Economy
EMP1	0	0	0	0	--	-	0?	-?	-	--	0	0	--	0	++
EMP2	0	0	0	0	--	-	-?	-?	-	-	-?	0	--	0	++
EMP3	0	0	0	0	--	-	0?	-?	-	-	0	-	--	0	++
EMP3 (safeguarded)	0	0	0	0	--	-	0?	-?	-	-	0	-	--	0	++
EMP4	0	0	0	0	--	-	0?	-?	-	-	0	0	--	0	++
EMP5	0	0	0	0	--	-	--?	-?	+	--	-?	0	--	0	++
EMP6	0	0	0	0	--	-	-?	-?	-	-	0	0	--	0	++

## Summary of SA findings for employment sites

### SA Objective 1: Education

- 4.30 Employment sites are considered to have a negligible effect on this objective.

### SA Objective 2: Services

- 4.31 Employment sites are considered to have a negligible effect on this objective.

### SA Objective 3: Housing Provision

- 4.32 Employment sites are considered to have a negligible effect on this objective.

### SA Objective 4: Community cohesion

- 4.33 Each employment site is expected to have a negligible effect in relation to SA Objective 4: Community cohesion because none of them are located within the 20% most deprived areas in terms of access to employment within the Borough.

### SA Objective 5: Health

- 4.34 All of the employment sites are expected to have a significant negative effect in relation to SA5: Health because they are each located within 200m of Hertsmere's strategic road network, where high pollution levels and noise disturbance could have an adverse effect on users of the employment sites.

### SA Objective 6: Soil and Minerals

- 4.35 A minor negative effect is expected for each employment site in relation to this SA Objective because they each consist of Grade 3 agricultural land. All of the sites (with exception of EMP4 and EMP6) fall within a Minerals Consultation Area for sand and gravel, which could be sterilised from future extraction should development be located here.

### SA Objective 7: Historic Environment

- 4.36 Of the seven employment site options, one (EMP5) has the potential for significant negative effects to the historic environment as a result of there being designated assets within the site and the potential for substantial harm to these. Two sites (EMP2 and EMP6) have the potential for minor adverse effects and the remaining four sites (EMP1, EMP3, EMP3 (safeguarded) and EMP4) have been judged to have a negligible effect on the historic environment.
- 4.37 All effects are considered to be uncertain and will depend on the location and design of any development.

### SA Objective 8: Landscape

- 4.38 All of the employment sites have been assessed as having a minor negative effect in relation this SA Objective, because development of each would result in the loss of large, predominantly rural areas. Furthermore, each site falls within a Landscape Character Area considered 'Moderate' with regard to strength of character. All effects are uncertain as the actual effect on landscape depends on the exact size, location and design of development.

### SA Objective 9: Greenhouse Gas Emissions

- 4.39 All of the employment sites with the exception of EMP5 are expected to have a minor negative effect in relation to SA Objective 9: Greenhouse Gas Emissions. This is due to each site being located within walking distance of only one sustainable transport link (bus stops). Site EMP5 is expected to have a minor positive effect because it is located within walking distance of two sustainable transport links (bus stops and a National cycle route).



### **SA Objective 10: Biodiversity and Geodiversity**

- 4.40 Two of the employment sites (EMP1 and EMP5) are expected to have a significant negative effect in relation to SA Objective 10: Biodiversity and Geodiversity, because they contain designated biodiversity sites and/or BAP Priority Habitats that could be lost to or damaged by development. The remaining employment sites are expected to have a minor negative effect because they do not contain designated biodiversity sites and/or BAP Priority Habitats, but lie adjacent to designated sites and/or BAP Priority Habitats.

### **SA Objective 11: Water Quality and Quantity**

- 4.41 Sites EMP2 and EMP5 are expected to have a minor negative uncertain effect in relation to this SA Objective, because they fall within a Source Protection Zone. The uncertainty is given as the effect will depend on the exact location and detailed design of development. The remaining sites are expected to have a negligible effect because they do not fall within a Source Protection Zone.

### **SA Objective 12: Flooding**

- 4.42 Sites EMP3 and EMP3 (safeguarded) are expected to have a minor negative effect in relation to SA Objective 12: Flooding, because they contain between 5% and 25% of land within Flood Zone 3. The remaining sites are expected to have a negligible effect because they contain less than 25% of land within Flood Zone 2 and less than 5% of land within Flood Zone 3.

### **SA Objective 13: Air Quality**

- 4.43 All of the employment sites are expected to have a significant negative effect because, although they are not located within an AQMA, they are still likely to generate traffic that uses a route with an AQMA and its primary access.

### **SA Objective 14: Energy Efficiency**

- 4.44 All employment sites are expected to have a negligible effect in relation to this SA objective because their location will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development.

### **SA Objective 15: Economy**

All employment sites are expected to have a significant positive effect in relation to SA Objective 15: Economy because they are each over 0.5ha in size and will provide employment land and opportunities for business investment both of which will contribute towards economic growth.



## 5 Conclusions

- 5.1 The potential sites for housing and employment have been subject to an appraisal against the SA objectives, which were developed at the scoping stage of the SA process. All options were found to have a mix of positive and negative effects. This reflects the fact that they consist of relatively large areas and therefore include, or are in proximity to, a number of features, including environmental and historic designations, yet in being strategic sites all will contribute to providing the scale and type of development needed in the borough over the plan period.
- 5.2 Due to the mix of positive and negative effects identified, and the fact that all options must contribute to infrastructure requirements, such as healthcare or public transport, it is not possible to identify an overall best performing option. Site BE5 performs slightly better than other options with regards to environmental criteria and proximity to services and facilities and accessibility, although air quality is a significant issue for the area. The garden village options are among the six sites considered likely to have significant negative effects on landscape, although these also potentially provide more opportunities with regards to infrastructure provision and good design. However, these options may take longer to come forward than other options.
- 5.3 Due to the large scale of many of the options, development may come forward in just part of the site. As such, many of the effects identified depend on the exact location and design of development. It is likely that a number of the negative effects identified could be avoided, reduced or mitigated through detailed design policies and that some of the positive effects could be even greater. The detailed policies that will influence this will be subject to SA, once they have been drafted.
- 5.4 There is also potential for cumulative effects to arise in relation to a number of SA objectives. However, as the Council has not yet selected which options to include in the emerging Local Plan, an overall cumulative effects assessment has not been undertaken. Once a full draft of the plan has been prepared, the SA will consider the likely cumulative effects of the plan as a whole.

### Next Steps

- 5.5 This SA Report will be available for consultation from October 2018. Following this consultation, the responses will be reviewed and addressed. The findings of the SA and the outcomes of the consultation will be taken into account by the Council as it prepares the next iteration of the Local Plan. The SA will then be updated to reflect that version of the Local Plan and further consideration will be given to potential mitigation measures as well as the approach to monitoring the likely significant effects of the plan.

LUC

October 2018

## Appendix 1

### Consultation Responses Received in Relation to the SA Scoping Report (September-October 2017)

Draft Only

**Table A1.1: Consultation comments received in relation to the September 2017 SA Scoping Report for the Local Plan and how they have been addressed in this SA report**

Consultee	Consultation comment	Action/response
<b>Historic England</b>		
	Historic England has published guidance on Sustainability Appraisals, which contains details on baseline information, sustainability issues and objectives, indicators and monitoring. This document can be found here: <i>Historic England Advice Note 8: Sustainability Appraisal and Strategic Environmental Assessment:</i> <a href="https://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/">https://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/</a>	Noted.
	Suggested additions to Policy Context in Section 2 and Appendix 1: <ul style="list-style-type: none"><li>• UNESCO World Heritage Convention</li><li>• The European Convention on the Protection of Archaeological Heritage (Valetta Convention)</li><li>• European Landscape Convention (Florence Convention)</li><li>• Convention for the Protection of the Architectural Heritage of Europe (Granada Convention)</li><li>• Planning (Listed Buildings &amp; Conservation Areas) Act 1990</li><li>• Ancient Monuments &amp; Archaeological Areas Act 1979</li></ul>	The UNESCO World Heritage Convention has not been included as the nearest World Heritage sites are over 18km away, in central London. The Valetta Convention, Florence Convention and Granada Convention were already referenced in the Plan, Policy and Programme review. The relevant Acts have now been included in <b>Appendix 3</b> .
	Suggested using local level documents, including Hertsmere's existing Conservation Area Appraisals. Local SPDs and SPGs such as the Borough's Planning and Design SPD and Streetscape Manual should also be used.	The Plan, Policy and Programme review focuses only on the national and international levels. Other relevant documents, such as those listed, will be referred to throughout the SA process as appropriate.
	Welcomed reference to GI and noted that heritage assets can form part of GI networks.	Noted.
	Suggested additions to baseline information and sources of information for the historic environment: <ul style="list-style-type: none"><li>• Identify which Grade II buildings and buildings of local importance are 'at risk'.</li><li>• Local Historic Environment Record</li><li>• Building Futures online resource</li><li>• Hertfordshire Archaeology and History Journal</li><li>• Information and figures relating to visitor numbers and key historic attractions in the Borough.</li></ul>	These suggestions have been taken into account in updating the baseline information as presented in <b>Appendix 4</b> , where we have been able to access this information.  The baseline information will be updated at each stage of the SA, as and when additional or updated information becomes available.
	Recommended that the term 'historic environment' is used throughout (rather than 'heritage').	The term 'historic environment' has been used throughout this report.
	Agreed that without a planned local approach to development, heritage assets and their settings would be at risk from poorly planned development.	Noted.
	Suggested the Scoping Report recognises adverse impacts that other aspects such as transport could have upon the historic environment.	This has been acknowledged in <b>Appendix 4</b> of this document.

Consultee	Consultation comment	Action/response
	The objectives and questions in the SA framework are generally appropriate.	Noted.
	<p>Requested the following amendments to SA Objective 7 of the SA Framework:</p> <ul style="list-style-type: none"> <li>Refer to 'historic environment'</li> <li>State <i>"to protect or enhance"</i> rather than <i>"protect and enhance"</i> in order to be consistent with the statutory obligations embodied in the Planning (Listed Buildings &amp; Conservation Areas) Act 1990.</li> <li>Include reference to the settings of historic buildings, designated and non-designated heritage assets and archaeological sites. It would also be helpful to clarify what is meant by archaeological sites as it is not clear how they differ from designated sites in the form of scheduled monuments and non-designated heritage assets.</li> <li>Another particularly useful objective would be to: <i>"improve access to the cultural heritage of the district (including architectural, archaeological and artistic heritage) for enjoyment and educational purposes."</i></li> <li>With regards to the first question of SA Objective 7 we request that the wording is amended to read, <i>"Conserve or enhance listed buildings .... and their settings"</i> rather than, <i>"avoid adverse effects on ..."</i>.</li> <li>It would be helpful if a question was added which sought to explore the ability of the emerging Plan to deal with the effects of unknown heritage assets on the development proposals.</li> <li>With regards to the question on archaeology, it would be helpful to expand the question to include consideration of the effects of alterations to hydrological conditions as this could impact upon water dependent heritage assets including organic remains.</li> <li>It is also advised that a question which will address how climate change mitigation and energy efficiency measures are integrated into the historic environment sensitively particularly as there is a separate objective on energy efficiency.</li> <li>We welcome questions which will explore the ability of any emerging Plan to improve participation in and access to the historic environment as well as fostering heritage-led regeneration.</li> </ul>	Noted. <b>Table 2.2</b> has been updated accordingly. Access to cultural heritage has been incorporated as one of the questions for SA Objective 7.
	The SA matrices and form of assessment are reasonable	Noted.
	We welcome the statement in paragraph 5.1 which outlines consultation with statutory consultees, we would request that 'Historic England' is used instead of 'English Heritage' as that is no longer the correct name for the organisation.	Noted. This document and future SA Reports will refer to Historic England.
	<p>The emerging Local Plan offers the opportunity to review the historic environment elements of the existing adopted development plan, from the evidence base to specific policies and proposals.</p> <p>Historic England look forward to being involved in future Local Plan consultations. We have produced guidance relating to Local Plans which you may find helpful:  <i>Historic Environment Good Practice Advice in Planning 1: The Historic Environment in Local Plans</i>: <a href="https://historicengland.org.uk/images-books/publications/gpa1-historic-">https://historicengland.org.uk/images-books/publications/gpa1-historic-</a></p>	Noted.

Consultee	Consultation comment	Action/response
	<i>environment-local-plans/</i> Paragraph 3.44 states that there are no heritage assets at risk within the Borough. We therefore question the site allocation assumptions regarding SA objective 7, which identifies allocation as having a significant positive effect in bringing heritage at risk back into use. The acceptability of site allocation with regards to heritage assets appears to be based purely on distance. We advise that this is an inappropriate method for assessing the suitability of a site allocation on the significance of a designated heritage asset and its setting. The distances that have been applied however are relatively substantial.	Noted. This has been removed as demonstrated in <b>Appendix 5</b> .  Assessments against SA objective 7 (historic environment) have been undertaken by specialists, using appropriate professional judgement – based on the significance of the assets in question, and the likely contribution of setting to that significance – rather than a proximity-based approach. The assumptions have been amended to reflect this in <b>Appendix 5</b> .  Due to the high-level nature of spatial options considered at the Issues and Options stage, this does not change any of the assessments in previous the SA Report.
	Refer to site allocation guidance: <a href="https://historicengland.org.uk/images-books/publications/historic-environment-and-site-allocations-in-local-plans/">https://historicengland.org.uk/images-books/publications/historic-environment-and-site-allocations-in-local-plans/</a> The SA Scoping Report contains no information on monitoring and indicators. It is considered that the report should cover these two topics to ensure that appropriate means of monitoring and assessment processes are used to inform the final Sustainability Appraisal.	Noted.  Monitoring only needs to be carried out where likely significant effects have been identified. No assessment work was undertaken at the Scoping stage, therefore the likely effects of the plan are unknown, and therefore monitoring needs are unknown. Indicators and monitoring will be addressed at a later stage of the SA process.
<b>Environment Agency</b>		
	No response has been received from the Environment Agency.	N/A.
<b>Natural England</b>		
	Natural England does not consider that this Local Plan Sustainability Appraisal Scoping Report poses any likely risk or opportunity in relation to our statutory purpose, and so does not wish to comment on this consultation.	Noted.
<b>Aldenham Parish Council</b>		
	Page 12, 3.22. What are the accessibility issues in Aldenham?	This is in relation to accessibility of open space. There are no parks and gardens in Aldenham and 1 in 3 people are not within the defined accessible catchment for an allotment. Accessibility deficiencies are detailed in Table 12.4 of the Hertsmere Open Space Study (2011), as referenced in the Scoping Report.
	Page 16, 3.50. Could you clarify the details of “Aldenham West is within the 20% most deprived wards in the country”? How is this defined?	As stated in the SA Scoping Report, these statistics are taken from the English Indices of Deprivation 2015.

Consultee	Consultation comment	Action/response
	Page 18, 3.68. The Radlett Neighbourhood plan supports the assertion that there is “a high overall need for affordable housing with one to three bedrooms”.	Noted.
	3.70. We agree that congestion is a major concern, particularly in the centre of Radlett at rush hours and school bus collection times.	Noted.
	Page 20, Housing Provision Mix. We agree wholeheartedly that there is a need for a mix of housing types, including one to three bedroomed homes.	Noted.
	Page 21, Service Accessibility. We support this policy, as mentioned in the Neighbourhood Plan. SADM32 identifies specific proposals for provision of community facilities.	Noted. This table identified key sustainability issues and their likely evolution without the plan. It only discusses existing Local Plan policies; it does not present new policies.
	Page 23, Biodiversity. SADM12 requires healthy, high quality trees and hedgerows to be retained. The Neighbourhood Plan strongly supports this, and would encourage HBC to put greater penalties on developers who flout these rules, and insistence that trees and hedgerows knocked down should be replaced with mature specimens.	Noted.
	Page 36. Housing Provision. We support strongly the need to provide housing for a range of ages and household types. This is emphasised in our Neighbourhood Plan. We hope this will be taken into account when considering planning applications in Radlett for very large homes, where potentially smaller ones could be built.	Noted.
	Page 37, Community Cohesion. (reducing and preventing crime and the fear of crime). There is mention of street lighting. We would like to propose that, as the conversion to LED light sources in the street lighting progresses, that the timing criteria are changed to allow the lights to be on longer during the hours of darkness. This policy was a cost saving policy, and as LEDs save roughly 80% of energy consumption as opposed to standard lighting, a few extra hours of operation would still save money and give the residents a much greater sense of security.	Noted.
	The Parish Council also made a number of comments that do not relate to the SA Scoping Report. These included reference to specific developments. Some of these comments also related to other activities of the Council, such as funding for various services and facilities. Other such comments included a desire for developers’ viability assessments to be more transparent and comments on particular aspects the Parish Council would like to be	The role of the SA Scoping Report is to review plans, policies and programmes relevant to the Local Plan, summarise the existing baseline with regards to sustainability topics, identify key issues for the Borough and set out the SA Framework to use in future assessments. As such, these issues are not relevant to

Consultee	Consultation comment	Action/response
	considered in relation to planning applications.	the SA Scoping Report.
<b>Affinity Water</b>		
	Page 28: Water Supply – Likely evolution without implementation of the Local Plan. Whilst we support this section, we would suggest adding an additional sentence highlighting that without the updated Local Plan, the ability for Affinity Water to plan for necessary strategic infrastructure and increases in water demand in the Hertsmere Borough beyond 2027 would also be reduced, due to a lack of information and certainty regarding the locations and quantities of planned future development.	This section has been amended, see <b>Table 3.1</b> .
	Page 40: SA Objective 11 – Water Quality and Quantity. We believe that paragraph 2 should be reworded to include adequate potable water supply.	An appraisal question regarding potable water supply has been added to <b>Table 2.2</b> .
	The 2014 Water Resources Management Plan (WRMP14) is cited as a reference within the report. We would just like to highlight that we are currently in the process of undertaking work on our next Water Resources Management Plan (WRMP19), which will assess our water supply and demand balance over the next 25 years, replacing our previous WRMP. The draft plan will be submitted to DEFRA in December and we are planning to undertake public consultation on the plan early next year, prior to submitting the final version later next year.	Noted.
<b>Watford Borough Council</b>		
	The section titled 'Economy and labour market' could reference the retail work being undertaken which has not specifically been reviewed in the Scoping Report aside from the number of jobs associated with the sector.	We assume this refers to the Joint Retail Study. Reference to this has been included in the updated Baseline section in <b>Appendix 4</b> .
	With regards to <b>Table 4.2</b> : <ul style="list-style-type: none"> <li>SA Objective 2 (Services): It could be useful to specify what services are considered to be 'essential' to provide more context for this objective.</li> </ul>	A footnote has been added to <b>Table 2.2</b> for clarity. As demonstrated in the assumptions presented in Appendix 2 of the SA Scoping Report, this will largely be measured in terms of proximity to town and local centres.
	With regards to <b>Table 4.2</b> : <ul style="list-style-type: none"> <li>SA Objectives 2 (Services) and 5 (Health): There is overlap between the questions posed in these two objectives. Without more distinction between them this could limit the value the assessment has overall. It could be useful to provide more</li> </ul>	There is a degree of overlap between these objectives, but this is not considered to limit the value of the assessment. As noted above, SA objective 2 will be largely measured in terms of proximity to town and local centres and is about accessibility of

Consultee	Consultation comment	Action/response
	clarity between the appraisal questions that contribute to each objective. For example, further clarity could be provided between which objective relates to facilities such as medical centres where there is direct health intervention available and indirect intervention such as access to recreational facilities that could improve health.	services and facilities in general, whilst SA objective 5 considers health in terms of accessibility to health facilities, as well as recreation facilities. Clarification has been added to the footnote to <b>Table 2.2</b> .
	With regards to <b>Table 4.2</b> : <ul style="list-style-type: none"> <li>SA Objective 8 (Landscape): The first question could be more definitive if instead of asking if the Plan will 'consider the existing...' the question was more targeted by asking if the Plan 'will retain or enhance the existing...'.</li> </ul>	The SA framework in <b>Table 2.2</b> has been updated accordingly.
	With regards to <b>Table 4.2</b> : <ul style="list-style-type: none"> <li>SA Objective 9 is called emissions, however, the focus of the appraisal questions is on promoting alternative forms of transport to the car sustainable transport modes. These questions overlap the same topic and are covered by Objective 13, which is related to air quality. The assumptions for Objective 13 set out in Appendix 2 do not reflect the appraisal questions set out in Table 4.2. A clearer distinction between the objectives and the respective appraisal questions in the two objectives could provide more value to the overall assessment.</li> </ul>	SA objective 9 relates to greenhouse gas emissions. As a large proportion of greenhouse gas emissions in Hertsmere arise from transport, this has been used, in part, as a proxy for greenhouse gas emissions. SA objective 13 relates to air quality. Again, a large proportion of air pollutants in Hertsmere arise from transport, therefore this has been used as a proxy. Greenhouse gas emissions and air quality relate to different SEA topics, as outlined in the SEA Regulations, and therefore have been kept separate in this SA, despite the fact that transport is an important factor for both topics. Please note that there are additional factors that may influence both objectives. <b>Table 2.2</b> has been updated to add clarity.
	With regards to <b>Table 4.2</b> : <ul style="list-style-type: none"> <li>SA 10 (Biodiversity and Geodiversity): It could be useful to reference European protected sites as part of the appraisal questions as these sites are specifically referenced in national policy for the highest protection. This would help demonstrate such designations have been accounted for, whether they are in the Borough or outside of it.</li> </ul>	The SA framework in <b>Table 2.2</b> has been updated accordingly.
	In Appendix 2, it could be useful to clarify if the distances (e.g. access to facilities) refer to a straight line distance or if this is a distance along public rights of way.	Clarification has been included in the 'Difficulties encountered and limitations' section in <b>Chapter 2</b> .



**Table A1.2: Consultation comments received in relation to the Issues and Options SA Report for the Local Plan and how they have been addressed in this SA report<sup>32</sup>**

Consultee	Consultation comment	Action/response
<b>Lichfields on behalf of CEG</b>		
	CEG is proposing housing and a golf course at Potters Bar Golf Course and has submitted this through the call for sites. State that they broadly agree with the methodology adopted in the SA but have concerns over how the methodology is applied (see below).	Noted.
	<p>Suggests that the SA should not apply equal weight to all SA objectives, in particular, that SA objective 3 (Housing) should be given greater weight.</p> <p>Gives the example that under consideration of Local Housing need, the significant negative effect against SA objective 8: Landscape should be given a lesser weight than effects recorded against meeting the needs of the HMA. The consultee links this to the presumption in favour of sustainable development and the fact that the NPPF does not require development to be limited when substantial greenfield land is needed to meet development needs.</p>	<p>The weighting of SA objectives is not a requirement of the SEA Directive or legislation regarding the SA. The SA does not apply any weighting to the SA objectives, as this is considered a more transparent approach, as weighting may mask potential significant effects. The SEA Regulations and the PPG state that assessment should focus on significant effects, therefore the SA considers each objective in turn and whether positive or negative, significant or minor effects are likely. It should be noted that the SA is an assessment of the effects of the plan on sustainability, not a review against national policy.</p> <p>The Council may choose to weight certain issues in their decision-making process, but the process would be separate to the SA (although informed by it).</p>
	Suggests that the less positive scoring of Option 2 (Growth through new garden suburbs) against SA15 (Economy), when compared to other Potential Development Approaches does not consider 'the objectives of the plan in the round', as the economic objective could still be met within the wider Local Plan strategy.	<p>The SA of Issues and Options assesses each option in turn, in order to demonstrate the effects of that option in itself. The SA does not make assumptions about what other parts of the plan may require, when this is currently unknown.</p> <p>Once options have been selected by the Council, the SA will undertake a cumulative assessment of the plan as a whole.</p>
	Notes that the updated NPPF and proposed standardised methodology for assessing housing need will apply to the Local Plan. In particular, notes that the SA has not assessed the	The Council identified the alternative housing need scenarios, as described in the SA Report. The Potential Sites for

<sup>32</sup> Note that all references to particular parts of the report relate to the Issues and Options SA Report, not this SA Report, unless the reference is in **bold**.

Consultee	Consultation comment	Action/response
	housing need that would be calculated under the proposed methodology.	Housing and Employment document suggests that the OAN using the Government's standard methodology is 444 homes per year. However, much uncertainty remains as advice on calculating the OAN is expected to be updated shortly. We will continue to liaise with the Council about what the reasonable alternatives are and will assess any new reasonable alternatives identified.
<b>Aldenham Parish Council</b>		
	<b>The Sustainability Objective 1, Education:-</b> 'Provide new and improved education facilities' – this is most necessary in Radlett and members agree with the statement in 'The Vision' that 'schools will be needed to support growth.'	Noted.
	<b>The Sustainability Objective 2, Services:-</b> 'Provide new and enhance existing leisure facilities' and 'Provide for the specific needs of disabled and older people', members have agreed that these are high on their priority list.	Noted.
	<b>The Sustainability Objective 3, Housing Provision:-</b> To create developments that make significant contributions 'to local housing needs' and provide 'a mix of housing' and 'to provide genuinely affordable housing'. Members consider these to be important objectives and have included such objectives in the Radlett Neighbourhood Plan.	Noted.
	<b>The Sustainability Objective 7, Historic Environment:-</b> To 'Conserve and enhance' listed buildings and 'Conservation Areas'. Members agreed that better protection is needed for Radlett Conservation areas, especially Loom Lane. Also, to 'Provide appropriately scaled, designed and landscaped developments that relate well to and enhance the historic character of the Borough and contribute positively to its distinctive sense of place.' This is also an objective of the Radlett Neighbourhood Plan – i.e. the proposed development on the site of the petrol station would be too high.	Noted.
	<b>The Sustainability Objective 13, Air Quality:-</b> Members noted that there was no suggestion or mention of using plants and trees to absorb carbon dioxide.	The appraisal questions have been updated to recognise the role vegetation can play in absorbing CO <sub>2</sub> and pollutants with regards to SA objective 9: Greenhouse Gas Emissions and SA objective 13: Air Quality respectfully. Given the high-level nature of the options assessed at Issues and Options stage, these additional questions would not result in any changes to

Consultee	Consultation comment	Action/response
		the previous assessments.
	In respect of the section 'Aldenham Parish Council, What are the accessibility issues in Aldenham?' (relates to accessibility of open space), members would like clarification about the statement 'There are no parks and gardens in Aldenham and 1 and 3 people are not within the defined accessible catchment for an allotment'. What does this mean?	<p>This relates to Table A1.1 in Appendix 1. The information given in this response is taken from the Hertsmere Open Space Study (2011). This study states that there are no parks and gardens (defined as including urban parks, country parks and formal gardens) in Aldenham.</p> <p>The study defines a 1,200m catchment for allotments, which means that allotments are considered accessible to residents living within 1,200m of them. This means that in Aldenham, 1 in 3 people live further than 1,200m from an allotment.</p>
	<p><b>Table A6.3 Growth of key villages</b></p> <p><b>SA1: Education</b> - Members support the objective that large new housing developments will require one or more primary schools and additional secondary school places.</p> <p><b>SA11: Water quality and quantity</b> – Members agreed that the objectives in this section are important but also suggested that a gas supply to villages should also be considered as an amenity that would be in place for the future.</p>	This table is an assessment of the options against the SA objectives. These comments seem to be suggestions for the plan itself, rather than the SA.
	<p><b>Table A6.4 Meeting the needs of other villages</b></p> <p><b>SA1 Education</b> - Members suggested that new developments of 100 houses or more will require an increase in primary and secondary places. With this objective in mind, the new development at Patchetts Green may qualify for further educational provision.</p> <p><b>SA2 Services</b> – Members acknowledged that with the expansion of our smaller villages namely Letchmore Heath, Aldenham and Patchetts Green, there will be added pressure on services and facilities. Members are fully supportive of all measures to improve facilities and to improve bus/pedestrian/cycle connectivity ensuring ease of access to the neighbourhood centre and the wider networks.</p> <p>Members noted that there was no mention of utilities such as improving the gas supply.</p>	This table is an assessment of the options against the SA objectives. These comments seem to be suggestions for the plan itself, rather than the SA.
	Members agreed that any approved Neighbourhood Plan needs to take in to consideration planning for growth and has to be part of the 'Issues and Options' outlined in the Hertsmere Local Plan.	Neighbourhood Plans sit alongside Local Plans as part of the development plan for an area. It is therefore not necessary to assess a Neighbourhood Plan as an option within the SA process for a Local Plan.
	The Parish Council has also submitted a number of comments relating to the Issues and Options document itself.	These comments do not address the SA.

Consultee	Consultation comment	Action/response
<b>Forestry Commission</b>		
	Ancient Woodland is mentioned in <b>SA Objective 10: To protect and enhance biodiversity and geodiversity</b> . However <i>the Significant negative effect focuses on designated sites and SSSIs</i> . But not all Ancient Woodland is a SSSI and Ancient Woodland isn't designated, but all are irreplaceable habitats and therefore we suggest they should be mentioned implicitly. We cannot comment on the actual appraisal only in relation to our note above as the impact of options on Ancient Woodland will be much more apparent when planning applications come forward and will also depend on design and implementation.	The assumptions to be applied to SA objective 10 have been updated as suggested. As the SA of Issues and Options did not assess any specific sites, this would not result in any changes to the previous assessments.
<b>CPRE Hertfordshire</b>		
	Raised concerns that the terminology in the SA is not clear regarding the difference between Housing Need and Housing Requirement, particularly in Table 3.1 (Key Sustainability Issues).	Noted. References to housing need and requirement have been updated in this report and this will also be carried through to future iterations of the SA.
	The SA should not have taken the Council's option of meeting housing need in full as a key assumption for the appraisal, and is flawed as result of doing so.	The SA recognises the objectively assessed need as an objective estimate of the number of homes required in Hertsmere over the plan period. There may be reasons why the Council cannot meet this need or choses to pursue a different figure, but the need will still be there. This is recognised in the SA. The Potential Sites for Housing and Employment document suggests that the OAN using the Government's standard methodology is 444 homes per year. However, much uncertainty remains as advice on calculating the OAN is expected to be updated shortly. We will continue to liaise with the Council about what the reasonable alternatives are and will assess any new reasonable alternatives identified.
	The subsequent reference in the table to 'piecemeal windfall developments' is also inappropriate. Windfalls are an essential contributor to housing supply promoted by national policy, and the reference to lack of infrastructure is of no relevance to the 'Housing Provision' topic in the SA.	The NPPF defines windfall sites as ' <i>Sites which have not been specifically identified as available in the Local Plan process. They normally comprise previously-developed sites that have unexpectedly become available</i> '. Therefore, with no local plan in place, it is likely that much development will come forward as windfall sites. This does not preclude the Council

Consultee	Consultation comment	Action/response
		<p>including a windfall allowance within the Local Plan.</p> <p>The reference to supporting infrastructure has been removed.</p>
	<p><b>SA Findings for Issues and Options Part 2</b></p> <p>The SA fails to consider any other 'reasonable alternatives', including alternatives with a lower housing requirement figure that takes into account the key policy constraints.</p>	<p>The Council is responsible for identifying reasonable alternatives, which are then subject to assessment through the SA. Should the Council identify additional reasonable alternatives, these will be subject to the same SA process.</p>
	<p>The explanation attempted in paragraph 5.13 of the reason for the Council's choice of one of the two identified housing need options as a proposed 'housing provision figure', is unclear and is surely irrelevant to its actual sustainability, which is what the SA is intended to assess.</p>	<p>The SEA Directive and PPG require the SA to provide an outline of reasons for identifying the reasonable alternatives, selecting the preferred options and not taking forward reasonable alternatives to these. The SA is not the only basis for the Council's decision making, therefore this reasoning often includes factors outside the findings of the SA. The consultee has not explained why it feels this is unclear, but we will work with the Council to consider whether the text provided needs updating.</p>
	<p>We also have major concerns about the actual conclusions summarised in paragraphs 7.4 and 7.5, particularly the claim that 'significant negative effects were only identified in relation to Option 5 (New garden village) against SA objectives 7 and 8). This is not true, and seems to be based on inconsistent and incomplete analysis in Appendices 4, 5 and 6.</p>	<p>Paragraph 7.4 relates to the assessment of potential development approaches only, in relation to SA objectives 7 and 8. Therefore, this statement is true and in line with the full assessment provided in Appendix 6, which is the relevant appendix for this paragraph.</p>
	<p>In Appendix 4 (Assumptions), under SA Objective 8 on Countryside and Landscape, a negligible effect is assumed if the allocation would not result in settlement coalescence, but this is only one of five equally important Green Belt purposes, two others of which are likely to be affected to at least a minor, if not significantly negative degree.</p> <p>Similarly, a 'significant negative effect' is only assumed if settlements merge as a result, totally ignoring the effect on the openness of the Green Belt, and the national purposes of safeguarding the countryside from encroachment and checking urban sprawl. We also point out that 'merger' is 'merger'; surely design and layout are unable to mitigate that effect if an allocation fills the gap between settlements.</p>	<p>The Green Belt is a policy designation and not an environmental or sustainability designation. As such, the purposes of the Green Belt are not inherently sustainability issues. Paragraphs 4.10 to 4.16 of the SA Scoping Report explain the relationship between the Green Belt and the SA, including Table 4.1, which demonstrates how each of the purposes of the Green Belt relates to the SA objectives.</p> <p>The reference to coalescence is because this is identified as a particular potential issue in Hertsmere. As the Green Belt is drawn tightly around the main urban areas of Hertsmere, it</p>

Consultee	Consultation comment	Action/response
		<p>has been included in the assumptions for SA objective 8 as a proxy for the rural area. To avoid confusion, references to the Green Belt have been removed and replaced with references to the settlement boundaries. As the SA of Issues and Options did not assess any specific sites, this would not result in any changes to the previous assessments.</p> <p>The PPG requires that all options are assessed in the same level of detail. As such, the assessment of site options will be based on site boundaries only and will not make assumptions about mitigation measures that may be put in place, as it cannot be guaranteed (at least at the site options stage) that these will be delivered.</p>
	Appendix 5 (SA Matrices) under SA Objective 8 on countryside, does mention 'Green Belt openness', but this is not referred to in the analysis, and the same section only refers to the impact on landscape character and settlements, which are not really Green Belt issues.	<p>The main report 'analysis' simply provides a summary of the full matrices, which are presented in Appendix 5. This is made clear in the introductory text to Chapter 5 (also applicable to Appendix 6 and Chapter 6).</p> <p>SA objective 8 relates to landscape, therefore, whilst Green Belt is acknowledged, the focus of the assessment (and therefore the summary) is on landscape impacts of the options. As discussed above, Green Belt is a policy designation, not an environmental or sustainability designation.</p>
	This inconsistency becomes even more important when paragraph 7.5 is addressed. This simply states that nearly all Greenfield land is in the Green Belt, and that development may lead to 'loss of open countryside and increase potential for settlement coalescence'. This conclusion totally misses the point that all of the housing allocation options assessed in Tables A6.2, A6.3, A6.4 and A6.5 would have a negative effect on the Green Belt and two of its purposes that are not even mentioned in these Tables. Indeed Table A6.3 on expansion of Elstree and Shenley does not even mention Green Belt at all.	Please see responses above. The SA is not a Green Belt Review or an assessment of impacts on the Green Belt. It is an assessment against the SA objectives presented in Table 2.2, which were established and consulted on at the Scoping Stage.
	States that paragraph 14 of the NPPF defines sustainable development and emphasises that there are exceptions to the circumstances in which Local Plans should plan to meet objectively assessed needs. Uses this point to reiterate the statement that a lower housing	Paragraph 14 of the NPPF defines the 'presumption in favour of sustainable development', rather than sustainable development itself.

Consultee	Consultation comment	Action/response
	figure should have been considered.	As explained above, the Council is responsible for identifying reasonable alternatives. Should the Council deem a lower housing figure to be reasonable, this will be assessed through the SA.
<b>St Albans City and District Council</b>		
<b>Table 5.1</b> <p>There is a limited range of housing figs options which falls short of Government Proposed Standard Methodology, at 707 per year.</p> <p>It is not clear why there is a relatively big difference in scoring, including significant effects, when the difference in housing numbers, at 600 and 670 pa respectively, is relatively small.</p> <p>Scoring for housing provision options is normally dependant on site selection. Site selection is not clear at this stage and so justification of approach could be better explained.</p>		<p>The Council identified the alternative housing need scenarios, as described in the SA Report. The Potential Sites for Housing and Employment document suggests that the OAN using the Government's standard methodology is 444 homes per year. However, much uncertainty remains as advice on calculating the OAN is expected to be updated shortly. We will continue to liaise with the Council about what the reasonable alternatives are and will assess any new reasonable alternatives identified.</p> <p>The reasons for scoring are set out in the full SA matrices, provided in Appendix 5 (Table A5.1).</p> <p>As the consultee has stated, there is a lack of certainty regarding the spatial implications of the housing figure options, which has meant that assessments are necessarily comparative to an extent. This has been stated more clearly in the 'difficulties encountered and limitations' section of this report. The SA has also accounted for the source of the housing numbers, e.g. the economic-led scenario is likely to have more positive effects on SA objective 15: economy, than the other scenarios. Additional text has been provided to clarify this.</p>
<b>Table 6.1</b> <p>Option 1 scores relatively well. Not clear why it scores lower than others on SA4.</p> <p>Not clear why option 2 is scored lower than others on SA4 and SA15. Benefits of garden suburbs at edge of towns are not fully recognised in the scoring as a relatively more</p>		<p>The reasons for scoring are set out in the full SA matrices, provided in Appendix 5 (Table A5.1). Issues with colour coding of mapped data relating to the indices of multiple deprivation resulted in an oversight that all options include areas in the 20% most deprived areas in terms of barriers to</p>



Consultee	Consultation comment	Action/response
	<p>sustainable location.</p> <p>Not clear why options 3 &amp; 4 are scored relatively high on SA 1-3, SA5, SA9 &amp; SA15 because in general terms villages are normally considered less sustainable locations than towns. Proposed housing at each village is relatively small. While additional population can help support existing village facilities; it is not enough additional homes to justify significant step change in infrastructure provision to make villages more sustainable locations than towns in relative terms. In some cases, extra population can stretch limited village infrastructure already under pressure. Lower infrastructure / service provision in villages normally means longer journeys to access essential infrastructure / services and jobs elsewhere; and there is often more resilience on the car in villages as there can be limited public transport and active travel options.</p> <p>Options 5 and 2 could be expected to have higher scores for SA1-3, SA5 &amp; SA15 than options 3 &amp; 4. This assumes a new garden village would be largely self-sufficient due to larger scale of development and significant planned new infrastructure and facilities. Also to recognise that garden suburbs at edge of towns are normally considered relatively sustainable locations compared to village locations.</p>	<p>housing (albeit these are smaller areas with regards to Options 1 and 2). This has been rectified and the assessments have been revised to acknowledge that all options should score equally with regards to SA 4 (see <b>Appendix 2</b>).</p> <p>Option 2 scored lower than other options on SA15, as all other options include provision of employment land/opportunities (outside of local centres).</p> <p>The purpose of the SA is to assist the Council in identifying the most sustainable and appropriate approach to development pattern. As such, it does not make assumptions about which locations are more sustainable prior to the assessment. The SA considers the implications of the options as a development approach across the borough as a whole, rather than the effects at one particular location.</p> <p>With regards to infrastructure to be provided by development at villages, the SA took account of the infrastructure provision set out in the Issues and Options document (as summarised in paragraph 6.3 of the Issues and Options SA Report). The assessments recognise the potential for increased pressure on existing facilities, but have assumed that the provision of new services and facilities, as set out in the Issues and Options report, would be sufficient to accommodate the increased population. Both options 3 and 4 state that the option would include provision and improvement of sustainable transport infrastructure. The assessments of SA objectives 9 and 10 recognise the positive effects of new and improved sustainable transport infrastructure, but also the likely increase in cars on the roads in Hertsmere overall.</p> <p>The SA assesses options against the baseline and focus on identifying significant effects, as required by the PPG. Therefore, as described in the methodology in Chapter 2 of</p>



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		the SA report, the SA only identifies the magnitude of effects as negligible, minor or significant (see Figure 2.1). As such, all options often have the same score, e.g. for SA1 and SA2, because all are expected to have significant effects compared to the baseline.
<b>Little Heath Action Group</b>		
	The group believe Hertsmere has approached its Local Plan with a real desire to properly evaluate all of the options.	Noted.
	Raised concerns that if option 2 (New Garden Suburbs) is pursued in Potters Bar Golf Course it could mean two councils will be developing back to back across the boundary and the cumulative effect of this would be inappropriate. Stated that a full detailed cross boundary examination should be undertaken with special consideration to effects on the Green Belt.	When preferred options have been identified, the SA will consider cumulative effects.  The Green Belt is a policy designation and not an environmental or sustainability designation.
	Concerned that there are unresolved Duty to Cooperate issues with regard to Welwyn and Hatfield's Local Plan and hope that future considerations of Hertsmere's Local Plan will properly address the legal requirements of DtC across all issues such as schools, transport and health.	The Duty to Cooperate is not part of the SA process.
<b>Mr. Popat</b>		
	Through the public consultation on the Issues and Options document (October/November 2017) we promoted our client's site on the western urban edge of Bushey for a retirement village led mixed use scheme including self-build housing plots and an equestrian centre. The submission should therefore be read in conjunction with this earlier representation (Comment ID LPIO_664 – 682).	Noted.
	Support integrated approach to SA and SEA and the inclusion of Table 1.1.	Noted.
	We are generally supportive of the broad methodological approach which is outlined in table 2.1. In relation to the Stage A: Scoping, we note the fifteen SA Objectives which form part of the SA framework. While we recognise the importance of all Strategic Objectives, we particularly note Objective 2 – Services and Objective 3 – Housing Provision. With regards to Objective 2, we support the need, "to ensure ready access to essential services and facilities for all residents". We stress the importance of the proposed SA 'questions' which include consideration that the plan, "provide new and enhance existing leisure facilities...",	Noted.  The weighting of SA objectives is not a requirement of the SEA Directive or legislation regarding the SA. The SA does not apply any weighting to the SA objectives, as this is considered a more transparent approach, as weighting may

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	"create opportunities to lead healthier lifestyles..." (also related to Objective 5 – Health) and "provide for the specific needs of disabled and older people". In relation to Objective 3, we support the need, "to ensure the provision of housing, including affordable housing and a mix that meets local needs." We again stress the importance of the proposed SA 'questions' which include consideration that the plan, "creates development that makes a significant contribution to household needs" and "provides a mix of housing for a range of ages and household types". We wish to reiterate our submission to the Issues and Options consultation that our client's site will make a significant contribution to all these Objectives and should be a key consideration as the SA process develops, particularly when assessing site specific proposals in the future.	mask potential significant effects.  All reasonable alternative strategic housing and employment site allocations have been considered in this SA report.
	We generally agree and support the assessment and analysis of the Council's vision and Priorities, as set out in section 4. We particularly note that the Vision and Priorities are assessed to have a 'significant positive effect' in relation to Objectives 2 and 3 and 5. We are pleased that the sustainability principles of potential Green Belt release have been assessed and considered through this SA process.	Noted.  The SA has assessed the vision and priorities as set out in the Issues and Options document. It does not assess the sustainability principles of Green Belt release in itself.
	We support the assessment in Section 5 that the demographic-based scenario should be used as the basis for the housing provision figure.	The preferred approach was identified by the Council. The SA simply presents the sustainability implications of the reasonable alternatives identified.
	With regards to self-build housing, as set out in paragraph 5.18, we support the assessment and analysis that the Council's policy would support Objective 3.	Noted.
	An SA is ultimately required to inform the development of the 'most appropriate strategy' when considered against the 'reasonable alternatives' and based on proportionate evidence. It is an essential part of the plan making process. It should be undertaken from the outset and in doing so, will help to ensure that decisions are made that contribute to achieving sustainable development. It should be possible to see how the SA has influenced the final outcome of the plan.	Noted.
	Suggests that the five development approaches are not reasonable, as none identify sufficient land to meet the OAN. States that the Council should have considered approaches that meet the full OAN in their own right, therefore not all reasonable alternatives have been considered. Expresses concern that the limitations of the alternative approaches mean that the Council will be formulating a development approach based solely on the basis of meeting development needs rather than one which has been informed or shaped by this SA process.	The Council is responsible for identifying reasonable alternatives. The SA is transparent in stating, at paragraph 6.2, that ' <i>multiple options will need to be taken forward in order to meet the full objectively assessed housing need</i> '.  The SA will continue to assess all options considered reasonable by the Council. This includes assessment of all reasonable alternative site allocations, as presented in this document. These were assessed in draft and sent to the Council prior to the Council identifying its preferred options.

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	We note, particularly in regards to Sustainability Objective 3 – Housing Provision, that all five scenarios have been assessed to make a positive + + (Green) impact. Whilst we accept that each approach will make an additional contribution to the Council's housing requirements, no approach would meet the OAN. This 'score' should reflect this as not meeting OAN will ultimately have an overall negative impact in sustainability terms for the borough. The SA should recognise and highlight this important point in its analysis and reflect it in its 'scoring'.	As stated in paragraph 6.6 of the Issues and Options SA, all options are expected to have a significant positive effect on SA3 as all will provide a substantial amount of housing, including affordable housing. These assessments have been undertaken in light of paragraph 6.3, and therefore do not award negative scores as it is accepted that multiple options will be taken forward.
	We fully support the conclusion in paragraph 7.5 that, "the Borough has limited opportunities for brownfield development, meaning that some development will be required on greenfield land." We also support the fact that the sustainability implications of releasing Green Belt have been considered in the SA process at an early stage.	Noted. As stated above, the SA has assessed the options in themselves, rather than the principle of Green Belt release. This is because Green Belt is a policy designation, not a sustainability or environmental designation.
	Supports Option 2 as the most sustainable option and generally supports the SA's appraisal of this as the most sustainable approach.	Noted.  Note that the SA does not identify any particular option as being most sustainable.
<b>National Grid</b>		
	We have reviewed the above consultation document and can confirm that National Grid has no comments to make in response to this consultation.	Noted.
<b>Three Rivers District Council</b>		
	We support the scores given to the Sustainability Objectives and feel that the Vision covers the majority of the Sustainability Objectives. As the vision sets a broad outlook for Hertsmere over the plan period, we understand why certain details which underlie the Sustainability Objectives are not specifically referenced (e.g. development not being permitted in Flood Zone 3, protection of designated wildlife sites, crime prevention in design). We expect that these details will be directly addressed in policies/options as the Plan progresses.	Noted.
	The priorities set an appropriate foundation for the Vision to be successfully met. We support the scores given to each priority and agree that several effects are dependent on the future locations of development, with the expectation that effects will become clearer at	Noted.

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	<p>a later stage. Where negligible effects are given for SA4, we note that an improvement to meeting this sustainability objective could be made at a later stage; for example, by implementing policies that incorporate crime prevention into design.</p> <p>Also suggests a number of amendments or additions to the vision and objectives to address SA objectives that are not currently addressed and minimise negative effects of SA11.</p>	
	<p>We feel that the demographic-based scenario is the most appropriate and realistic option for calculating local housing need and also agree that less significant negative effects for the Sustainability Objectives will be produced from this scenario, in comparison to the economic-led scenario. We recognise that many of the possible effects of each scenario are uncertain until locations for housing development are clearer and also accept the possibility of mixed effects due to threshold requirements for services, schools, etc.</p>	<p>Noted.</p> <p>The preferred approach was identified by the Council. The SA simply presents the sustainability implications of the reasonable alternatives identified.</p>
	<p>We agree that the proposed threshold for affordable housing provision will provide significant positive effects for SA3. Affordable housing provision meets local needs and secures housing for people who cannot compete in the local housing market, subsequently reducing inequalities and helping to close barriers in accessing housing. In recognising this, the Three Rivers Sustainability Appraisal scores a minor positive effect for affordable housing provision in relation to the social objectives of community cohesion and health and wellbeing. The negligible effect given for SA4 and SA5 could be reconsidered in light of these suggestions.</p>	<p>All SA objectives are related to many, if not all, other objectives. However, in order to be transparent and useful to plan makers, the SA attempts to separate these out as far as possible.</p> <p>It is accepted that provision of affordable housing may help to directly address deprivation, and may also have some benefits for health therefore the scores for SA 4 and 5 have been amended as suggested (see <b>Appendix 2</b>).</p>
	<p>We agree with the sustainability rating for the self-build housing proposal. We note that the effect on SA3 may improve or deteriorate depending on what is defined as a 'larger development' and whether there is a minimum limit of provision set in relation to the requirement for 'up to 10%' of new housing to be self-build homes.</p>	<p>Noted.</p>
	<p>Supports selection of the employment-led scenario and notes that future policies should help to prevent and/or mitigate the significant negative effects scored for SA7, SA8, SA10, SA11, SA12 and SA14, with outcomes also being dependent on future locations of employment development.</p>	<p>Noted.</p>
	<p><u>Potential Development Approaches:</u> We support the scores and justifications given for each option, especially in regards to SA1-SA5. As the development necessary to meet growth demands will be large-scale, we recognise that the positive effects resulting from future</p>	<p>Noted.</p>

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	development that is required may come with associated negative environmental effects. Developing policies and allocating sites which achieve a balance in preventing and/or mitigating negative effects and boosting positive effects is possible at a later stage.	
	Overall, the sustainability scores given in Hertsmere's Sustainability Appraisal generally accord with the scores given for similar issues and options proposed in the Three Rivers Issues and Options Consultation (July 2017). Where there are differences in the scores given for similar options, we feel that this is mainly due to varying uncertainties between both Councils about the potential locations of future development.	Noted
<b>Royds Conservation Association</b>		
	<p>The comments submitted by Royds Conservation Association do not directly comment on the SA, other than stating '<i>The SA document recognises the aspirational aims of the councils plan but also concludes that their implementation will result in many environmental disadvantages due to the land take from the greenbelt</i>'.</p> <p>The rest of the document largely sets out baseline environmental information for Royds Conservation Area.</p>	<p>Noted.</p> <p>SA has assessed the options in themselves, rather than the principle of Green Belt release. This is because Green Belt is a policy designation, not a sustainability or environmental designation.</p>
<b>Gladman Developments</b>		
	States that the SA should clearly justify the Council's policy choices.	In line with the PPG, the SA will outline the Council's reasons for decision making. The SA is one of many pieces of evidence the Council uses to make its decisions.
	<p>Undertaking a comparative and equal assessment of each reasonable alternative, the Council's decision making and scoring should be robust, justified and transparent.</p> <p>It is essential that each reasonable alternative is assessed to the same degree of detail as the Council's preferred option and should only be rejected after fair and comparable assessment of its sustainability credentials.</p>	<p>In line with the SEA Regulations and guidance, all reasonable alternatives will be assessed in the same level of detail. The SA has assessed all options and fed the results of these assessments back to the Council prior to the Council selecting a preferred option.</p> <p>The Assumptions presented in <b>Appendix 5</b> will help to ensure site assessments are undertaken on the same basis and scoring is robust and transparent.</p> <p>Rather than being comparative, SA assesses each option against the baseline. There will often be an equal number of</p>

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		positive or negative effects identified for each option, such that it is not possible to 'rank' them based on sustainability performance in order to select a preferred option. One exception to this is quanta options, which include an element of comparison as without spatial information on where housing would be delivered, it's very difficult to identify differences in sustainability effects between different housing numbers.
	<p>Gladman considers that the appraisal questions for SA Objective 3 should be as follows (see Table 2.2):</p> <p><i>"Allocate sufficient sites to accommodate the objectively assessed housing need for the District in full taking into account any housing need that cannot be met in neighbouring authorities.</i></p> <p><i>Provide a mix of housing suitable for a range of ages and housing types including those who require affordable housing, families with children, older people, students, people with disabilities, service families, travellers, people who rent their homes and people wishing to commission or build their own homes."</i></p>	<p>The appraisal questions must be appropriate for assessing individual elements of the plan, as well as the plan overall. In addition, the suggested questions build on existing appraisal questions. As such, the suggested appraisal questions have been integrated with existing appraisal questions, rather than replacing them.</p>
	<p>Gladman considers that the third appraisal question for SA Objective 9 should be amended to read as follows (see Table 2.2):</p> <p><i>"Situate development in locations well served or capable of being well served by public transport, cycle paths and walking routes"</i></p>	<p>Data on which areas are capable of being well served by sustainable transport is not available on a consistent basis across the borough, therefore this has not been included in the SA framework as it cannot be assessed. Whether a site is capable of being well served by public transport, cycle paths and walking routes may be considered by the Council at the planning application stage.</p>
	<p>Gladman considers that the second appraisal question for SA Objective 13 should be amended to read as follows (see Table 2.2):</p> <p><i>"Situate development in locations well served or capable of being well served by public transport, cycle paths and walking routes in order to minimise emissions."</i></p>	<p>As above.</p>
	<p>Gladman considers that the section on the Review of Plans, Policies and Programmes should include reference to the draft Revised NPPF by the government for consultation in March 2018. Whilst Gladman accepts that the draft NPPF is currently subject to consultation and</p>	<p><b>Appendix 3</b> has been updated to acknowledge the revised NPPF, which was published July 2018.</p>

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	consequently may be subject to amendment, the general thrust of policy in the document is unlikely to change and given the proposed timetable for the Hertsmere Local Plan, it will certainly be in force by the time that the Plan is submitted for examination. In particular, with regard to housing, reference in the SA should be made to the Government's introduction of a standard methodology for determining housing need instead of the use of Strategic Housing Market Area Assessments.	
	Under Housing Provision (Supply), Table 3.1 ('Key sustainability issues for Hertsmere and likely evolution without the Local Plan') should make reference to the Government's proposed standard methodology for determining local housing need which will be in place at the time the Plan is submitted for examination.	<b>Table 3.1</b> has been updated to acknowledge this.
	Paragraph 4.28 of the SA ('Priority 1: Housing Need') concludes that the provision of new homes in the District will have only a minor positive effect with regard to SA Objective 15: Economy. However, the delivery of new homes across Hertfordshire is seen as fundamental to its Vision for Hertfordshire by the Hertfordshire Local Enterprise Partnership in its refreshed Strategic Economic Plan 2017-2030. Accordingly, Gladman considers that the SA should assess the provision of new homes in Hertsmere as having a major positive impact on the local economy.	As explained in paragraph 4.2, significant effects were identified where a priority directly addresses one of the SA objectives. Priority 1 relates primarily to housing provision and does not discuss economic growth. We have recognised the likely, indirect positive effect on economic growth by identifying a minor positive effect against SA objective 15.
	Paragraph 5.3 identifies two reasonable alternative options in relation to the housing requirement for Hertsmere; an economic-led growth scenario and the 10 year migration trend scenario. Gladman considers that the SA should include a third reasonable alternative which is the Government's proposed Standardised Methodology for determining a District's housing need. It is likely to have come into force by the time the Local Plan is submitted for examination.	The Council identified the alternative housing need scenarios, as described in the SA Report. The Potential Sites for Housing and Employment document suggests that the OAN using the Government's standard methodology is 444 homes per year. However, much uncertainty remains as advice on calculating the OAN is expected to be updated shortly. We will continue to liaise with the Council about what the reasonable alternatives are and will assess any new reasonable alternatives identified.
	In paragraph 5.8 of the SA, it is concluded that the alternative 10-year migration trend scenario would be likely to have only a minor negative effect in terms of SA Objective 3. Gladman disagrees and considers that opting for this scenario would have a significant negative impact on SA Objective 3.	A minor negative effect was identified as a large proportion of housing need would be met, although there would still be a shortfall in housing.



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	In paragraph 5.17 of the SA, the number of households currently on the Council's housing register is utilised to measure the effectiveness of the Plan's ability to provide adequate numbers of affordable housing. Gladman considers this approach to be unsatisfactory. With reference made to paragraph 7.45 of the 2016 South West Hertfordshire SHMA, Gladman considers it would be appropriate for the SA to use the figure identified in the SHMA (434 dwellings per annum) to assess the Plan's effectiveness.	Noted and updated. This has not altered the overall assessment results.
	In Table A6.5 SA Objective 8 Landscape, it concludes that the development of a new garden village would be likely to have a significant but uncertain impact on landscape, whereas other alternatives proposed to accommodate housing growth are anticipated to have only minor landscape impacts. Given that the amount of housing to be accommodated in the District will be the same for each option (and broadly the same land take will be required), Gladman considers it is questionable whether a new garden village would have a higher landscape impact than the cumulative impact of a large number of smaller sites. It could be argued, dependent upon its actual location, that a new garden village could have less landscape impact because of the ability for schemes of this size to incorporate substantial landscape buffer areas.	The uncertainty recorded in the SA reflects the fact that there are uncertainties related to the exact size, location and design of development. The amount of housing that can be accommodated varies between options, as stated in the Issues and Options document. As stated in paragraph 6.2 of the Issues and Options SA, the Council has confirmed that multiple options will need to be taken forward. In addition, development of a new settlement in a rural landscape is considered to have a greater impact on landscape than development within or on the edge of existing settlements, as the landscape of the wider area will be significantly altered.
<b>Hertfordshire County Council (Minerals and Waste)</b>		
	Hertfordshire County Council (HCC) welcomes reference to the Sand and Gravel Minerals Safeguarding Area in Hertsmere.	Noted.
	HCC welcomes reference to the safeguarded Harper Lane Rail Aggregates Depot.	Noted.
	HCC supports 'SA Objective 6: Soils and Minerals' which references the protection of mineral resources from sterilisation.	Noted.
	HCC supports 'SA Objective 11: Water Quality and Quantity' which supports the location of development where sewerage treatment facilities can be made available.	Noted.
	HCC notes that it is encouraging to see 'resource efficiency' highlighted as a key sustainability issue for Hertsmere, as increasing resource efficiency can reduce the	Noted.



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	generation of waste.	
	With regard to waste, HCC would support the inclusion of a new SA objective specifically addressing it. The new SA objective may wish to address the steps Hertsmere Borough Council could take to mitigate waste arisings, as well as how waste management could be more sustainable in Hertsmere. This could include proximity of development to waste management sites, such as HWRCs.	The SA objectives were established and consulted on at the Scoping Stage in 2017. These are based on the SA objectives for the Hertsmere Site Allocations and Development Management Policies Plan and updated in light of the review of plans, policies and programmes, baseline information and key sustainability issues, as described in the Scoping Report. Whilst the Local Plan has limited ability to influence waste issues, an additional appraisal question has been added to SA6: 'Encourage minimisation, reuse and recycling of waste'.
<b>Canal &amp; River Trust</b>		
	The Canal and River Trust does not own or manage any waterways in Hertsmere Borough and has no comments to make on the SA.	Noted.
<b>Hertfordshire Ecology (Hertfordshire County Council)</b>		
	With regard to Table 2.2 ('SA framework for the Hertsmere Local Plan'), to help achieve these objectives the following could be included:  With regard to landscape: <ul style="list-style-type: none"> <li>"Where appropriate, support local farming and other land management practices which help to maintain the nature and character of local countryside and green spaces?"</li> <li>"Promote high quality Green Infrastructure within existing and new development?"</li> </ul>	Farming and land management practices have not been included because these are expected to be outside the scope of the Local Plan.  The green infrastructure appraisal question has been added.  Given the high-level nature of the options assessed at Issues and Options stage, these additional questions would not result in any changes to the previous assessments.
	With regard to biodiversity and geodiversity (changes shown in <b>bold</b> ): <ul style="list-style-type: none"> <li>"Enhance and increase the extent of <b>priority</b> habitats for protected <del>species</del> and priority species identified in the Hertfordshire BAP or the England Biodiversity Strategy 2020, <b>in support of the 25 year Environment Plan?</b>"</li> </ul>	Noted and updated.  Reference to maintaining and enhancing ecological networks 'through appropriate decisions and habitat management' has

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	<ul style="list-style-type: none"> <li>• <b>"Seek to secure biodiversity offsetting opportunities where appropriate?"</b></li> <li>• <b>"Connect people with the environment to improve health and wellbeing by promoting the importance of biodiversity and increase opportunities for people to come into contact with resilient wildlife, places while encouraging respect for and raising awareness of the sensitivity of these sites and species?"</b></li> <li>• <b>"Integrate locally distinctive biodiverse habitats into new developments, as well as contribute to improvements in ecological connectivity and ecological resilience within and between rural and urban areas?"</b></li> <li>• <b>"Maintain and enhance – through appropriate decisions and habitat management – ecosystem services and ecological networks in the Borough?"</b></li> </ul> <p>NB Climate change is likely to impact upon habitats and <del>species thereby biodiversity</del>. Plan policies that achieve the goals listed above should all help to <del>enhance</del> <b>enable</b> the ability of wildlife to adapt to a changing climate."</p>	<p>been omitted as this is expected to be outside the scope of the Local Plan.</p> <p>Given the high-level nature of the options assessed at Issues and Options stage, these additional questions would not result in any changes to the previous assessments.</p>
	<p>With regard to Table 3.1 ('Key sustainability issues for Hertsmere and likely evolution without the Local Plan') and in respect of biodiversity, the reference to woodland character and in particular Redwell Wood SSSI is purely descriptive and reflects the current condition of this site. Without any qualification, this doesn't meaningfully relate to the function of the Local Plan. Consequently, it should state: <i>"the plan will seek to maintain and enhance the SSSI and where possible, improve its condition"</i>.</p> <p>Table 3.1 also states that without the Local Plan, habitat and biodiversity may be at risk from poorly planned development and their conditions could degrade. Given that such condition decline is primarily related to changes to or a decline in habitat management, the Local Plan should recognise the significance of site management and seek to influence this where it can.</p>	<p>Table 3.1 sets out the sustainability issues identified from the review of baseline data and plan, policy and programme review. The identified issue is that the SSSI is largely in unfavourable condition. The SA cannot state what the plan will seek to achieve, as it is undertaken separately to the plan-making and decision making process (although it informs this).</p> <p>Habitat management is expected to be outside the scope of the Local Plan. However, <b>Table 3.1</b> has been updated to acknowledge that habitat management plays an important role.</p>
	<p>Hertfordshire Ecology expresses support for the statement starting <i>"With regard to SA Objective 10, Priority 4 states that..."</i> at paragraph 4.58. However, whether the planning system is capable of achieving these aims will be dependent on whether the infrastructure and means to deliver these is available, the extent they can be secured within the Local Plan area and the extent to which implementation of the Plan itself can deliver these aims.</p>	<p>This part of the SA has assessed the priority itself and has taken this at face value.</p>
	<p>Hertfordshire Ecology agrees with the statements starting <i>"Negative effects were identified in relation to most other environmental objectives..."</i> and <i>"Due to the constrained nature of the Borough and the scale of development required..."</i> at paragraph 5.23.</p>	<p>Noted.</p>

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	With regard to SA Objective 8 ('Landscape'), Hertfordshire Ecology agrees with the statement starting " <i>will have a significant effect on the landscape due to...</i> " at paragraph 6.17. The quality of the existing countryside – including any associated biodiversity and geodiversity – will inevitably be compromised by any such development.	Noted.
	With regard to SA Objective 10 ('to protect and enhance biodiversity and geodiversity') at paragraph 6.19, Hertfordshire Ecology states that if recognised nature conservation sites are detrimentally affected, this cannot be sustainable unless appropriate compensation can be provided.	Noted.
	With regard to the conclusions, housing and employment (Part 2) will have more significant negative effects particularly in terms of environmental harm, given land take is likely to be close to sensitive features and require greenfield development. Potential development approached (Part 3) may also have negative effects due to the land take required. Consequently it is recognised that development may lead to a loss of open land and increase settlement coalescence, both of which would degrade the existing associated biodiversity. However the relative significance of this would depend on the quality of habitats and species affected.	This section is a summary of the assessment results in the preceding chapters. It is not a cumulative effects assessment, as at the time of assessment a preferred approach had not been selected.
	Whilst the Sustainability Appraisal itself would appear to be acceptable, the net result of the Plan itself can only be unsustainable in that there will be a net loss and fragmentation of open countryside and associated biodiversity. There will also be increased pressure on other sensitive sites from recreation as a result of increased populations. In this respect the Plan will result in a net loss or degradation of these resources.	At the time of assessment a preferred approach had not been selected, therefore cumulative effects of the plan as a whole were not assessed at this stage.
	<p>Whilst Hertfordshire Ecology acknowledge and support the aspirations to enhance landscape and biodiversity, new open land cannot be created as compensation and there are no mechanisms to actually deliver biodiversity enhancements unless form of biodiversity offsetting can be adequately delivered. This will require combinations of additional receptor land, willing landowners, significant enhancements to existing land as well as appropriate measures required to deliver the management needed to achieve these. All of these are currently unknown. On this basis, in terms of these environmental considerations as a component of Sustainable Development, Hertfordshire Ecology considers they will not have been met.</p> <p>The Local Plan should acknowledge the aforementioned issues by supporting planning</p>	This comment relates to considerations for plan making, rather than the SA itself.

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	measures and decisions to provide viable compensation and landscape and biodiversity enhancements where it can.	

Draft Only

## Appendix 2

### Updates to SA of the Issues and Options in Response to Consultation Comments

Draft Only

This appendix presents updated assessments for some of the reasonable alternatives that were previously presented in the Sustainability Appraisal of the Hertsmere Local Plan: Issues and Options (February 2018). These updates have been made in response to the comments received in relation to the February 2018 SA Report, as presented in **Appendix 1**. Only those assessments for which updates were made have been included here.

## Housing Provision Options (previously Local Housing Need)

The assessment below has been updated to distinguish between housing 'need' and housing 'requirement'. The scores for these options have not changed and it is not considered that any changes are required to the full SA matrix.

The Issues and Options document makes provision for 600 homes per annum over the plan period for the next 15 years, a total of 9,000 homes. This is the objectively assessed housing need<sup>33</sup> as set out in the South West Hertfordshire Strategic Housing Market Assessment (SHMA)<sup>34</sup>. This was the 'demographic-based scenario', which is adjusted for affordability. Two reasonable alternative options were identified in relation to the housing provision figures for Hertsmere:

- The economic-led growth scenario: Makes provision for the highest housing growth scenario from the SHMA, the economic-led growth scenario, based on the economy study scenario, which provides 670 homes per annum over the plan period for the next 15 years, a total of 10,050 homes.
- The 10-year migration trend scenario: Makes provision for the lowest housing growth scenario from the SHMA, the 10-year migration trend scenario, which provides 468 homes per annum over the plan period for the next 15 years, a total of 7,020 homes.

A summary of assessment results is given below.

### Summary of results

Mixed effects were identified with regards to SA objectives 1 (education), 2 (access to services), and 5 (health) as additional housing may put existing services and facilities under additional pressure, although this may also provide additional funding for new and improved facilities. Such effects are expected to be significant with regards to demographic and employment-led scenarios, due to the larger amount of housing that would be provided through these. Similarly, mixed effects were recorded with regards to SA objective 9 (greenhouse gas emissions) and 13 (air quality), as although additional housing will lead to increased energy demand and an increased number of cars on the road, housing development may provide funding for public transport improvements.

The selected option would meet the objectively assessed housing need for the Borough, based on demographic projections and adjusted for affordability. This was deemed the most suitable approach through the SHMA work and would provide a sufficient number of homes to meet local need, including affordable homes, resulting in significant positive effects with regards to SA objective 3 (housing).

The alternative economic-led growth scenario would provide more homes than the objectively assessed housing need for the Borough, and would therefore be likely to result in a significant positive effect with regard to SA objective 3. Whilst the SHMA identifies a greater housing need for Hertsmere under the employment-led scenario, the overall housing need across the HMA is

<sup>33</sup> This is based on the 2016 SHMA. It is acknowledged that the objectively assessed need will now be determined in terms of the Government's standard methodology and updated population projections. This will be assessed when there is more certainty regarding the figure, as updates to the methodology are expected to be published shortly.

<sup>34</sup> GL Hearn Limited (2016) South West Hertfordshire Strategic Housing Market Assessment for Dacorum Borough Council, Hertsmere Borough Council, Three Rivers District Council, and Watford Borough Council: <https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/Local-Plan/Supporting-Studies.aspx>

lower than the demographic—led projections. The SHMA states that there are '*strong labour market inter-relationships between the local authorities within the HMA*' and that '*it would be artificial to seek to balance growth in employment and labour supply within the confines of somewhat arbitrary boundaries of individual administrative authorities*', therefore there is no need to adjust housing need to support this level of economic growth.

The SHMA considers that the alternative 10-year migration trend scenario is deemed to be less robust as it does not account for the changing age structure of the population and the effect this might have on migration, or the inter-relationship with how London's population is expected to change. In addition, it is thought that migration figures may have historically been underestimated; therefore projections based on more recent data are likely to be more reliable. As such, this scenario is likely to provide less housing than the identified need within the Borough and would likely cause a housing supply shortfall. Therefore, it would likely have a minor negative effect with regard to SA Objective 3.

Mixed effects were identified with regards to SA objective 6 (soil), as all scenarios are likely to require development on both greenfield and brownfield land.

Negative effects were identified in relation to most other environmental objectives, including SA objectives 7 (historic environment), 8 (landscape), 10 (biodiversity and geodiversity) and 12 (flood risk). Due to the constrained nature of the Borough and the scale of development required, development is likely to be in proximity to receptors that will be affected by this. Larger housing requirements are more likely to lead to significant negative effects on these objectives, due to the greater land-take required.

The scale of housing provision for all of the options will require high levels of energy use during construction and operation. The greater the number of homes to be delivered, the higher the overall increase in energy consumption. As such, the demographic-based and economic-led scenarios are assessed as having significant negative effects on this objective. As the 10-year migration trend scenario will provide the lowest number of homes, minor negative effects have been recorded. However, these effects are uncertain as energy efficiency will depend on the layout and design of development.

All scenarios are expected to have positive effects on the economy, as they will bring additional workforce to the area, which may in turn attract more businesses. Short-term jobs will also be created through construction of new developments.

**Table A2.1 : Summary of SA scores for the housing provision options**

	SA1: Education	SA2: Services	SA3: Housing Provision	SA4: Community Cohesion	SA5: Health	SA6: Soil and Minerals	SA7: Historic Environment	SA8: Landscape	SA9: Greenhouse Gas Emissions	SA10: Biodiversity and Geodiversity	SA11: Water Quality and Quantity	SA12: Flooding	SA13: Air Quality	SA14: Energy Efficiency	SA15: Economy
<b>Selected option: Demographic-based scenario</b>	++ ?/-- ?	++ ?/-- ?	++	0	++ ?/-- ?	+/-	--?	-?	++ ?/--	--?	-?	-?	++ ?/--	--?	+
<b>Alternative option: Economic-led scenario</b>	++ ?/-- ?	++ ?/-- ?	++	0	++ ?/-- ?	+/-	--	--?	++ ?/--	--	--?	--?	++ ?/--	--?	++ ?
<b>Alternative option: 10-year migration</b>	+?/ -?	+?/ -?	-	0	+?/ -?	+/-	-?	-?	+?/ -	-?	-?	-?	+?/ -	-?	+?

trend scenario															
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## Additional Housing Requirements

The assessment below has been updated to recognise that affordable housing provision can have implications for community cohesion and health and wellbeing. It also includes updates in response to Gladman's comment that the affordable housing figure is the SHMA is a more appropriate measure of affordable housing need in the area than the number of households currently on the Council's housing register.

### Affordable housing

The Issues and Options document proposes that 35-40% of new homes should be provided as affordable housing within larger developments. This is in line with the current local plan, particularly Core Strategy policy CS4. Whilst the definition of 'larger developments' is not given in the Issues and Options document, the Core Strategy policy CS4 states that all housing developments of 5 or more homes, or over 0.2 hectares should provide affordable housing. If this threshold is to be carried forward to the new local plan, it is expected that this will provide sufficient affordable housing – currently understood to be 434 dwellings per annum as identified in the SHMA. This has resulted in uncertain significant positive effects with regards to SA Objective 3 (housing). The provision of affordable housing may also help in directly addressing deprivation by securing housing for people who cannot compete in the local housing market. This may help to ensure that those people have a decent home, which would contribute to their health and wellbeing. As such, minor positive effects are expected in relation to SA Objectives 4 and 5. This proposed approach is not relevant to any of the other SA objectives.

**Table A2.2: Summary of SA scores for the additional housing requirements options**

	SA1: Education	SA2: Services	SA3: Housing Provision	SA4: Community Cohesion	SA5: Health	SA6: Soil and Minerals	SA7: Historic Environment	SA8: Landscape	SA9: Greenhouse Gas Emissions	SA10: Biodiversity and Geodiversity	SA11: Water Quality and Quantity	SA12: Flooding	SA13: Air Quality	SA14: Energy Efficiency	SA15: Economy
<b>Affordable Housing</b>	0	0	++	+	+	0	0	0	0	0	0	0	0	0	0

## Development Approach Options

The assessment below has been updated to recognise that all options include areas within the 20% most deprived areas. As this relates only to SA objective 4, the updated assessment results below focus on this objective. A summary of scores for all development approach options is included in **Table A2.3** and the full SA matrices for Options 1 and 2 are presented further ahead in this appendix.

Five potential development approaches were appraised:

- Option 1: Redevelopment of urban brownfield sites.



- Option 2: Growth through new garden suburbs.
- Option 3: Supporting larger rural communities and growth of key villages.
- Option 4: Meeting the needs of other villages.
- Option 5: New garden village.

**SA Objective 4: To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces**

All five options received a significant positive effect for this objective, due to each of them being located within one of the 20% most deprived areas in terms of barriers to housing and services<sup>35</sup>. With regard to crime prevention, the effect of development will not be influenced by the location of the site allocated through the Local Plan but by the detailed proposals for each. Option 5 proposes the development of a new garden village, which creates greater opportunities to design out crime.

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<sup>35</sup> According to the 'Overall – Barriers to housing and services' domain of English Indices of Deprivation (<https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>)

**Table A2.3: Summary of SA scores for potential development approaches**

	SA1: Education	SA2: Services	SA3: Housing provision	SA4: Community cohesion	SA5: Health	SA6: Soil and minerals	SA7: Historic Environment	SA8: Landscape	SA9: Greenhouse Gas Emissions	SA10: Biodiversity and geodiversity	SA11: Water quality and quantity	SA12: Flooding	SA13: Air Quality	SA14: Energy Efficiency	SA15: Economy
<b>Option 1:</b> Redevelopment of brownfield sites	++	++	++	++	++	+	+/-/?	+/-	++/--	+	-?	0?	++/-/?	0	++
<b>Option 2:</b> Growth through new garden suburbs	++	++	++	++	++	-	-?	-?	+/-/?	+/-/?	-/?	-?	+/-/?	0	+
<b>Option 3:</b> Supporting larger rural communities – growth of key villages	++	++	++	++	++	-	-?	-?	+/-	+/-/?	-/?	-?	+/-	0	++?
<b>Option 4:</b> Meeting the needs of other villages	++	++	++	++	++	-?	-?	-?	+/-/?	+/-/?	-/?	-?	+/-/?	0	++?
<b>Option 5:</b> New garden village	++	++	++?	++	++	-	--?	--?	+/--/?	+/--/?	+/-	-	+/-	0	++

**Table A2.4: Redevelopment of urban brownfield sites**

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Option 1 states that provision will be made for additional primary and secondary school places, or one or more new primary schools. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	Urban brownfield sites are more likely to be located in Town or Local Centres, which contain numerous services and facilities. Option 1 also makes provision for a range of services including education, healthcare, open space, leisure, recreation and community facilities. These are likely to be easily accessible due to proposed improvements to pedestrian/cycle connectivity, bus services and local and wider strategic highway networks. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	Option 1 makes provision for up to 3,000 new homes. This will contribute significantly to the provision of housing in the Borough, including those which are affordable.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>Option 1 states that provision will be made for community spaces including open space, leisure, recreation and community facilities.</p> <p>The areas of search identified for this option include areas classified as 20% most deprived with regards to housing and services. As such, development at these locations may help to overcome such barriers.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++	Option 1 states that provision will be made for additional healthcare provision, as well as leisure and recreation facilities. This is likely to have a significant positive effect on people's health by improving access to these facilities and local capacity. Furthermore, improvements to pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improved public transport services, may reduce inequalities by enhancing accessibility and reducing reliance on the private car.

<p><b><u>6. Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	+	<p>The redevelopment of as much brownfield land as possible is likely to reduce the loss of greenfield land or Grade 1, 2 or 3a agricultural land. In addition, a very large proportion of the Borough is located within a Minerals Safeguarding Area; therefore all options are likely to result in development within this. However, prioritising use of brownfield land is likely to minimise sterilisation of mineral resources, as resources at these sites are likely to have been sterilised by previous development. A minor positive effect is therefore likely.</p>
<p><b><u>7. Historic Environment</u></b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	+/-/?	<p>The development of up to 3,000 homes on urban brownfield sites could change the character and appearance of towns. This could have adverse effects on the historic environment, particularly heritage assets present in the urban area and their settings. However, this effect is uncertain because the actual effect on heritage assets will depend on the location, scale, design and layout of the new development. For example, the urban area of Bushey contains a large number of Listed Buildings whereas Borehamwood does not. Conversely, Option 1 could lead to the regeneration of degraded land, which could improve the setting of heritage assets.</p>
<p><b><u>8. Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+/-	<p>The development of up to 3,000 homes on urban brownfield sites will involve a significant increase in densities in central locations according to Option 1. This could have an adverse effect on the quality of the townscape. However, the fact that Option 1 encourages the redevelopment of urban brownfield sites is likely to have a positive effect on the countryside and landscape by reducing the extent to which Green Belt land needs to be built on, which may contribute to reducing the risk of settlement coalescence. Furthermore, the redevelopment of urban brownfield sites may also regenerate degraded land. A mixed minor positive and minor negative effect is therefore likely.</p>
<p><b><u>9. Greenhouse Gas Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	++/--	<p>Option 1 states that improvements will be made to pedestrian/cycle connectivity, as well as bus services within and between towns. Option 1 also makes provision for more electric charging points. This is expected to significantly reduce greenhouse gas emissions, at the same time as reducing dependence on the private car. However, the development of up to 3,000 homes is expected to increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion in urban areas. A mixed significant positive and minor negative effect is therefore likely.</p>
<p><b><u>10. Biodiversity and Geodiversity</u></b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	+?	<p>The redevelopment of urban brownfield sites is likely to have a positive effect on biodiversity by minimising development of greenfield land. Generally, greenfield land is more likely to support a greater number and range of species than developed land. In addition, the majority of Hertsmere's biodiversity designations are located in rural areas. Furthermore, Option 1 states that enhancements will be made to green infrastructure within new development (including parks, green spaces and other natural features). However, brownfield land can also be important for wildlife and redevelopment may result in a loss of biodiversity. A minor positive but uncertain effect is</p>

		therefore likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	The development of up to 3,000 homes across a large number of small sites, as is the case in Option 1, may not provide the funding needed for the additional infrastructure required. As such, it is also uncertain how sufficient wastewater infrastructure will be provided. As water resources are limited in the Borough, it is also uncertain how the needs of new development will be met in this regard. Source Protection Zones are located to the north west of the Borough. Whether these are affected by this option will depend on the location of the proposed development sites. Overall, a minor negative effect with uncertainty is likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0?	There are a limited number of areas at risk of flooding in Hertsmere. The redevelopment of brownfield sites is not likely to result in significant increases in surface water flooding. This is because brownfield sites already contain some form of development (or have done in the past). Despite this, the risk of flooding depends on the existing permeability and location of proposed development sites. A negligible but uncertain effect is therefore recorded.
<b><u>13. Air Quality</u></b> To improve local air quality.	++/-/?	Option 1 states that improvements will be made to pedestrian/cycle connectivity, as well as bus services within and between towns. Option 1 also makes provision for more electric charging points. This is expected to significantly reduce emissions of air pollutants associated with traffic, by reducing dependence on the private car. However, the development of up to 3,000 homes is expected to increase the amount of cars on the road despite availability of more sustainable transport modes. This may have adverse effects on local air quality. Furthermore, the industrial development proposed by this option may also have an adverse effect on local air quality, although this depends on the type of industry. It is unknown at this stage whether these brownfield sites will be located in Air Quality Management Areas (AQMAs), but focusing development in urban areas is more likely to lead to increases in traffic in AQMAs, which could exacerbate existing air quality issues. Overall, a mixed significant positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	Option 1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing	++	Option 1 makes provision for additional industrial and commercial development across built up areas within the Borough. This is likely to help facilitate a sustainable and growing economy for the Borough, by creating economic and employment opportunities. The allocation of housing and commercial development to built up areas will provide for vital and viable town centres, due to an increase in the number of people and associated increase in spending. Some types of commercial

for vital and viable town centres.		development may also attract more people into the town centres. In addition, this option would include high speed broadband network improvements, which may make the area more attractive to business and may increase opportunities for residents to work from home. A significant positive effect is therefore likely.
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**Table A2.5: Growth through new garden suburbs**

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Option 2 states that provision will be made for one or more new primary schools and additional secondary school places. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	Option 2 will see the expansion of Borehamwood, Potters Bar, Bushey and Radlett. Although the expansion of these towns may increase pressure on existing services and facilities, Option 2 proposes the development of new neighbourhood centres. Option 2 also makes provision for a range of services including education, healthcare, open space, leisure, recreation and community facilities. These and the neighbourhood centres are likely to be easily accessible due to proposed improvements to pedestrian/cycle connectivity, bus services and local and wider strategic highway networks. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	Option 2 makes provision for up to 300 to 500 new homes in each garden suburb (although no overall figure is given). This will contribute significantly to the provision of housing in the Borough, including those which are affordable.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>Option 2 states that provision will be made for community spaces including open space, leisure, recreation and community facilities.</p> <p>The areas of search identified for this option include areas classified as 20% most deprived with regards to housing and services. As such, development at these locations may help to overcome such barriers.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++	Option 2 states that provision will be made for additional healthcare provision, as well as leisure and recreation facilities. This is expected to have a significant positive effect on people's health by improving access to these facilities and local capacity. Furthermore, improvements to pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improved public transport services, may reduce inequalities by enhancing

		accessibility and reducing reliance on the private car.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	Growth through new garden suburbs is likely to result in a loss of greenfield land, which in the areas of search consists of Grade 3 agricultural land. In addition, a very large proportion of the Borough is located within a Minerals Safeguarding Area, therefore all options are likely to result in development within this. A minor negative effect is therefore likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	The development of up to 300 to 500 homes at each of Borehamwood, Potters Bar, Bushey and Radlett could change the character and appearance of these urban areas. This could have adverse effects on the historic environment, particularly heritage assets present within these urban areas and their settings. However, this effect is uncertain because the actual effect on heritage assets will depend on the location, scale, design and layout of the new development. For example, the urban area of Bushey contains a large number of Listed Buildings. Borehamwood, on the other hand, has fewer.
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	-?	<p>The development of up to 300 to 500 homes at each of Borehamwood, Potters Bar, Bushey and Radlett could have an adverse effect on the quality of the countryside and townscape. This is because the development of new garden suburbs may result in development of Green Belt land, which could contribute to settlement coalescence. For example, the development of a garden suburb to the west of Borehamwood may result in settlement coalescence with Elstree. Likewise, the development of a garden suburb to the north east of Radlett may result in settlement coalescence with Shenley.</p> <p>Furthermore, the development of a garden suburb in a Landscape Character Area considered to be 'strong' in character could have an adverse effect on quality of landscape. Bushey and Borehamwood are both located within close proximity to a Landscape Character Area considered to be 'strong' in character, namely LCA 23 (Elstree Ridge and Slopes).</p> <p>Overall, a minor negative but uncertain effect is likely.</p>
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-/?	Option 2 states that improvements will be made to pedestrian/cycle connectivity, as well as inter-urban bus services. This is expected to encourage more people to travel by sustainable modes of transport, therefore reducing greenhouse gas emissions by reducing dependence on the private car. However, the development of up to 300 to 500 homes is expected to increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may



		increase congestion in urban areas. In addition, improvements to the wider strategic highway network <sup>36</sup> may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. A mixed minor positive and negative effect with uncertainty is therefore likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+/-/?	The development of new garden suburbs may have an adverse effect on biodiversity due to a loss in greenfield land, which is more likely to support a greater number and range of species than previously developed land and garden suburbs are most likely to be located on greenfield land on the fringes of existing settlements. The areas of search to the East of Bushey, west of Borehamwood, and north of Potters Bar include Ecosites and the area of search to the south of Borehamwood includes an Ecosite and Wildlife site adjacent to the urban area. Development at any of the areas of search has potential to lead to loss or degradation of nature conservation sites lying either within or next to the areas of search. However, Option 2 states that enhancements will be made to green infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and negative effect is therefore likely. This effect is uncertain as effects on biodiversity depend on the exact location and design of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-/?	The development of up to 300 to 500 homes in each new garden suburb will increase demand for water and wastewater services. However, it is uncertain how sufficient wastewater infrastructure will be provided. Additionally, as water resources are limited in the Borough, it is uncertain how the needs of new development will be met in this regard. Lastly, garden suburbs located at Radlett and Potters Bar could lead to degradation of water quality in Source Protection Zones located to the north west of the Borough. A mixed uncertain and negative effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	-?	There are a limited number of areas at risk of flooding in Hertsmere; therefore the risk of flooding depends on the location of proposed development sites. The development of garden suburbs to the east of Bushey, to the north east of Radlett and adjacent to Potters Bar could fall into Flood Zones 2 or 3, which would have a significant negative effect on this objective, as homes may be at a high risk of flooding. However, the incorporation of flood mitigation into the design of these new garden suburbs could reduce this risk of flooding, therefore downgrading the significant effect to a minor effect. Overall, a minor negative but uncertain effect is expected.

<sup>36</sup> Note that improvements to the local highway network are expected to be focused on enhancing safety; therefore these are not expected to make significant differences to the attractiveness of driving. Improvements to the strategic highways network is more likely to increase capacity and efficiency, therefore are considered more likely to have significant effects on the number of cars on the road.

<p><b><u>13. Air Quality</u></b></p> <p>To improve local air quality.</p>	<p>+/-/?</p>	<p>Option 2 states that improvements will be made to pedestrian/cycle connectivity, as well as inter-urban bus services. This is expected to reduce dependence on the private car, therefore minimising local air pollution. However, the development of up to 300 to 500 homes in each garden suburb is expected to increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion in urban areas. This may have adverse effects on local air quality. Furthermore, the development of a garden suburb to the south of Potters Bar would be in an Air Quality Monitoring Area (AQMA), namely Dove Lane (AQMA 1). Development here would lead to an increase in traffic movements within the AQMA, exacerbating existing air quality issues. In addition, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising air pollution from transport. A mixed minor positive and negative effect with uncertainty is therefore likely.</p>
<p><b><u>14. Energy Efficiency</u></b></p> <p>To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.</p>	<p>0</p>	<p>Option 2 is not expected to have an effect on this SA objective.</p>
<p><b><u>15. Economy</u></b></p> <p>Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.</p>	<p>+</p>	<p>Option 2 proposes the development of neighbourhood centres, which are expected to include a range of shops, services and small business units. This is expected to help facilitate a sustainable and growing economy for the Borough, by creating economic and employment opportunities, although these may be limited in number. Overall, a minor positive effect is expected.</p>

## Appendix 3

### Review of Plans, Policies and Programmes

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Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
<b>INTERNATIONAL</b>			
<b>EU Directives</b>			
<i>SEA Directive 2001</i> Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment	Provides for a high level of protection of the environment and contributes to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive at the national level.	Requirements of the SEA Directive must be met in Sustainability Appraisals.
<i>The Industrial Emissions Directive 2010</i> Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	Lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal question for reducing pollution.
<i>Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU</i>	The Directive aims to promote the energy performance of buildings and building units. It requests that member states adopt either national or regional methodology for calculating energy performance and minimum requirements for energy performance.	Policies and site allocations should take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include SA objective relating to the energy performance/efficiency of existing and proposed buildings.
<i>The Birds Directive 2009</i> Directive 2009/147/EC is a codified version of Directive 79/409/EEC as amended	Requires the preservation, maintenance, and re-establishment of biotopes and habitats to include the following measures: <ul style="list-style-type: none"> <li>• Creation of protected areas.</li> <li>• Upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones.</li> <li>• Re-establishment of destroyed biotopes.</li> </ul> Creation of biotopes.	Policies should make sure that the upkeep of recognised habitats is maintained and not damaged from development.  Should also avoid pollution or deterioration of habitats or any other disturbances affecting birds.	Include sustainability objective / appraisal questions for the protection of biodiversity.
<i>The Waste Framework</i>	Aims to prevent or reduce waste production and its harmfulness and to increase the recovery of	Develop policies that take	Include sustainability

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
<i>Directive 2008</i> Directive 2008/98/EC on waste	waste by means of recycling, re-use or reclamation. Aims to achieve recovery or disposal of waste without endangering human health and without using processes that could harm the environment.	account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	objective / appraisal questions that minimise waste production as well as promote recycling.
<i>The Air Quality Directive 2008</i> Directive 2008/50/EC on ambient air quality and cleaner air for Europe	Avoid, prevent and reduce harmful effects of ambient noise pollution on human health and the environment.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to maintain and enhance air quality.
<i>The Floods Directive 2007</i> Directive 2007/60/EC on the assessment and management of flood risks	Establishes a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions that relate to flood management and reduction of risk.
<i>The Water Framework Directive 2000</i> Directive 2000/60/EC establishing a framework for community action in the field of water policy	Protection of inland surface waters, transitional waters, coastal waters and groundwaters.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and minimise the impact on water quality.
<i>The Landfill Directive 1999</i> Directive 99/31/EC on the landfill of waste	Prevent or reduce negative effects on the environment from the landfilling of waste by introducing stringent technical requirements for waste and landfills.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to increase recycling and reduce the amount of waste.
<i>The Drinking Water Directive 1998</i> Directive 98/83/EC on the quality of water intended for human consumption	Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and enhance water quality.
<i>The Packaging and Packaging Waste Directive</i>	Harmonise the packaging waste system of Member States. Reduce the environmental impact of packaging waste.	Develop policies that take account of the Directive as well as more detailed policies	Include sustainability objective / appraisal questions to minimise the

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
<p><i>1994</i></p> <p>Directive 94/62/EC on packaging and packaging waste</p>		derived from the Directive contained in the NPPF.	environmental impact of waste and promote recycling.
<p><i>The Habitats Directive 1992</i></p> <p>Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora</p>	Promote the maintenance of biodiversity taking account of economic, social, cultural and regional requirements. Conservation of natural habitats and maintain landscape features of importance to wildlife and fauna.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and maintain the natural environment and important landscape features.
<p><i>The Nitrates Directive 1991</i></p> <p>Directive 91/676/EEC on nitrates from agricultural sources.</p>	Reduce water pollution caused or induced by nitrates from agricultural sources and prevent further such pollution.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to reduce water pollution.
<p><i>The Urban Waste Water Directive 1991</i></p> <p>Directive 91/271/EEC concerning urban waste water treatment</p>	Protect the environment from the adverse effects of urban waste water collection, treatment and discharge, and discharge from certain industrial sectors.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to reduce water pollution.
<b>European plans, policies and programmes</b>			
<p>EU Seventh Environment Action Programme (2014)</p>	<p>The EU's objectives in implementing the programme are:</p> <ul style="list-style-type: none"> <li>(a) to protect, conserve and enhance the Union's natural capital;</li> <li>(b) to turn the Union into a resource-efficient, green and competitive low-carbon economy;</li> <li>(c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing;</li> <li>(d) to maximise the benefits of the Union's environment legislation by improving implementation;</li> <li>(e) to improve the knowledge and evidence base for Union environment policy;</li> <li>(f) to secure investment for environment and climate policy and address environmental externalities;</li> </ul>	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and enhance the natural environment and promote energy efficiency.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	(g) to improve environmental integration and policy coherence; (h) to enhance the sustainability of the Union's cities; (i) to increase the Union's effectiveness in addressing international environmental and climate-related challenges.		
European Spatial Development Perspective (1999)	Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to conserve natural resources and cultural heritage.
European Landscape Convention (Florence, 2002)	The convention promotes landscape protection, management and planning.	Develop policies that take account of the Convention.	Include sustainability objective / appraisal questions to protect the archaeological heritage.
European Convention on the Protection of the Archaeological Heritage (Valletta, 1992)  <i>Revision of the 1985 Granada Convention</i>	Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater.  Creation of archaeological reserves and conservation of excavated sites.	Develop policies that take account of the Convention.	Include sustainability objective / appraisal questions to protect the archaeological heritage.
<b>Other international plans, policies and programmes</b>			
Johannesburg Declaration on Sustainable Development (2002)	Commitment to building a humane, equitable and caring global society aware of the need for human dignity for all.  Renewable energy and energy efficiency. Accelerate shift towards sustainable consumption and production.	Develop policies that take account of the Declaration.	Include sustainability objective / appraisal questions to enhance the natural environment and promote renewable energy and energy efficiency.
Aarhus Convention (1998)	Established a number of rights of the public with regard to the environment. Local authorities should provide for:  The right of everyone to receive environmental information  The right to participate from an early stage in environmental decision making  The right to challenge in a court of law public decisions that have been made without respecting	Develop policies that take account of the Convention.	Ensure that public are involved and consulted at all relevant stages of SA production.

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	the two rights above or environmental law in general.		
<b>NATIONAL</b>			
<b>White Papers</b>			
Energy White Paper: Our Energy Future (2003)	<p>There are four key aims in this document:</p> <ul style="list-style-type: none"> <li>To put ourselves on a path to cut the United Kingdom carbon dioxide emissions- the main contributor to global warming- by some 60 % by about 2050, with real progress by 2020;</li> <li>To maintain the reliability of energy supplies;</li> <li>To promote competitive markets in the United Kingdom and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity; and</li> </ul> <p>To make sure that every home is adequately and affordably heated.</p>	The Local Plan and its policies need to promote development that is energy efficient and increases the use and/ or availability of renewable energy	Include a sustainability objective relating to energy efficiency.
Heritage Protection for the 21 <sup>st</sup> Century: White Paper (2007)	<p>The proposals in this White Paper reflect the importance of the heritage protection system in preserving our heritage for people to enjoy now and in the future. They are based around three core principles:</p> <ul style="list-style-type: none"> <li>Developing a unified approach to the historic environment;</li> <li>Maximising opportunities for inclusion and involvement; and</li> <li>Supporting sustainable communities by putting the historic environment at the heart of an effective planning system</li> </ul>	The Local Plan policies will need to ensure that they protect the Borough's heritage assets.	Include a sustainability objective relating to cultural heritage.
<p>Natural Environment White Paper, 2011</p> <p><i>The Natural Choice: securing the value of nature</i></p>	<p>Protecting and improving our natural environment;</p> <p>Growing a green economy; and</p> <p>Reconnecting people and nature.</p>	Protect the intrinsic value of nature and recognise the multiple benefits it could have for communities.	Include a sustainability objective / appraisal question relating to the enhancement of the natural environment.
Electricity Market Reform White Paper 2011, <i>Planning our Electric Future: A White Paper for Secure, Affordable and Low-Carbon Electricity</i>	This White Paper sets out the Government's commitment to transform the UK's electricity system to ensure that our future electricity supply is secure, low-carbon and affordable.	Develop policies that support renewable energy generation and encourage greater energy efficiency.	Include sustainability objective / appraisal questions to reduce carbon emissions and increase proportion of energy generated from renewable sources.



Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
The Future of Transport White Paper 2004: A network for 2030	<p>Ensure we can benefit from mobility and access while minimising the impact on other people and the environment, now and in the future.</p> <p>Get the best out of our transport system without damaging our overall quality of life.</p> <p>Develop strategies that recognise that demand for travel will increase in the future.</p> <p>Work towards a transport network that can meet the challenges of a growing economy and the increasing demand for travel but can also achieve the government's environmental objectives.</p>	Develop policies that provide for an increase in demand for travel whilst minimizing impact on the environment. Policies also needed to promote public transport use rather than increasing reliance on the car.	Include sustainability objective / appraisal questions to reduce the need to travel and improve choice and use of sustainable transport modes.
Water White Paper, 2011 <i>Water for Life</i>	<p>Objectives of the White Paper are to:</p> <ul style="list-style-type: none"> <li>• Paint a clear vision of the future and create the conditions which enable the water sector and water users to prepare for it;</li> <li>• Deliver benefits across society through an ambitious agenda for improving water quality, working with local communities to make early improvements in the health of our rivers by reducing pollution and tackling unsustainable abstraction;</li> <li>• Keep short and longer term affordability for customers at the centre of decision making in the water sector;</li> <li>• Protect the interests of taxpayers in the policy decisions that we take;</li> <li>• Ensure a stable framework for the water sector which remains attractive to investors;</li> <li>• Stimulate cultural change in the water sector by removing barriers to competition, fostering innovation and efficiency, and encouraging new entrants to the market to help improve the range and quality of services offered to customers and cut business costs;</li> <li>• Work with water companies, regulators and other stakeholders to build understanding of the impact personal choices have on the water environment, water resources and costs; and</li> </ul> <p>Set out roles and responsibilities – including where Government will take a stronger role in strategic direction setting and assessing resilience to future challenges, as well as clear expectations on the regulators.</p>	Ensure that site allocations and policies will support the wise use of water, and improvement of water quality.	Include sustainability objective / appraisal questions that relate to water quality and quantity.

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Urban White Paper 2000, <i>Our Towns and Cities: The Future – delivering an urban renaissance</i>	New, sustainable homes that are attractive, safe and practical. Retaining people in urban areas and making them more desirable places to live. Improving quality of life, opportunity and economic success through tailored solutions in towns and cities.	Allocate sites that will effectively deliver better towns and cities taking into account the key aims of the White Paper.	Include sustainability objective / appraisal questions to prioritise new development on brownfield sites or conversion of existing buildings; and to improve the quality of life in urban areas.
Rural White Paper 2000, <i>Our Countryside: The Future – a fair deal for rural England</i>	Facilitate the development of dynamic, competitive and sustainable economies in the countryside.  Maintain and stimulate communities and secure access to services for those who live and work in the countryside.  Conserve and enhance rural landscapes.  Increase opportunities for people to get enjoyment from the countryside.	Allocate sites that will increase employment and services in the rural parts of the Borough whilst conserving the landscape.	Include sustainability objective / appraisal questions that aim to improve the economies of rural areas with minimal impact to the environment.
Housing White Paper 2016, <i>Fixing our broken housing market</i>	The White Paper sets out ways to address shortfall in affordable homes and boost housing supply. The White Paper focuses on the following: <ul style="list-style-type: none"> <li>Planning for the right homes in the right places – Higher densities in appropriate areas, protecting the Green Belt while making more land available for housing by maximising the contribution from brownfield and surplus public land, regenerating estates, releasing more small and medium-sized sites, allowing rural communities to grow and making it easier to build new settlements</li> <li>Building homes faster – Improved speed of planning cases, ensuring infrastructure is provided and supporting developers to build out more quickly.</li> <li>Diversifying the Market – Backing small and medium-sized house builders, custom-build, institutional investors, new contractors, housing associations.</li> <li>Helping people now – supporting home ownership and providing affordable housing for all types of people, including the most vulnerable</li> </ul>	Allocate sites that will fulfil the aims of the White Paper, including development on smaller/medium sized sites, brownfield land and sites capable of achieving higher densities.	Include sustainability objectives/appraisals that relate to providing the right mix of housing and recognise the sustainability advantages of development on brownfield land.
<b>Policies and Strategies</b>			
MHCLG (2018) National Planning Policy Framework	Presumption in favour of sustainable development.  Achieving sustainable development by:	Development plan has a statutory status as the starting point for decision making.	Sustainability appraisal should be an integral part of the plan preparation process, and should consider all the likely significant effects on the

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
			environment, economic and social factors.
	Delivering a sufficient supply of homes.	Development plans should be informed by a local housing need assessment, conducted using the standard method in national planning guidance <sup>37</sup> .	Include a sustainability objective / appraisal question relating to the supply of housing.
	Building a strong, competitive economy.	Set out clear economic visions for that particular area.	Include a sustainability objective / appraisal question relating to strengthening the economy.
	Ensuring vitality of town centres.	Recognise town centres as the heart of their communities.	Include a sustainability objective / appraisal question relating to the vitality of town centres.
	Promoting healthy and safe communities.	Achieve healthy, inclusive and safe places which promote social interaction, are safe and accessible and enable and support healthy lifestyles.	Include a sustainability objective / appraisal question relating to the promotion of healthy and safe communities.
	Promoting sustainable transport.	Consider transport issues from the earliest stages of plan-making.	Include a sustainability objective / appraisal question relating to sustainable transport and patterns of growth.
	Supporting high quality communications.	Enhance the provision of local community facilities and services by supporting the expansion of electronic communications networks including next generation mobile technology and full fibre broadband connections.	Include a sustainability objective / appraisal question relating to improving communications infrastructure.

<sup>37</sup> MHCLG (2018) Housing Delivery Test Measurement Rule Book

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	Making effective use of land.	Promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions.	Include a sustainability objective / appraisal question relating to the use of previously developed land.
	Achieving well-designed places.	Set out a clear design vision – design policies should reflect local aspirations and be grounded in an understanding of each area's defining characteristics.	Include a sustainability objective / appraisal question relating to good design.
	Protecting Green Belt Land.	To prevent urban sprawl by keeping land permanently open.	Include a sustainability objective relating to urban sprawl.
	Meeting the challenge of climate change, flooding, and coastal change.	Take into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overeating from rising temperatures.	Include a sustainability objective / appraisal question relating to climate change mitigation and adaption.
	Conserving and enhancing the natural environment.	Distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local	Include a sustainability objective / appraisal question relating to the conservation and enhancement of the natural environment.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
		authority boundaries.	
	Conserving and enhancing the historic environment.	<p>Set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats.</p> <p>A local plan may be considered unsound if there has been no proper assessment of the significance of heritage assets in the area, and the plan does not contain a positive strategy for the conservation, enhancement and enjoyment of the historic environment.</p>	Include a sustainability objective / appraisal question relating to the conservation and enhancement of historic features.
	Facilitating the sustainable use of minerals.	Encourage prior extraction of minerals where practicable and environmentally feasible.	Include a sustainability objective / appraisal question relating to avoiding sterilisation of identified, viable mineral reserves.
National Planning Practice Guidance, DCLG	<p>Provides further guidance to be read alongside the NPPF on a range of topics that link to the promotion of sustainable development including:</p> <ul style="list-style-type: none"> <li>• Air quality</li> <li>• Climate change</li> <li>• Conserving and enhancing the historic environment</li> <li>• Flood risk</li> <li>• Health and well being</li> <li>• Housing and economic development</li> <li>• Natural environment</li> <li>• Minerals</li> <li>• Rural housing</li> <li>• Open space</li> <li>• Transport</li> <li>• Waste</li> </ul> <p>Water supply, wastewater and water quality</p>	The NPPG sets out a range of social, economic and environmental considerations for the preparation of the Local Plan. It also includes information on preparation of local plans which can be taken into consideration.	The NPPG sets out a range of social, economic and environmental considerations for the preparation of the Local Plan. It also includes information on undertaking sustainability appraisals which can be taken into consideration.

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The Conservation of Habitats and Species Regulations 2017	The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species' and the adaptation of planning and other controls for the protection of European sites.	Development should not have an adverse effect on any European sites and European protected species.	Include a sustainability objective / appraisal question regarding the protection of European sites and species.
DfT (2013) <i>Door to Door: A strategy for improving sustainable transport integration</i>	The strategy's vision is for an inclusive, integrated and innovative transport system that works for everyone, and where making door-to-door journeys by sustainable means is an attractive and convenient option. Four key areas to address are highlighted: <ul style="list-style-type: none"> <li>• improving availability of information;</li> <li>• simplifying ticketing;</li> <li>• making connections between different steps in the journey, and different modes of transport, easier; and</li> </ul> providing better interchange facilities.	Enhance public transport provision and encourage active modes of travel such as walking and cycling.	Include a relevant sustainability objective / appraisal question relating to sustainable transport.
DEFRA (2011) <i>Biodiversity 2020: A strategy for England's wildlife and ecosystem services</i>	The strategy aims to guide conservation efforts in England up to 2020, and move from a net biodiversity loss to gain. The strategy includes 22 priorities which include actions for the following sectors: <ul style="list-style-type: none"> <li>• Agriculture;</li> <li>• Forestry;</li> <li>• Planning and Development;</li> <li>• Water Management;</li> <li>• Marine Management;</li> <li>• Fisheries;</li> <li>• Air Pollution; and</li> </ul> Invasive Non-Native Species.	Develop policies that promote conservation and enhancements of biodiversity.	Include sustainability objective / appraisal question that relates to biodiversity.
Lifetime Neighbourhoods (2011)	This document is a national strategy for housing in an ageing society. It seeks to support residents to develop lifetime neighbourhoods in terms of resident empowerment, access, services and amenities, built and natural environment, social networks/well-being and housing.	The policies and site allocations will need to reflect the requirements set out within the national strategy.	Include a sustainability objective relating to the creation of sustainable communities.
UK Bioenergy Strategy (2012)	The UK Government has a responsibility to ensure that its policies only support bioenergy use in the right circumstances. This strategy is based on four principles which will act as a framework for future government policy on bioenergy.  In summary the four principles state that: <ul style="list-style-type: none"> <li>• Policies that support bioenergy should deliver genuine carbon reductions that help meet UK carbon emissions objectives to 2050 and beyond.</li> </ul>	The principles of the Bioenergy Strategy 2012 will need to be reflected within the Local Plan policies.	Include a sustainability objective relating to energy efficiency and climate change.

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	<ul style="list-style-type: none"> <li>Support for bioenergy should make a cost effective contribution to UK carbon emission objectives in the context of the overall energy goals.</li> <li>Support for bioenergy should aim to maximise the overall benefits and minimise costs (quantifiable and non-quantifiable) across the economy.</li> </ul> <p>At regular time intervals and when policies promote significant additional demand for bioenergy in the UK, beyond that envisaged by current use, policy makers should assess and respond to the impacts of this increased deployment on other areas, such as food security and biodiversity.</p>		
National Planning Policy for Waste (2014)	<p>Key planning objectives are identified within National Planning Policy for Waste, requiring planning authorities to:</p> <ul style="list-style-type: none"> <li>help deliver sustainable development through driving waste management up the waste hierarchy</li> <li>Ensure waste management is considered alongside other spatial planning concerns</li> <li>provide a framework in which communities take more responsibility for their own waste</li> <li>help secure the recovery or disposal of waste without endangering human health and without harming the environment,</li> </ul> <p>ensure the design and layout of new development supports sustainable waste management</p>	Develop policies that promote sustainable waste management and use of the waste hierarchy.	Include sustainability objective / appraisal question that relates to waste reduction.
DCLG (2011) <i>Laying the Foundations: A Housing Strategy for England</i>	Aims to provide support to deliver new homes and improve social mobility.	Develop policies that encourage development of residential properties.	Include sustainability objective / appraisal question that assesses whether housing need is being met.
DEFRA (2018) <i>A Green Future: Our 25 Year Plan to Improve the Environment</i>	Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently.	Develop policies that encourage the protection and enhancement of the natural environment.	Include sustainability objective / appraisal question that relates to the protection and enhancement of the natural environment.
UK Government Sustainable Development Strategy: Securing the Future (2005)	<p>The Strategy sets out 5 principles for sustainable development:</p> <ul style="list-style-type: none"> <li>Living within environmental limits;</li> <li>Ensuring a strong, healthy and just society;</li> <li>Achieving a sustainable economy;</li> <li>Promoting good governance ; and</li> <li>Using sound science responsibly.</li> </ul> <p>The strategy sets four priorities for action:</p> <ul style="list-style-type: none"> <li>Sustainable consumption and production;</li> </ul>	<p>The Local Plan should seek to deliver sustainable communities. These are places which:</p> <ul style="list-style-type: none"> <li>Meet the diverse needs of existing and future residents</li> <li>People want to live and</li> </ul>	To ensure that the requirements of the Strategy are embedded within the SA framework.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<ul style="list-style-type: none"> <li>Climate change and energy;</li> <li>Natural resource protection and environmental enhancement;</li> <li>Sustainable communities</li> </ul> <p>The strategy commits to:</p> <ul style="list-style-type: none"> <li>A programme of community engagement;</li> <li>Forums to help people live sustainable lifestyles;</li> <li>Open and innovative ways for stakeholders to influence decision; educating and training</li> </ul>	<p>work in</p> <ul style="list-style-type: none"> <li>Are sensitive to their environment</li> <li>Contribute to a high quality of life</li> <li>Are safe and inclusive</li> <li>Are well planned, built and run; and</li> <li>Offer equality of opportunity and good services for all</li> </ul>	
National Policy Statement EN1: Overarching Energy Policy Statement (2011)	This policy document sets out government policy for the delivery of major planning applications for energy development. These will be dealt with by the Planning Inspectorate, rather than local authorities in which the development occurs. The document also specifies the criteria for waste management, traffic and transport, water quality and quantity, noise and vibration, open spaces and green infrastructure, the landscape, visual impact, dust flood risk, historic environment, odour, light, smoke/steam, insects, coastal change, aviation, biodiversity and geodiversity.	The Local Plan will need to be consistent with the National Policy Statement.	Include a sustainability objective relating to energy efficiency.
The Carbon Plan: Delivering our Local Carbon Future (2011)	<p>The Carbon Plan sets out the government's plans for achieving the emissions reductions it committed to in the first four carbon budgets.</p> <p>Emissions in the UK must, by law, be cut by at least 80% of 1990 by 2050. The UK was first to set its ambition in law and the Plan sets out progress to date.</p>	The Local Plan will need to include policies that reflect the targets within the Carbon Plan.	Include a sustainability objective relating to greenhouse gas emissions.
DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy	<p>Enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life for future generations. There are 4 shared priorities:</p> <ul style="list-style-type: none"> <li>sustainable consumption and production;</li> <li>climate change and energy;</li> <li>natural resource protection and environmental enhancement; and sustainable communities.</li> </ul>	Develop policies that meet the aims of the Sustainable Development Strategy.	Include sustainability objective / appraisal questions to cover the shared priorities.
Department of Health (2010) <i>Healthy Lives, Healthy People: our Strategy for public health in England</i>	Protect the population from serious health threats; helping people live longer, healthier and more fulfilling lives; and improving the health of the poorest, fastest. Prioritise public health funding from within the overall NHS budget.	Policies within the Local Plan should reflect the objectives of the strategy where relevant.	Include a sustainability objective / appraisal question relating to health and well-being.
Building a Greener Future: Policy Statement (DCLG,	This Statement confirms the government's intention to achieve 25% more energy efficient homes by 2010, 44% more efficient homes by 2013 and zero carbon (net carbon emissions	Policies should seek to promote zero carbon	Include sustainability objectives / appraisal questions relating to



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2007)	should be zero per annum) homes by 2016.	residential development.	renewable energy generation and energy efficiency.
DECC (2011) UK Renewable Energy Roadmap  (updates setting out progress and changes to the strategy dated 2012 and 2013)	Make the UK more energy secure Help protect consumers from fossil fuel price fluctuations. Help drive investment in new jobs and businesses in the renewable energy sector. Keep the UK on track to meet carbon reduction objectives	Encourage developments that would support renewable energy provision including electricity, heat and transport.	Include sustainability objectives / appraisal questions relating to renewable energy generation and energy efficiency.
Community Energy Strategy (DECC, 2014)	Sets out plans to promote and facilitate the planning and development of decentralised community energy initiatives in four main types of energy activity: <ul style="list-style-type: none"> <li>• Generating energy (electricity or heat)</li> <li>• Reducing energy use (saving energy through energy efficiency and behaviour change)</li> <li>• Managing energy (balancing supply and demand)</li> </ul> Purchasing energy (collective purchasing or switching to save money on energy)	Ensure that site allocations and policies will support community low carbon and renewable energy provision including electricity, heat and transport.	Include sustainability objectives / appraisal questions relating to renewable energy generation and energy efficiency.
The National Adaptation Programme – Making the Country Resilient to a Changing Climate (Defra, 2013)	The report sets out visions for the following sectors: <ul style="list-style-type: none"> <li>• Built Environment – “buildings and places and the people who live and work in them are resilient to a changing climate and extreme weather and organisations in the built environment sector have an increased capacity to address the risks and take the opportunities from climate change”.</li> <li>• Infrastructure – “an infrastructure network that is resilient to today’s natural hazards and prepared for the future changing climate”.</li> <li>• Healthy and resilient communities – “a health service, a public health and social care system which are resilient and adapted to a changing climate. Communities and individuals, including the most vulnerable, are better prepared to cope with severe weather events and other impacts of climate change. Emergency services and local resilience capability take account of and are resilient to, a changing climate”.</li> <li>• Agriculture and Forestry – “profitable and productive agriculture and forestry sectors that take the opportunities from climate change are resilient to its threats and contribute to the resilience of the natural environment by helping maintain ecosystem services and protect and enhance biodiversity”.</li> <li>• Natural Environment – “the natural environment, with diverse and healthy ecosystems, is resilient to climate change, able to accommodate change and valued for the adaptation services it provides”.</li> <li>• Business – “UK businesses are resilient to extreme weather and prepared for future risks</li> </ul>	Policies should take account of the aims of the Programme.	Include sustainability objectives / appraisal questions which seek to promote the implementation of adaptation measures to make the area more resilient to a changing climate.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<p><i>and opportunities from climate change".</i></p> <ul style="list-style-type: none"> <li>Local Government – <i>"Local government plays a central in leading and supporting local places to become more resilient to a range of future risk and to be prepared for the opportunities from a changing climate".</i></li> </ul>		
The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)	<p>This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities.</p> <p>The strategic aims and objectives of the Strategy are to:</p> <ul style="list-style-type: none"> <li><i>"manage the risk to people and their property;</i></li> <li><i>Facilitate decision-making and action at the appropriate level – individual, community or local authority, river catchment, coastal cell or national;</i></li> </ul> <p><i>Achieve environmental, social and economic benefits, consistent with the principles of sustainable development".</i></p>	Policies should seek to reduce and manage the risk of all types of flooding.	The SA framework should include sustainability objectives / appraisal questions which seek to reduce the risk and manage flooding sustainably.
Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy (HM Government, 2013)	<p>The aim of the Programme is to improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth:</p> <ul style="list-style-type: none"> <li>encourage businesses to contribute to a more sustainable economy by building waste reduction into design, offering alternative business models and delivering new and improved products and services;</li> <li>encourage a culture of valuing resources by making it easier for people and businesses to find out how to reduce their waste, to use products for longer, repair broken items, and enable reuse of items by others;</li> <li>help businesses recognise and act upon potential savings through better resource efficiency and preventing waste, to realise opportunities for growth; and</li> </ul> <p>support action by central and local government, businesses and civil society to capitalise on these opportunities.</p>	Primarily an issue for the County Waste Plan and Waste Management Strategy rather than the Local Plan.	N/A.
Future Water: The Government's Water Strategy for England (DEFRA, 2008)	<p>Sets out how the Government want the water sector to look by 2030 and an outline of the steps which need to be taken to get there.</p> <p>The vision for 2030 is one where we, as a country have:</p> <ul style="list-style-type: none"> <li><i>"improved the quality of our water environment and the ecology it supports, and continue to maintain high standards of drinking water quality from taps;</i></li> <li><i>Sustainably managed risks from flooding and coastal erosion, with greater understanding and more effective management of surface water;</i></li> </ul>	Policies should aim to contribute to the vision set out in this Strategy.	Include sustainability objectives / appraisal questions which seek to protect, manage and enhance the water environment.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<ul style="list-style-type: none"> <li>• Ensure a sustainable use of water resources, and implement fair, affordable and cost-reflective water charges;</li> <li>• Cut greenhouse gas emissions; and</li> </ul> <p>Embed continuous adaptation to climate change and other pressures across the water industry and water users”.</p>		
The Air Quality Strategy for England vol. 1 (2007)	<p>The Air Quality Strategy sets out a way forward for work and planning on air quality issues by setting out the air quality standards and objectives to be achieved. It introduces a new policy framework for tackling fine particles, and identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The objectives of strategy are to:</p> <ul style="list-style-type: none"> <li>• Further improve air quality in the UK from today and long term.</li> </ul> <p>Provide benefits to health, quality of life and the environment.</p>	The Local Plan policies will need to work towards further improving air quality in the UK	Include a sustainability objective relating to air quality.
Working with the grain of nature – A Biodiversity Strategy for England (2011))	This Strategy seeks to protect and improve the rural, urban, marine and global environment and lead on the integration of these with other policies across Government and internationally.	The Local Plan should minimise loss of biodiversity when allocating sites for development.	Include a sustainability objective relating to the protection and enhancement of biodiversity.
National Infrastructure Plan (2014)	The Infrastructure Plan allows for long term public funding certainty for key infrastructure areas such as: roads, rail, flood defences and science. All elements highlighted in the Plan represent firm commitment by government to supply the funding levels stipulated. The Plan also highlights what steps the government will take to ensure effective delivery of its key projects.	The Local Plan objectives and policies should support the delivery of infrastructure to support new development.	To ensure that infrastructure delivery is embedded within the SA framework.
Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)	<p>The Strategy vision for water resource “is for there to be enough water for people and the environment, meeting legitimate needs”.</p> <p>Its aims include:</p> <ul style="list-style-type: none"> <li>• To manage water resource and protect the water environment from climate change.</li> <li>• Restore, protect, improve and value species and habitats that depend on water.</li> <li>• To contribute to sustainable development through good water management.</li> </ul> <p>People to understand how water and the water environment contribute to their quality of life.</p>	Policies should reflect the aims of the strategy where relevant.	Include sustainability objectives / appraisal questions that seek to promote water management and efficiency.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
Safeguarding our Soils: A Strategy for England (DEFRA, 2009)	<p>The vision is “by 2030, all England’s soils will be managed sustainability 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”.</p> <p>The Strategy highlights the areas for priority including:</p> <ul style="list-style-type: none"> <li>• Better protection for agricultural soils.</li> <li>• Protecting and enhancing stores of soil carbon.</li> <li>• Building the resilience of soils to a changing climate.</li> <li>• Preventing soil pollution.</li> <li>• Effective soil protection during construction and development.</li> <li>• Dealing with our legacy of contaminated land.</li> </ul>	Ensure that site allocations and policies will help protect and enhance the quality of soils and seek to sustainably manage their quality for future generations.	Include sustainability objectives / appraisal questions that seek to safeguard and enhance the quality of soil.
The Plan for Growth implementation update (2013)	<p>The plan for growth, published alongside Budget 2011, and as part of the Autumn Statement 2011, announced a programme of structured reforms to remove barriers to growth for businesses and equip the UK to compete in the global race. These reforms span a range of policies including improving UK infrastructure, cutting red tape, root and branch reform of the planning system and boosting trade and inward investment, to achieve the governments four ambitions for growth:</p> <ul style="list-style-type: none"> <li>• Creating the most competitive tax system in the G20</li> <li>• Encouraging investment and exports as a route to a more balanced economy</li> <li>• Making the UK the best place in Europe to start, finance and grow a business</li> </ul> <p>Creating a more educated workforce that is the most flexible in Europe.</p>	The Local Plan policies will need to reflect the ambitions set out within the Plan for Growth 2013.	Include a sustainability objective relating to economic growth.
DEFRA (2007) <i>The Air Quality Strategy for England, Scotland, Wales and Northern Ireland</i>	<p>Make sure that everyone can enjoy a level of ambient air quality in public spaces, which poses no significant risk to health or quality of life.</p> <p>Render polluting emissions harmless.</p>	Develop policies that aim to meet the standards.	Include sustainability objective / appraisal questions to protect and improve air quality.
<b>Legislation</b>			
Housing Act 2004	<p>Protect the most vulnerable in society and help create a fairer and better housing market.</p> <p>Strengthen the Government’s drive to meet its 2010 decent homes target.</p>	Develop policies that help to create a fairer and better housing market.	Include sustainability objective / appraisal questions to improve access to good quality and affordable housing.
Housing and Planning Act	The Act makes widespread changes to housing policy at the national level. Measures introduced	The Local Plan will need to	Include a sustainability

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
(2016)	in the Act relate to starter homes, and permitting the sale of higher value local authority homes. Starter homes are the new affordable housing product designed by the government to specifically meet the housing needs of younger generations and to allow them to access home-ownership. The overarching aim of the Act is to promote home ownership and increase levels of house building.	take account of the provisions of the Act in relation to housing provision.	objective relating to the provision of an appropriate range of housing within the Borough.
Localism Act (2011)	<p>The Localism Act introduces a number of measures to decentralise decision making process to the local level, creating space for Local Authorities to lead and innovate, and giving people the opportunity to take control of decisions that matter to them. The Localism Act includes a number of important packages.</p> <ul style="list-style-type: none"> <li>• The new act makes it easier for local people to take over the amenities they love and keep them part of local life;</li> <li>• The act makes sure that local social enterprises, volunteers and community groups with a bright idea for improving local services get a chance to change how things are done.</li> <li>• The act places significantly more influence in the hands of local people over issues that make a big difference to their lives.</li> <li>• The act provides appropriate support and recognition to communities who welcome new development.</li> <li>• The act reduces red tape, making it easier for authorities to get on with the job of working with local people to draw up a vision for their area's future.</li> <li>• The act reinforces the democratic nature of the planning system passing power from bodies not directly to the public, to democratically accountable ministers.</li> <li>• The act enables Local Authorities to make their own decisions to adapt housing provision to local needs, and make the system fairer and more effective.</li> <li>• The act gives Local Authorities more control over the funding of social housing, helping them plan for the long- term.</li> </ul> <p>In relation to planning, the Localism Act enables the Government to abolish regional spatial strategies, introduce Neighbourhood Plans and Local Referendums.</p>	The Local Plan will need to reflect the principles of Localism as identified in the document, including Neighbourhood Planning.	<p>To ensure the concepts of the Localism Act are embedded within the SA framework.</p> <p><i>Relates to the overall SA process.</i></p>
The Climate Change Act (2008)	<p>The Climate Change Act was passed in 2008 and established a framework to develop an economically credible emissions reduction path. It also strengthened the UK's leadership internationally by highlighting the role it would take in contributing to urgent collective action to tackle climate change under the Kyoto Protocol.</p> <p>The Climate Change Act includes the following:</p> <ul style="list-style-type: none"> <li>• 2050 target. The act commits the UK to reducing emissions by at least 80% in 2050 from 1990 levels. This target was based on advice from the CCC report: Building a Low- carbon Economy. The 80% target includes GHG emissions from the devolved administrations, which currently accounts for around 20% of the UK's total emissions.</li> </ul> <p>Carbon Budgets. The Act requires the Government to set legally binding 'carbon budgets'. A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year</p>	The Local Plan policies must reflect the objectives of The Climate Change Act, in order to contribute to reducing UK carbon emissions.	Include a sustainability objective relating to climate change.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	period. The first four carbon budgets have been put into legislation and run up to 2027.		
Energy Act (2008)	<p>The Act works towards a number of policy objectives including carbon emissions reduction, security of supply, and competitive energy markets. Objectives: Electricity from Renewable Sources: changes to Renewables Obligation (RO), designed to increase renewables generation, as well as the effectiveness of the RO.</p> <p>Feed in tariffs for small scale, low carbon generators of electricity. Smart meters: the Act mandates a roll-out of smart meters to medium sized businesses over the next five years.</p> <p>Renewable heat incentives: the establishment of a financial support mechanism for those generating heat from renewable sources.</p>	Policies and site allocations will have to ensure a positive contribution in meeting the climate change challenge by capitalising on renewable and low carbon energy opportunities and adaptation measures which reduce the threat of climate change.	Include a sustainability objective relating to energy efficiency and climate change.
Flood and Water Management Act (2010)	The Act aims to reduce the flood risk associated with extreme weather. It provides for better, more comprehensive management of flood risk for people, homes and businesses, helps safeguard community groups from unaffordable rises in surface water drainage charges, and protects water supplies to the consumer.	The Local Plan should protect existing and future development as well as residents from flood risk.	The overview of flood risk management in England which is provided in the Act will need to be reflected in the Framework of the SA.
Town and country planning legislation	<p>A range of legislation published in 2017 is of relevance to the Local Plan. This includes:</p> <ul style="list-style-type: none"> <li>- The Neighbourhood Planning Act 2017 – Act aims to strengthen neighbourhood planning by ensuring that planning decision-makers take account of well-advanced neighbourhood development plans and by giving these plans full legal effect at an earlier stage.</li> <li>- The Town and Country Planning (Brownfield Land Register) Regulations 2017 - The <u>regulations</u> require local authorities to prepare and maintain registers of brownfield land that is suitable for residential development.</li> <li>- The Town and Country Planning (Permission in Principle) Order 2017 the <u>Order</u> provides that sites entered on Part 2 of the new brownfield registers will be granted permission in principle.</li> </ul> <p>The regulations and order above aim to improve the quality and consistency of data held by local planning authorities, which will provide certainty for developers and communities, encouraging investment in local areas.</p>	<p>The Local Plan policies should take into account well-advanced neighbourhood plans.</p> <p>The Local Plan should promote and prioritise development of brownfield land.</p>	Include a sustainability objective/appraisal question that recognises the sustainability value of development on brownfield land.
Planning (Listed Buildings & Conservation Areas) Act 1990	This Act details the requirements for listing buildings of special architectural or historic interest and identifying conservation areas. The Act details requirements for works to these or that may otherwise affect these. It aims to ensure that such requirements are enforced and to prevent deterioration of and damage to special buildings and areas.	Local Plan policies should protect listed buildings and conservation areas by preventing harm to and deterioration of these.	Include a sustainability objective relating to the historic environment.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
Ancient Monuments & Archaeological Areas Act 1979	This Act makes provision for investigation, preservation and recording of matters of archaeological and historic interest, in particular ancient monuments and areas of archaeological importance and activities affecting these.	Local Plan policies should protect ancient monuments and areas of archaeological interest.	Include a sustainability objective relating ancient monuments and archaeological areas.

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## Appendix 4

### Updated Baseline Information

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## Biodiversity and geodiversity

A number of habitats within Hertsmere have been identified as internationally important under the EU Habitats Directive, including characteristic oak-hornbeam woodlands. However, there are no EU level designations in the Borough such as Special Areas of Conservation, Special Protection Areas or Ramsar sites. As mentioned previously, an HRA will be undertaken during the plan preparation process and its results used to inform the SA.

There are two Sites of Special Scientific Interest (SSSIs) in Hertsmere Borough:

- *Redwell Wood*, a large ancient semi natural woodland which is notified primarily for its oak hornbeam stand type with healthy remnants;
- *Castle Lime Works*, a geological SSSI displaying the finest exposure of clay-filled pipes in the chalk karst of England<sup>38</sup>.

There are three Local Nature Reserves within Hertsmere: Fisher's Field, Hillfield Park Reservoir and Furzefield Wood & Lower Halfpenny Bottom. There are no National Nature Reserves located within the Borough<sup>39</sup>.

Some 130 Wildlife Sites were identified in Hertsmere in 2008, making up approximately 7% of the Borough. Six sites larger than 50ha were identified: Hillfield Park Reservoir, Little Organ Hall Farm pasture, Porters Park (Radlett) Golf Course, Dyrham Park, Tyttenhanger Gravel Pit and Redwell, Hawkshead & Mymmshall Wood<sup>40</sup>.

The Hertfordshire Biodiversity Action Plan<sup>41</sup> identified two Key Biodiversity Areas in Hertsmere:

- *Upper Colne Valley*: An area of wetlands and heath centred on the River Colne, Tyttenhanger Gravel Pit and Colney Heath in St Albans District.
- *Mymmshall Brook/Water End*: The woodland complex of Redwell Wood and the stream swallow holes and associated sites around the brook up to the major swallow hole complex just to the north.

Hertsmere contains three Regionally Important Geological Sites (RIGS): Shenley Chalk Mine, Radlett Plantation and Radlett Field.

The underlying bedrock in Hertsmere is chalk, which rises at the Chilterns to the north, and underlies London to the south. The chalk is important in influencing the general topography of the area and in providing an underground aquifer, which affects the calcareous nature of the water and the levels of rivers, streams, springs and flushes<sup>42</sup>.

In Hertsmere, the chalk occurs at the surface around Aldenham, southwest and northeast of Radlett towards North Mimms Park and the edges of the Mymmshall Brook valleys. It is edged by the overlying Reading Beds, consisting of mottled clay, sands and pebbles that occur at the surface, in a band, from Radlett to South Mimms and Potters Bar. Most of the solid geology consists of London Clay, which dominates much of the Borough, from Bushey and Borehamwood across to Potters Bar<sup>43</sup>.

## Soils and minerals

Geologically, Hertsmere lies on the boundary between the chalk of Hertfordshire to the north and the London clay and Reading Beds of the London Basin to the south. There is a marked contrast in soil types across the Borough. In the headwaters of the catchment (southern end of the

<sup>38</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>39</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>40</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>41</sup> A Local Biodiversity Action Plan (reviewed March 2006) [http://www.hef.org.uk/nature/biodiversity\\_vision/](http://www.hef.org.uk/nature/biodiversity_vision/)

<sup>42</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>43</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

Borough) across Borehamwood, Bushey and Potters Bar the soils are generally clays of low permeability, seasonally waterlogged, with medium to high runoff producing potential. The soils in the lower part of the catchment (northern end of the Borough) across Radlett and Shenley are generally well-drained, loamy sandy soils permeable producing relatively low amounts of runoff<sup>44</sup>.

The geology noted above gives rise to acid-neutral soils within Hertsmere, apart from localised areas where calcareous soils may exist directly influenced by the chalk. These are largely Argillic brown earths or brown earths, clayey or loamy and with impeded drainage<sup>45</sup>.

Hertsmere contains a minerals and railhead safeguarding area. The mineral safeguarding area for sand/gravel covers a large proportion of Hertsmere, while the railhead safeguarding area is located to the north of Hertsmere, within close proximity to Radlett.

According to Natural England's Agricultural Land Classification, land within Hertsmere Borough includes best and most versatile agricultural land, with elements of Grade 2 agricultural land around Aldenham, Letchmore Heath and Colney Heath, and the majority of land being Grade 3. Over 95% of new homes were provided on previously developed land, mostly within defined urban areas, according to the Authority Monitoring Report 2013/14<sup>46</sup>. The Borough also contains important reserves of sand and gravel, which have been identified by Hertfordshire County Council as 'preferred areas' for future mineral extraction in its Minerals Local Plan.

## Landscape

There is no Area of Outstanding Natural Beauty in Hertsmere.

Hertsmere falls within the Northern Thames Basin National Character Area (NCA), which contains a diverse range of semi-natural habitats including ancient woodland, lowland heath and floodplain grazing marsh. The pattern of woodlands is varied across the area and includes considerable areas of ancient semi-natural woodland. Hertfordshire is particularly wooded in some areas. Significant areas of wood pasture and pollarded veteran trees are also present. Mixed farming is characteristic of the basin, with arable land predominating in the Hertfordshire plateaux. Landscape parklands surrounding 16<sup>th</sup> and 17<sup>th</sup> century rural estates and country houses built for London merchants are a particular feature in this NCA<sup>47</sup>.

Hertsmere contains 16 Local Character Areas (No. 014-029), the largest of which are located in the centre of Hertsmere, between the settlements of Radlett, Borehamwood and Potters Bar (Borehamwood Plateau, High Canons Valleys and Ridges and Arkley Plain). These three LCAs contain gently undulating ground, with a number of distinctive features including historic parklands, reservoirs and pasture lands.

## Open space

A total of 257 open spaces have been identified in Hertsmere, comprising 999.3 hectares. This amounts to 9.9% of the total area of the Borough<sup>48</sup>.

Hertsmere has a diverse distribution of different types of open space. However, compared to the proposed standards there are a number of deficiencies within Hertsmere. In particular, there is a shortage of play facilities across the Borough which has been identified as a key problem.

Additionally, some accessibility issues were identified in Aldenham & Shenley, Borehamwood & Elstree, Bushey and Potters Bar, that need to be addressed through planning policy<sup>49</sup>.

<sup>44</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>45</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>46</sup> Authority Monitoring Report 2013/14 (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/AMR-2013-2014.pdf>

<sup>47</sup> National Character Area profile: 111: Northern Thames Basin (2013) <http://publications.naturalengland.org.uk/publication/4721112340496384?category=587130>

<sup>48</sup> Hertsmere Open Space Study (2011) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB25-HBC-Open-Space-Study-Oct-2011.pdf>

<sup>49</sup> Hertsmere Open Space Study (2011) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB25-HBC-Open-Space-Study-Oct-2011.pdf>

## Green space

Some 591 sites within Hertsmere have been identified as green space or amenity land. A large majority of these are considered 'amenity greens', comprising almost 60% of the sites identified. 'Amenity greens' are defined as roadside verges or very small areas of green space. Although amenity greens tend to provide a more useable space for people than say semi natural greenspace, they do not contribute as much as other types (e.g. parks or outdoor sports facilities) to local communities in terms of recreation, social, environmental and visual amenity terms<sup>50</sup>.

Hertsmere's Green Infrastructure Plan<sup>51</sup> seeks to conserve and enhance strategic greenspaces and Green Infrastructure (GI) resources such as the Aldenham Country Park, as well as registered and minor historic parklands, areas with an intact small scale or historic field boundary network, minor watercourses and wetlands within Hertsmere.

## Air quality

The main air quality issues in Hertsmere relate to nitrogen dioxide (NO<sub>2</sub>). Hertsmere Council has recorded concentrations of NO<sub>2</sub> above the annual mean objective at a number of relevant locations outside existing Air Quality Management Areas (AQMAs)<sup>52</sup>. However, as these are all in close proximity to existing AQMAs it is not considered necessary to amend existing or create new AQMAs at these locations. All other pollutants in the Borough are meeting the objective levels. At present, there are eight AQMAs located in Hertsmere:

- AQMA 1 – An area comprised of the properties at 23-27 Dove Lane and the caravan site Brookes Place off the A1000 Barnet Road, near the M25.
- AQMA 2 – An area comprised of Charleston Paddocks, St Albans Road, South Mimms, Potters Bar, near the M25.
- AQMA 3 – An area comprised of properties 31-29 Blanche Lane South Mimms near the M25.
- AQMA 4 – An area comprised of the domestic properties 12 Grove Place, Hartspring Lane and caravans numbered 1-4, 7-8, 55-58 and 60 within Winfield Caravan site, Hartspring Lane, near the M1 at Bushey.
- AQMA 5 – An area comprised of eight properties on the east side of the A5183 High Street, Elstree around the junction with the A411 Barnet Lane.
- AQMA 6 – An area comprised of properties at 133 to 167 High Street on the east side of the High Street opposite the bus station Potters Bar.
- AQMA 7 – An area encompassing residential properties along both sides of Watling Street, Radlett, between the junctions with Park Road and Aldenham Road.
- AQMA 8 – An area encompassing residential, commercial and retail properties along both sides of Shenley Road and Theobald Street, and the roundabout joining Shenley Road and Eldon Avenue.

A managed motorway scheme was recently implemented on a section of the M25 running through the Borough between Junctions 23 and 24 (South Mimms services to Potters Bar). The air quality impacts arising from this change are currently under investigation.

## Climatic factors

There is widespread scientific consensus that the Earth's climate is changing and that human activity could be the principal cause. Scientific forecasts suggest that the UK's climate will continue to get warmer and that heavy rainfall will be more frequent. Weather extremes, such as

<sup>50</sup> Green Spaces and Amenity Land Report (2012) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB26-Green-Spaces-Amenity-Land-2012.pdf>

<sup>51</sup> Hertsmere Borough Green Infrastructure Plan (2011) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Development-Framework/Hertsmere-Green-Infrastructure-Plan.pdf>

<sup>52</sup> 2015 Air Quality Updating and Screening Assessment (2015) <https://www.hertsmere.gov.uk/Documents/04-Environment-Refuse--Recycling/Environmental-Health/Pollution-Control/Updating-and-Screening-Assessment-2015.pdf>; those sites exceeding the annual mean objective that are not located within an existing AQMA are as follows: central Potters Bar; on the periphery of South Mimms; central Radlett; central Elstree; adjacent to Hartspring Lane; and in central Borehamwood.

heat waves would become more common and others such as snowfall would become less common. Sea levels will continue to rise and storm surges will become more frequent, increasing the risk of flooding in coastal areas.

Changes to the climate will bring new challenges to the Borough's built and natural environments. Climate change estimates (at the 50% probability level) for the East of England for the 2080s, based on medium emissions scenarios, predict an increase in winter mean temperature of approximately 4°C and an increase in summer mean temperature of approximately 4°C<sup>53</sup>.

In 2016, Hertsmere emitted the second highest amount of CO<sub>2</sub> (722.7 kt CO<sub>2</sub>) overall amongst all local authorities in Hertfordshire County, after St Albans City and District Council (906.7 kt CO<sub>2</sub>). This was mainly due to the amount of CO<sub>2</sub> emitted via transport (382.9 kt CO<sub>2</sub>).<sup>54</sup>

## Water quality and water resources

Hertsmere Borough falls within the catchment of the River Colne, which flows from northeast to southwest from Colney Heath through to Watford. The main tributaries of the Colne along this reach are the Hilfield Brook, Radlett Brook, Tykeswater and Mimshall Brook.

Hertsmere mainly falls within the Colne Management and Operational Catchment. A majority of water for people and businesses is abstracted from groundwater within the catchment. Some rivers fed by this suffer from low flows during dry weather, which is exacerbated by abstraction. In the future, the demand for water for people, business and the environment may increase beyond the capacity available locally<sup>55</sup>.

Affinity Water provides the mains water supply in Hertsmere Borough. Water consumption in Hertfordshire is thought to be above average compared to the rest of the UK. At the Hertfordshire Water Summit in 2013, it was suggested that water consumption in Hertfordshire was 166 per capita consumption (pcc), compared to the UK average of 150 pcc<sup>56</sup>. However, Affinity Water's Water Resources Management Plan<sup>57</sup> found that their Central and Southeast regions do not have sufficient water for the whole of the 25-year planning period to meet their customers' need for water. They have considered a wide range of options to rebalance supply and demand, which has resulted in a substantial investment programme for their Central region, where Hertsmere is located.

Wastewater can have a detrimental impact on water quality, with over 2,000 residential properties and six large sewage treatment works discharging treated water into local rivers in the catchment. In addition, challenges caused when intermittent sewage is discharged (under license) during storm events, can also impact on groundwater<sup>58</sup>.

## Forthcoming evidence

Hertfordshire County Council, in conjunction with nine Hertfordshire local authorities and Chiltern District Council, has commissioned a Water Cycle Study. This has involved collaborative working between the County and district councils, the Environment Agency, Hertfordshire LEP and the water companies that serve the area (Thames Water, Affinity Water and Anglian Water). This describes the current environmental and infrastructure capacity with regards to water infrastructure and resources in the Hertfordshire area and considers solutions to any capacity issues identified over the period 2021 to 2051. This includes a provisional five point action plan, including the following headline actions:

- Establish a water and sewerage infrastructure delivery partnership.
- Establish an integrated planning portal and single point of contact.

<sup>53</sup> UK Climate Projections (December 2014) <http://ukclimateprojections.metoffice.gov.uk/21708>

<sup>54</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2016 (2018) <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

<sup>55</sup> Catchment Data Explorer: Colne Management Catchment (2017) <http://environment.data.gov.uk/catchment-planning/ManagementCatchment/3017>

<sup>56</sup> Hertfordshire Water Summit, 14 March 2013

<sup>57</sup> Final Water Resources Management Plan, 2015-2020 (2014) <https://stakeholder.affinitywater.co.uk/docs/FINAL-WRMP-Jun-2014.pdf>

<sup>58</sup> Catchment Data Explorer: Colne Operational Catchment (2017) <http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3096/Summary>

- Create a growth risk profile.
- Explore long term funding opportunities.

Plan for AMP7 (2020-25) and the forthcoming Price Review Mechanism (PR19).

## Flood risk

The risk of flooding posed to properties arises from a number of sources including river, groundwater, surface water and sewers. Hertsmere has a history of drainage infrastructure flooding, which has been recorded in all urban areas across the Borough.

The updated Hertsmere Borough Strategic Flood Risk Assessment (SFRA) was published in May 2018<sup>59</sup>. Hertsmere falls within the catchment of the River Colne, which has extensive partially developed floodplain with development built up to the water's edge and narrow floodplains in the headwaters, with some properties at risk of flooding. The following table, taken from the SFRA (2018) demonstrates potential flood sources and pathways in Hertsmere.

Flood type	Source	Pathway
Fluvial	Hilfield Brook Radlett Brook Tykeswater and Mimmshall Brook	Floodplain ponding / conveyance / breach and overtopping
Surface water	Greenfield runoff Urban runoff	Flow paths merging from surrounding fields
Arterial Drainage Network	Urban runoff	Surcharged sewers or burst water mains (failure of infrastructure)
Groundwater	Perched within alluvial deposits	Rising water level
Artificial Sources	Reservoir	Flow paths should a reservoir fail

There have been a number of incidents of fluvial flooding from the River Colne, most recently in February 2014. There are also historic records of fluvial flooding from the Radlett Brook and Mimmshall Brook. There have also been historic incidents of flooding from a range of other sources, including land drainage, surface water sewers and highway drainage, among others. Historic flood events have mostly affected properties in Borehamwood, Bushey and Potters Bar<sup>60</sup>.

There are a number of Source Protection Zones within the Borough to ensure that rivers and aquifers are protected from pollution, with these principally located within the northeast and west of the Borough.

Hertsmere contains a number of areas susceptible to flooding. Areas of land within Flood Zones 2 and 3 are located along the west-north boundary of the Borough, as well as The Brook, Mimmshall Brook and Catherine Bourne.

Overall, surface water flooding is highlighted as a major cause of frequent flooding in the Borough and often occurs in combination with groundwater flooding.

<sup>59</sup> Strategic Flood Risk Assessment: Level 1 (2018) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/20180604-Hertsmere-Borough-Council-SFRA-L1-Report-Final-v6.pdf>

<sup>60</sup> Strategic Flood Risk Assessment: Level 1 (2018) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/20180604-Hertsmere-Borough-Council-SFRA-L1-Report-Final-v6.pdf>

## Historic environment

There are many historic and heritage designations within Hertsmeire, including 319 Listed Buildings, 15 Conservation Areas, 32 Sites of Archaeological Interest, four Registered Parks and Gardens (Wrotham Park, Aldenham House, Wall Hall, The Rose Garden, Bushey), and four Scheduled Monuments. The Rose Garden is a key local attraction, which celebrated its 100<sup>th</sup> birthday in 2013. It was created by famous landscape designer Thomas Mawson, who went on to become the first president of the Landscape Institute. The Battle of Barnet 1471 Registered Battlefield is also partially within the Borough's boundary. Hertsmeire Borough also maintains a list of Locally Important Buildings, which includes 380 buildings of local significance. At present there are no heritage assets at risk within the Borough.

The Hertfordshire Historic Environment Record (HER) contains information on historic buildings, archaeological remains, historic sites and military remains. It can be used to identify significant historic remains and contains information on surveys and archaeological excavations undertaken in Hertfordshire. LUC sought to obtain data from the HER but was unable to do so in time to inform this report. Instead, data from Heritage Gateway has been used but we will continue to work with the Council to ensure that any relevant data or features are taken into account in the SA.

Proximity to London and the rapid growth in development pressures in the 20<sup>th</sup> century have resulted in the growth of suburban development in the southern part of Hertfordshire. This in turn led to the designation of a large proportion of the county as Green Belt. Hertfordshire's inherited built environment is generally low rise, including in Hertsmeire. Guidance from Hertfordshire County Council<sup>61</sup> states that historic buildings need to adapt and manage change to remain viable. It also encourages new development to respect historic buildings, but not to replicate them. Hertfordshire is characterised by traditional (mainly pre 1850s) building materials related to its geology and landscape.

At present, there is no information available on visitor numbers to specific heritage assets in Hertsmeire.

## Health

The health of people in Hertsmeire is generally better than the national average. Some 84.76% of people reported being in 'very good' or 'good' health, while only 4.01% of people reported being in 'bad' or 'very bad' health<sup>62</sup>. The breakdown by ward of resident general health in the 2011 Census shows that Aldenham East has the best health in Hertsmeire with 90.55% reporting very good or good health. However, Borehamwood Cowley Hill ward has the worst with only 78.6% reporting 'very good' or 'good' health<sup>63</sup>.

In 2016/17, 63% of adults in Hertsmeire were physically active, compared to the English average of 66%. Furthermore, in 2016/17, 65.2% of adults in the area were recorded as being overweight, compared to the English average of 61.3%. Despite this, 15.8% of children in Year 6 are classified as obese, better than the average for England.<sup>64</sup>

Life expectancy for both men and women is higher than the England average. However, life expectancy is 9.3 years lower for men and 6.3 years lower for women in the most deprived areas of Hertsmeire than in the least deprived areas<sup>65</sup>.

<sup>61</sup> Hertfordshire County Council (date unavailable) Building Futures website [online] available at: <https://www.hertfordshire.gov.uk/microsites/building-futures/a-sustainable-design-toolkit/technical-modules/design/understanding-hertfordshires-character.aspx>, accessed 30/11/17

<sup>62</sup> Knowing our Community (2015) <https://www.hertsmeire.gov.uk/Documents/11-Your-Council/Equality--Diversity/Knowing-Our-Community-2015-v2.pdf>

<sup>63</sup> English Indices of Deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>64</sup> Public Health England: Hertsmeire District Health Profile 2018

<sup>65</sup> Local Authority Health Profile 2018 (2018) [https://fingertips.phe.org.uk/profile/health-profiles/area-search-results/E07000098?place\\_name=Hertsmeire&search\\_type=parent-area](https://fingertips.phe.org.uk/profile/health-profiles/area-search-results/E07000098?place_name=Hertsmeire&search_type=parent-area)



## *Forthcoming evidence*

The Council has commissioned an Indoor Sports and Outdoor Playing Field Strategy, which will be taken into account when it becomes available.

## **Deprivation**

The English Indices of Deprivation 2015<sup>66</sup> are a measure of multiple deprivations in small areas or neighbourhoods, called Lower-layer Super Output Areas (LSOAs) in England, which are a similar size to electoral wards. Seven domains of deprivation are measured: Income; Employment; Education; Health; Crime; Barriers to housing & services and Living environment. Each domain contains a number of indicators. The seven domains are combined to give a multiple deprivation score. There are 32,844 LSOAs nationally and 62 LSOAs in Hertsmere.<sup>67</sup>

According to the English Indices of Deprivation 2015<sup>68</sup>, Hertsmere is ranked 243<sup>rd</sup> for the Index of Multiple Deprivation (IMD) multiple deprivation score (rank of average score) out of 326 local authority areas in England. This means that compared to the rest of the country, Hertsmere is in the 50% least deprived areas. Hertsmere's average deprivation rank across its 62 LSOAs is 21,818, which is slightly below the Hertfordshire average of 22,160. Hertsmere is a very diverse borough with varying levels of deprivation with overall IMD levels of LSOAs ranging from 3,049 (Borehamwood Cowley Hill 006C, the most deprived LSOA in Hertfordshire and in the top 10% most deprived nationally) to 32,695 (Bushey Heath 013C in the top 1% least deprived nationally). There are eight wards within the 20% most deprived in the country which are classified as having barriers to housing and services: Aldenham West, Shenley, Borehamwood Cowley Hill, Borehamwood Hillside, Bushey North, Borehamwood Kenilworth, Potters Bar Oakmere, and Potters Bar Parkfield.

## **Population and social issues**

In 2017 the population of Hertsmere was 104,000<sup>69</sup>. This number is predicted to increase to approximately 108,000 by 2024<sup>70</sup>. Hertsmere is projected to have a 9.7% increase in population from 2014 to 2024, of which 4.3% will be from natural change (i.e. births minus deaths), 4.9% from net migration within the UK, and 0.5% from net international migration<sup>71</sup>.

Hertsmere has a higher than the County average proportion of those aged over 75 years and this trend is predicted to continue. The proportion of those aged over 85 is projected to increase from 2.7% of the population to 3.2%, a rise of 429 people in real terms.

The 2011 Census estimates the population density of the Borough at 9.9 persons per hectare which is higher than the national average of 4.1 persons per hectare. However, of the total population, 85,007 people live in 'urban' areas (representing 85% of the population of the Borough) with a population density of 20.3 persons per hectare, while 15,024 people live in 'rural' areas with a population density of 2.5 persons per hectare<sup>72</sup>.

Between Academic Year 2011/12 and Academic Year 2015/16, the percentage of pupils at Key Stage 4 attaining Level 2 including GCSE English and Maths in Hertsmere, increased from 65.5% to 71.1%.<sup>73</sup>

Hertsmere Borough has a relatively low level of crime, with no wards classified as being within the 30% most deprived nationally. However, the total number of crimes reported in Hertsmere

<sup>66</sup> English Indices of Deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>67</sup> The English Indices of Deprivation, File 1: Index of multiple deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>68</sup> DCLG, English indices of deprivation 2015 (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>69</sup> Nomis – Labour Market Profile, accessed 9<sup>th</sup> July 2018 (2018) <https://www.nomisweb.co.uk/reports/lmp/la/1946157225/report.aspx?#ps>

<sup>70</sup> ONS, Population projections for local authorities: Table 2, 2016 based (2018) <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2>

<sup>71</sup> ONS, Understanding projected population change at the local authority level (2016)

<sup>72</sup> ONS, Population Density (2011)

<sup>73</sup> Herts Insight, Education and Lifelong Learning Profile Selection: Hertsmere District Geo-type: Districts (2017) <http://atlas.herts.gov.uk/profiles/profile?profileId=119&geoTypeId=15>

continues to increase. Anti-social behaviour is recorded as the most common offence in the Borough<sup>74</sup>.

### Religion

There are at least ten different types of faith in Hertsmere, comprising 70 individual groups. The area with the most faith communities is Borehamwood and Elstree, which also has the greatest population in the Borough. Bushey and Potters Bar all have a lower proportion of faith communities compared to the respective proportion of the population. Aldenham and Shenley contain 21% of the Borough's faith communities and just 16% of the population<sup>75</sup>.

According to Hertsmere's Faith community audit<sup>76</sup>, there were two communities in particular that require their own site and building for religious purposes in 2012: Shenley Jewish Community and the Borehamwood Muslim Community.

### Economy and labour market

At 85% of the total population, the percentage of the Borough population that is economically active is higher than the county, regional and country average. The percentage of the Borough's population that are in employment at 81.2% is also higher than the regional and British averages.

The Borough's largest employment industries are: wholesale and retail trade, and repair of motor vehicles and motorcycles (18.5%); construction (11.1%); administrative and support service activities (9.3%); and education (9.3%).

The proportion of people who are unemployed is 3.5% of the population, which is below the regional (3.6%) and national averages (4.4%). The four main occupations in Hertsmere in the same period were administrative and secretarial (16.9%), professional occupations (15.5%), associate professional and technical (14.1%), and skilled trades occupations (14.1%).

Unemployment in Hertsmere has dropped significantly from 5.2% (Apr 14-Mar 15) to 4.1% (Apr 15-Mar 16) to 3.1% (Apr 16-Mar 17)<sup>77</sup>. The number of people claiming Job Seeker's Allowance is in line with the county and regional average.

The general proportion of full-time to part-time jobs, at approximately 2:1, is in line with regional and national averages.

In 2015, the average full-time weekly earnings were £552 for residents in Hertsmere, compared to £614 in Hertfordshire. Furthermore, in 2016, the average full-time annual earnings were £30,360 for residents in Hertsmere, compared to £33,820 in Hertfordshire.

The level of job density calculated as the ratio of total jobs to population ages 16-64 in Hertsmere is 0.97%, which is higher than both the regional average (0.83%) and the national average (0.84%). Of the 6,795 enterprises in Hertsmere in 2017, 91.6% were 'micro' size (0-9 employees), 6.8% were considered to be 'small' (10-49 employees), 1.3% were considered to be 'medium' (50-249 employees) and 0.3% were considered to be 'large' (250+ employees).

According to the 2011 Census, 37% of the resident workforce commuted to London and only 41% actually work in the Borough. Hertsmere has a significant number of in-commuters and continues to be a 'net exporter' of labour resulting in a small, negative commuting balance.

The Hertfordshire London Arc Jobs Growth and Employment Land study<sup>78</sup> indicates that there is likely to be a small shortfall in office, industrial and warehousing floorspace in the Borough by 2026.

<sup>74</sup> UK Crime States (2018) <http://www.ukcrimestats.com/Constituency/65994>

<sup>75</sup> Faith Community: Needs Assessment (2012) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Faith-Community-Needs-Assessment-December-2012.pdf>

<sup>76</sup> Faith Community: Needs Assessment (2012) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Faith-Community-Needs-Assessment-December-2012.pdf>

<sup>77</sup> Nomis – Labour Market Profile, accessed 9<sup>th</sup> July 2018 (2018) <https://www.nomisweb.co.uk/reports/lmp/la/1946157225/report.aspx?town=hertsmere>

<sup>78</sup> Hertfordshire London Arc Jobs Growth and Employment Land: Final Report (2009) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Development-Framework/Hertfordshire-London-Arc-Final-Report-March-2009.pdf>



In 2015, the total number of day trips made to Hertsmere was 1,126,000, which is a decrease in 3.8% from the previous year. On the other hand, the total number of overnight trips to Hertsmere increased from 145,800 in 2014 to 151,300 in 2015. Overall, the largest proportion of trips made to Hertsmere was for vacation (41%).

#### *Forthcoming evidence*

The Council has commissioned a Joint Retail Study along with Watford, Dacorum and Three Rivers Councils, which will be taken into account when it becomes available.

### **Housing**

The South West Hertfordshire SHMA<sup>79</sup> considers housing need in the South West Hertfordshire Housing Market Area (HMA). The HMA comprises the following local authority areas:

- Dacorum;
- Hertsmere;
- St Albans;
- Three Rivers; and
- Watford.

The Potential Sites for Housing and Employment document suggests that the OAN using the Government's standard methodology is 444 homes per year. However, much uncertainty remains as advice on calculating the OAN is expected to be updated shortly. We will continue to liaise with the Council regarding updates to OAN calculations.

Hertsmere Borough has an exceptionally high house price to earnings ratio. Average house prices in Hertsmere are above the regional and national average, at £564,600<sup>80</sup>. Yet weekly earnings in Hertsmere are below the county average.

A survey carried out of local authorities by the National Housing Federation indicated that Hertsmere was the least affordable local authority in the East of England, with parts of the Borough having amongst the greatest gaps between housing affordability and access to services in England. The wide gap between local household incomes and house prices not only means that there is high demand for affordable housing to rent but also that the cost of 'intermediate' housing is not affordable to many seeking accommodation in the Borough<sup>81</sup>.

As of 1<sup>st</sup> September 2015, there were 811 households on Hertsmere's housing register (a 7.4% increase since January 2015). Approximately 90% reside in Hertsmere and all are required to have a connection with Hertsmere so there remains an acute need for affordable housing in the Borough. The Housing Register for Hertsmere currently shows a high overall requirement for affordable dwellings with one to three bedrooms<sup>82</sup>.

#### *Forthcoming evidence*

The Council is carrying out a Housing and Employment Land Availability Assessment, which will be taken into account when available. Updates to the Government's standard methodology for assessing housing need are expected to be published shortly.

### **Transport**

Hertsmere is well connected to London and the rest of the country. The M25 and M1 motorways and the A1 all run through the Borough, which is also serviced by main line rail services stopping

<sup>79</sup> South West Hertfordshire Strategic Housing Market Assessment (2016) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SW-Herts-SHMA-Final-Report-Jan16.pdf>

<sup>80</sup> Herts Insight, House Prices in Hertfordshire Selection: Hertsmere District Geo-type: Districts (2017) <http://atlas.herts.gov.uk/profiles/profile?profileId=994&geoTypeId=15>

<sup>81</sup> Affordable Housing: Supplementary Planning Document (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/AH-SPD-Nov-2015-FINAL-AS-PRINTED.pdf>

<sup>82</sup> Affordable Housing: Supplementary Planning Document (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/AH-SPD-Nov-2015-FINAL-AS-PRINTED.pdf>

at Potters Bar, Radlett and Borehamwood. However, some problems are caused by road links being better than access to public transport, particularly in terms of east to west transportation, which is reflected in high levels of car ownership and traffic congestion. Congestion is a major local concern<sup>83</sup>.

According to the *Hertfordshire Infrastructure & Investment Strategy* (2009), walking, cycling, bus and coach networks are generally adequate to cater for existing demand. However, hours of bus operation can be restrictive and there is a lack of a focused centre for services in Hertfordshire. There is a severe deficit in rail services both for passengers and freight<sup>84</sup>.

The 2009 predictions for retail capacity indicate that without further substantial investment at a national scale the effectiveness of the rail network would be severely restricted post-2021, which may suppress the attractiveness of this mode. Indeed the main issue for rail in Hertfordshire is that despite having an extensive north-south rail network traversing the County, rail use is constrained by a lack of capacity. Without further intervention, conditions on the road network will continue to deteriorate. The *Hertfordshire Infrastructure & Investment Strategy*<sup>85</sup> identifies a number of ways to resolve the deficit on the motorway network and help improve conditions at a number of key locations on Hertfordshire's road network. The *Hertfordshire Infrastructure & Investment Strategy* identified Hartspring Roundabout on the junction of the A41/B462 Hartspring Lane, within Hertsmere as a key corridor requiring improvement works to enable future growth by 2021.

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<sup>83</sup> Local Development Plan: Infrastructure Assessment (2013) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/CD12-Hertsmere-Infrastructure-Assessment.pdf>

<sup>84</sup> Hertfordshire Infrastructure & Investment Strategy: Transport Technical Report (2009) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB24b-HIIS-Study-2009-Trans-Tech-Report.pdf>

<sup>85</sup> Hertfordshire Infrastructure & Investment Strategy: Transport Technical Report (2009) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB24b-HIIS-Study-2009-Trans-Tech-Report.pdf>

## Appendix 5

### Assumptions to be Applied During the SA of Site Options

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**Table A4.1: Assumptions applied during the SA of site options for the Hertsmere Local Plan**

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b>SA Objective 1: To improve access to education, training, opportunities for lifelong learning and employability</b>						
<b><u>HOUSING ALLOCATIONS</u></b>  Distance to educational facilities.	<=1km from secondary AND <=500m from at least one primary school  <b>OR</b>  Provision of new facilities (including all sites providing 500 homes or more)	<=1km from at least one secondary school  <b>OR</b>  <=500m from at least one primary/infant/junior school  <b>OR</b>  <=1km from a college or other education or training facility	N/A	Site will increase pressure on existing facilities (including all sites providing fewer than 500 homes)	>1km from secondary AND >500m from at least one primary school  <b>OR</b>  Loss of facilities	N/A
<b>SA Objective 2: To ensure ready access to essential services and facilities for all residents</b>						
<b><u>HOUSING ALLOCATIONS</u></b>  Proximity to services/facilities/assets	The site falls mostly within an area with very high or high accessibility (score of 20.01 to 30.00)  <b>OR</b>  Provision of new local centre (including all sites providing 500 homes or more)	The site falls mostly within an area with medium/high accessibility (score of 15.01 to 20.00)  <b>OR</b>  Provision of new services/facilities but not a new local centre (including all sites providing between 250 and 500 homes)	The site falls mostly within an area with Medium accessibility (score of 10.01 to 15.00)	The site falls mostly within an area with low accessibility (score of 5.01 to 10.00)	The site falls mostly within an area with very low accessibility (score of 0.00 to 5.00)  <b>OR</b>  Loss of a facility	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b>SA Objective 3: To ensure the provision of housing, including affordable housing and a mix that meets local needs</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Delivery of affordable housing	Significantly contributes to the delivery of housing 500 dwellings or more)	Contributes to the delivery of housing (fewer than 500 dwellings)		N/A	N/A	Uncertainty
<b>SA Objective 4: To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Reducing and preventing crime	N/A	N/A	Levels of crime and fear of crime will not be influenced by the location of development sites (rather they will be determined through the detailed proposals for each site). Therefore, the effects of the potential sites on this SA objective will be assumed to be negligible (0).	N/A	N/A	Uncertainty
<b><u>HOUSING ALLOCATIONS</u></b> Access to housing and services	Allocation located within one of the 20% most deprived areas within the Borough ('Overall – Barriers to housing and services' domain of English Indices of Deprivation)  <b>AND</b> Allocation within 100m of	Allocation located within one of the 20% most deprived areas within the Borough ('Overall – Barriers to housing and services' domain of English Indices of Deprivation).  <b>OR</b>	All other allocations.	N/A	N/A	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
	a town, local or neighbourhood centre.	Allocation within 100m of a town, local or neighbourhood centre.				
<b><u>EMPLOYMENT ALLOCATIONS</u></b> Access to employment		Allocation located within one of the 20% most deprived areas within the Borough ('Overall – Employment Deprivation' domain of English Indices of Deprivation).	All other allocations.	N/A	N/A	N/A
<b>SA Objective 5: To improve population's health and reduce inequalities</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Distance to nearest NHS GP surgery or hospital	Provision of new healthcare facility.	<=800m from nearest NHS GP surgery or hospital.  OR Site will include additional healthcare provision.	N/A	>800m from nearest NHS GP surgery or hospital.  <b>OR</b> Site is located outside of Potters Bar and Bushey Village <sup>86</sup> .	N/A	Uncertainty
<b><u>HOUSING ALLOCATIONS</u></b> Distance to nearest sport/recreational facility or open space/Local Green	<=800m from open space, sport or recreation facility  <b>OR</b> Provision of new sport/recreation facility	<=400m from PRow but >800m of open space sport & recreation facility	N/A	Site containing PRow (- ?)	>800 m from open space, sport or recreation facility and >400 m from PRow  <b>OR</b> Loss of existing facility	Uncertainty

<sup>86</sup> Communication from Herts Valleys Clinical Commissioning Group to Hertsmere Borough Council indicates that Potters Bar and Bushey Village are the only settlements in the Borough thought to have capacity for new patients.

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
Space.	or new open space.					
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Development allocations that are adjacent to strategic road network (motorway or 'A' roads) or are within close proximity of waste management facilities.	N/A	N/A	All other allocations.	Site within 500m of an Anaerobic Digestion facility <b>OR</b> Within 250m of any other waste management facility	Site within 200m of an A road or Motorway	
<b>SA Objective 6: To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources</b>						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Agricultural grade of land	N/A	N/A	N/A	Significant proportion ( $\geq 25\%$ ) of allocation on Grade 3 agricultural land. <b>OR</b> Site consists partly of Grades 1 or 2 agricultural land, but less than 25% of site.	Significant proportion ( $\geq 25\%$ ) of allocation on Grade 1 or 2 agricultural land.	N/A
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Greenfield or brownfield	N/A	Allocation entirely or mainly ( $>50\%$ ) on brownfield land.	N/A	Allocation entirely or mainly ( $\geq 50\%$ ) on greenfield land.	N/A	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
land						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b>  Minerals Consultation Area	N/A	N/A	Allocation is not within 250m of a Minerals Consultation Area.	Allocation is within 250m of a Minerals Consultation Area.	N/A	N/A
<b>SA Objective 7: To protect and, where appropriate, enhance heritage assets and their settings</b>						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b>  Impact on known heritage assets, including nationally and locally listed buildings, conservation areas, scheduled monuments, registered parks and gardens, registered battlefields, and non-designated assets.	N/A	Beneficial effects are challenging to register and only in rare circumstances can a new development make a positive contribution to the significance of a heritage asset – for example, by removing harmful elements of its current setting, to better-reveal its character and significance. (Typically, it may only improve the visual and experiential qualities of an asset's context – however, this is a townscape and visual rather than an historic environment consideration.)	Development would not physically change any designated or non-designated heritage assets and would conserve their setting, resulting in no change to the heritage asset's significance, or the way in which it is perceived or understood.	A minor negative effect occurs where allocation has the potential to cause minor effects to assets of high or medium significance as a consequence of setting change; and/ or, where assets of low significance may experience physical or setting change, resulting in any degree of effect (minor to significant).	A significant negative effect occurs where, as result of allocation, assets of medium or high significance are subject to a significant degree of effect, via setting or physical change.	N/A
<b>SA Objective 8: To maintain and enhance the quality of countryside and landscape</b>						
<b><u>HOUSING AND EMPLOYMENT</u></b>	N/A	Allocation would help to improve and restore an area with	Allocation within area of 'weak' strength of character according to	Allocation on greenfield land within an area of 'moderate' or 'strong'	Allocation would be significantly at odds with existing landscape	



Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b><u>ALLOCATIONS</u></b> Landscape character		poor landscape condition, according to the Landscape Character Assessment  <b>OR</b> Site is on brownfield or degraded land	the Landscape Character Assessment.	strength of character according to the Landscape Character Assessment.	(including very large sites) and/or lead to loss of distinctive features of the relevant Landscape Character Area.	
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Settlement coalescence	N/A	N/A	A negligible effect with uncertainty (0?) occurs when the allocation is outside the settlement boundary but unlikely to contribute towards settlement coalescence. Uncertainty as the actual effect will depend on the design, layout and landscaping of the new development.  <b>OR</b> When an allocation is within an existing urban area or far away from neighbouring settlements, it's likely to have a negligible effect with no uncertainty (0).	A minor negative effect with uncertainty (-?) occurs when the allocation is outside the settlement boundary and may contribute towards coalescence of two or more settlements. Uncertainty as the actual effect will depend on the design, layout and landscaping of the new development.	A significant negative effect with uncertainty (--?) occurs when the allocation is outside the settlement boundary and would join two or more settlements. Uncertainty as the actual effect will depend on the design, layout and landscaping of the new development.	N/A
<b>SA Objective 9: To reduce greenhouse gas emissions, including a reduced dependence on the private car</b>						
<b><u>HOUSING AND EMPLOYMENT</u></b>	Within walking distance of 3 or more sustainable	Within walking distance of 2	N/A	Within walking distance of 1 sustainable	Not within walking distance of any	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b><u>ALLOCATIONS</u></b> Distance to public transport.	transport links (within 400m of a bus stop, 1km of a railway station and 400m of a cycle route)	sustainable transport links (within 400m of a bus stop, 1km of a railway station and 400m of a cycle route)		transport link (within 400m of a bus stop, 1km of a railway station or 400m of a cycle route)	sustainable transport links (within 400m of a bus stop, 1km of a railway station or 400m of a cycle route)	
<b>SA Objective 10: To protect and enhance biodiversity and geodiversity</b>						
<b><u>ALL ALLOCATIONS</u></b> Distance (impacts on) to:  National or local designated wildlife site (SSSI, NNR, LNR, LWS, Eco-site, HMWT reserve), BAP Priority Habitats, Ancient Woodland or Regionally Important Geological Site.  Impacts on internationally designated wildlife sites as assessed via the HRA and taken into account in the SA Report.	N/A	N/A	All other allocations.	Significant proportion of allocated land ( $\geq 25\%$ ) is on undesignated greenfield land.  <b>OR</b>  Allocated land is $\leq 100\text{m}$ from a designated site (other than SSSI) or ancient woodland.  <b>OR</b>  Site is adjacent to a RIGS.	Significant negative effect (--) if significant proportion of allocated land ( $\geq 25\%$ ) lies within designated site or includes an area of ancient woodland.  <b>OR</b>  Allocated land is $\leq 100\text{m}$ from an SSSI.  <b>OR</b>  Significant negative effect with uncertainty (--?) if significant proportion of allocated land ( $\geq 25\%$ ) lies within an SSSI Impact Risk Zone for the relevant type of development. Uncertainty relates to whether potentially significant negative effects can be	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
					mitigated. <b>OR</b> Site contains a RIGS.	
<b>SA Objective 11: To improve water quality and manage water resources sustainably</b>						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b>  Allocations located within a Source Protection Zone (SPZ)	N/A	N/A	All other allocations.	Minor negative effect with uncertainty (-?) if site falls within an SPZ.	N/A	N/A
<b>SA Objective 12: To minimise the risk of flooding taking account of climate change</b>						
<b><u>ALL ALLOCATIONS</u></b>  Allocations on brownfield or greenfield land and within flood zones	N/A	N/A	<5% of site within Flood Zone 3  <b>AND/OR</b>  <25% within Flood Zone 2 or proposed use classified as 'water compatible development'	>=25% of site within Flood Zone 2  <b>OR</b>  Smaller area (5% to 25%) within Flood Zone 3	>=25% of site within Flood Zones 3a or 3b	Uncertainty
<b>SA Objective 13: To improve local air quality</b>						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b>	N/A	N/A	Not within an AQMA or likely to generate traffic that uses an AQMA route as its primary	N/A	Within an AQMA or likely to generate traffic that uses an AQMA route as its	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
Development allocations that are within, or directly connected via road, to one of the Air Quality Management Areas (AQMA) in the Borough.			access		primary access	
<b>SA Objective 14: To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy</b>						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Energy consumption and potential for renewable energy use	N/A	N/A	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore, the effects of the potential allocations on this SA objective will be assumed to be negligible (0).	N/A	N/A	N/A
<b>SA Objective 15: Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital</b>						

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b>and viable town centres</b>						
<b><u>HOUSING ALLOCATIONS</u></b>  Proximity to town centres	N/A	Allocation is within 800m of a sustainable transport link (bus stop, railway stations or cycle paths).  <b>AND/OR</b>  Allocation is within 800m of a Town or Local Centre	N/A	Allocation is further than 800m from the nearest sustainable transport link (bus stop, railway station or cycle path)  <b>AND/OR</b>  Allocation is further than 800m from a Town or Local Centre.	N/A	N/A
<b><u>HOUSING ALLOCATIONS</u></b>  Proximity to employment opportunities	<=500m from an existing employment area or key employment site.  <b>OR</b>  Provision of new employment (including all sites providing 750 homes or more).	501-1000m from an existing or key employment area.  <b>OR</b>  <=500m from an existing local employment site.	N/A	1001-2000m from an existing or key employment area <b>AND</b> further than 500m from an existing local employment site.  <b>OR</b>  Loss of existing employment area.	>2000m from an existing or key employment area.	N/A
<b><u>EMPLOYMENT ALLOCATIONS</u></b>  Site size	Allocation is large (more than 0.5ha in size)	Allocation is small (0.5ha in size or smaller)	N/A	N/A	N/A	N/A

Appendix 6  
Sustainability Appraisal Matrices for Potential Sites for  
Housing and Employment

Draft Only

## Housing Sites

### Elstree Way Corridor (BE5)

This is a 'Redeveloped urban brownfield site' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site BE5 is located within 1km of three secondary schools (Hertswood Academy, EUTC and Yavneh College) and within 500m of four primary schools (St Teresa's Catholic Primary School, Yavneh Primary School, Kenilworth Primary School and Monksmead School). Additionally, as this site would deliver 585 new homes, it would be expected to make provision for additional education facilities. As such, a significant positive effect is expected.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'high' accessibility (score 20-25). However, as site BE4 would deliver up to 585 new homes it would be expected to provide a new local centre and new education facilities. As a 'redeveloped urban brownfield' site, development would also be expected to provide additional healthcare provision, open space, leisure, recreation and community facilities. These are likely to be easily accessible due to proposed improvements to pedestrian/cycle connectivity, bus services and local and wider strategic highway networks. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 585 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. A significant positive effect is therefore likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	The site is located within 100m of Borehamwood Town Centre and, due to its size, would be expected to provide a new local centre. . As this is a 'Redevelopment urban brownfield site', provision will be made for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing

SA Objective	SA Score	Justification
		<p>anti-social behaviour.</p> <p>Site BE5 does not fall within the 20% most deprived areas with regard to access to housing and services and employment.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals.</p> <p>Overall, a significant positive effect is expected.</p>
<p><b>5. Health</b></p> <p>To improve population's health and reduce inequalities.</p>	++/--	<p>Site BE5 is located within 800m of two NHS GP surgeries, and within 800m of school playing fields and other areas of open space including allotments and religious grounds. The site is located outside of Potters Bar and Bushey village. Any redeveloped urban brownfield sites will make provision for additional healthcare provision, as well as leisure and recreation facilities. This is likely to have a significant positive effect on people's health by improving access to these facilities and local capacity. Furthermore, improvements to pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improved public transport services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, the A5135 runs through the site, where high pollution levels and noise disturbance could have an adverse effect on residents. Overall, a mixed significant positive and a significant negative effect is likely.</p>
<p><b>6. Soil and minerals</b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	+	<p>The redevelopment of this brownfield site will reduce the loss of greenfield land and agricultural land, with positive effects against this objective. Overall, a minor positive effect is likely.</p>
<p><b>7. Historic Environment</b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	0?	<p><u>Designated Assets</u></p> <p>There are no statutorily designated assets within the site or within the wider area that appear to be susceptible to setting change.</p> <p><u>Non-designated Assets</u></p> <p>There are a number of locally listed buildings within the vicinity of the site. These include: White House, Power House (Elstree TV &amp; Film Studios), Fairbanks Building (BBC TV Elstree), Studios C &amp; D (BBC TV Elstree), 4 Elstree Way, 5 Elstree Way, Offices/dressing rooms (BBC TV Elstree), 213</p>



SA Objective	SA Score	Justification
		<p>Shenley Road, St Theresa Catholic Church, 291 Shenley Road, St Theresa Catholic Hall, All Saints Church and a war memorial on Shenley Road. However, it is unlikely that redevelopment of this brownfield site would meaningfully affect their setting. There is intervening built development between these assets and the site, which in any case is not related to their setting and heritage significance. Most are separated from the site by intervening development and only three - Power House (Elstree TV &amp; Film Studios), 213 Shenley Road, and St Theresa Catholic Church - lie in close proximity with potential intervisibility to the site. Despite this, they do not appear to have a relationship with the proposed allocation site that would be changed by development and affect their heritage significance. Given this, it is unlikely that redevelopment of this brownfield site would meaningfully affect the setting of any of the nearby local listed buildings.</p> <p>There are no Sites of Archaeological Interest within the site. Nor does Heritage Gateway record any heritage assets within the site. However, there is always the risk of unknown archaeological remains being encountered within a site.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+/-?	<p>The development of site BE5 will increase the housing density of this central location, which could have an adverse effect on the quality of the townscape, although redevelopment of the area could improve the townscape. However, the redevelopment of this site is likely to have a positive effect on the countryside and landscape by reducing the extent to which open rural land needs to be built on, which may contribute to reducing the risk of settlement coalescence. Furthermore the redevelopment of this site may regenerate degraded land. A mixed minor positive and minor negative uncertain effect is therefore likely.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	++/-	<p>Any redeveloped urban brownfield site will make improvements to pedestrian/cycle connectivity, as well as bus services within and between towns. Due to the urban location of this site, development is expected to significantly minimise greenhouse gas emissions, at the same time as reducing dependence on the private car. Additionally, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. Indeed site BE5 is located within 1km of a railway station and within 400m of a number of bus stops. Furthermore, the redevelopment of an urban brownfield site would deliver additional industrial and commercial development, therefore providing employment opportunities. However, the development of around 800 homes is expected to significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated greenhouse gas emissions. As such, a mixed significant positive and minor negative effect is likely.</p>

SA Objective	SA Score	Justification
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+	The redevelopment of this urban brownfield site is likely to have a positive effect on biodiversity by minimising development of greenfield land, as greenfield land is more likely to support a greater number and range of species than developed land. However, brownfield land can also be important for wildlife and redevelopment may result in a loss of biodiversity. Although an Ecosite (Maxwell Hillside Park) is located immediately adjacent to the southern edge of the site, any redeveloped urban brownfield site is required to enhance green infrastructure within new developments (including parks, green spaces and other natural features). Overall, a minor positive but uncertain effect is likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	The site is not located within a Source Protection Zone. Overall, a negligible effect is likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Site BE5 does not fall within Flood Zones 2 and 3. The redevelopment of brownfield sites is not likely to result in significant increases in surface water flooding. This is because brownfield sites already contain some form of development (or have done in the past). A negligible effect is recorded.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Improvements will be made to pedestrian/cycle connectivity, as well as bus services within and between towns. Provision will also be made for electric charging points, as set out in the Issues and Options document. This is expected to help minimise emissions of air pollutants associated with traffic, by reducing dependence on the private car. Furthermore, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. However, the development of around 800 new homes is expected to increase the amount of cars on the road despite availability of more sustainable transport modes, and therefore may increase congestion and associated air pollution. This may have adverse effects on local air quality. Although site BE5 is not located within an AQMA, it is located next to Shenley Road AQMA. Therefore, a mixed significant negative and minor positive effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site BE5 is not expected to have an effect on this SA objective.

SA Objective	SA Score	Justification
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++/-?	The allocation of housing, industrial and commercial development will provide for a vital and viable town centre, due to an increase in the number of people living within proximity to Borehamwood Town Centre and associated increase in spending. In addition, this development site would include high speed broadband network improvements, which may make the area more attractive to businesses and may increase opportunities for residents to work from home, thus further broadening employment opportunities and economic growth. Furthermore, site BE5 is located within 800m of one sustainable transport link (bus stops), and is located adjacent to the existing Elstree Way employment site. The redevelopment of some parts of the site may, however, result in the loss or relocation of existing small businesses. Overall, a mixed significant positive and uncertain minor negative effect is likely.

### Wrotham Park west of Baker Street (PB1)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site PB1 is within 1km of a secondary school (Dame Alice Owen's School) and less than 500m from a primary school (Wroxham School). Additionally, as this site would deliver up to 1,300 new homes, it would be expected to make provision for one or more new primary schools and additional secondary school places. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'low' accessibility (score 5-10). Furthermore, as site PB1 would deliver up to 1,300 new homes it would be expected to provide a local centre with shops, services and small business units, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local	++	The provision of up to 1,300 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.

SA Objective	SA Score	Justification
needs.		
<p><b><u>4. Community Cohesion</u></b></p> <p>To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.</p>	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The site would also be expected to include a new local centre. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site PB1 does not include areas within the 20% most deprived in terms of access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<p><b><u>5. Health</u></b></p> <p>To improve population's health and reduce inequalities.</p>	++/--	<p>Site PB1 is not within 800m of an NHS GP surgery, or hospital. However, the site is located within 800m of Potters Bar. Furthermore, it is within 800m of a number of open spaces, sports and recreation facilities, including Dame Alice Owen's School sports centre (The F.E. Clearly Sports Centre) and playing fields. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (M25). Additionally, a PRow runs through the site. Overall, a mixed significant positive and significant negative effect is likely.</p>
<p><b><u>6. Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	-	<p>This greenfield site consists entirely of Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.</p>

SA Objective	SA Score	Justification
<p><b>7. Historic Environment</b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	--?	<p><u>Designated Assets</u></p> <p>There are two Grade II listed buildings within the site – Bridgefoot Farm House and a Cottage 30m south of it. These assets are susceptible to physical and setting change.</p> <p>To the south of the site are two more listed buildings – a bridge of Mimmshall Brook and Dancers Hill Farmhouse. Neither of these assets appears to have a relationship with the site and they are therefore unlikely to be meaningfully affected by development within it.</p> <p><u>Non-designated Assets</u></p> <p>There are a total of three locally listed buildings within the vicinity of the site. Of these Bridgefoot Lodge is susceptible to setting change as a result of the potential loss of the estate with which it is associated (e.g. Bridgefoot Farm House and a Cottage 30m south of it, as well as the land around Bridgefoot House, which is no longer extant).</p> <p>Neither of the other local listed buildings – Windmore Hall and Strafford Arms – would be affected.</p> <p>There are no Sites of Archaeological Interest recorded within the site. However Heritage Gateway records several assets, including the site of a purported (but unsubstantiated) medieval settlement at South Mimms (1027) and the site of the post-medieval Bridgefoot House and the gardens and park that were formerly associated with it (16614). Any remains associated with these assets would be damaged or entirely lost as a result of development.</p> <p>Also recorded within the site are the findspot of a Roman coin hoard (9240) and another of a medieval seal matrix (15922). These assets have already been removed and so would not be subject to physical change.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	--?/+?	<p>The development of up to 1,300 homes would have significant effects on the landscape, due to the scale of such development which would significantly increase the urban area and Potters Bar. The development of site PB1 would result in development of a large, rural area on the edge of Potters Bar, to the southwest. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site PB1 falls within one character area (24. Arkley Plain) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed uncertain significant negative and minor positive effect is likely, as effects depend on the exact size, location and design of development.</p>

SA Objective	SA Score	Justification
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Indeed site PB1 is located within 400m of a number of bus stops and a National cycle route (No. 12). However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is expected.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains Bridgefoot House area Local Wildlife Site, as well as Wood and Green Lane off Bridgefoot Lane Ecosite. It also contains four areas of deciduous woodland, which is a BAP Priority Habitat. Furthermore, the site is located directly adjacent to a number of Local Wildlife Sites, Ecosites and BAP Priority Habitats. These designations and BAP Priority Habitats may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	Part of the site falls within Source Protection Zones 1, 2 and 3. A minor negative but uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Less than 5% of this site falls within Flood Zone 3 and less than 25% of this site falls within Flood Zone 2. As such, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although

SA Objective	SA Score	Justification
		increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although site PB1 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA as its primary access. The site lies adjacent to the M25, which adjoins Charleston Paddocks AQMA. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site PB1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	As the site would deliver up to 1,300 new homes it would be expected to provide a new local centre and also new employment opportunities. Although site PB1 is not located within 800m of a Local or Town Centre, it is located between 501m and 1km of Cranbourne Road existing employment area. Furthermore, the site is located within 800m of two sustainable transport links (a number of bus stops and a National cycle route). Overall, a significant positive effect is likely.

### Potters Bar Golf Course (PB2)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site PB2 is within 1km of a secondary school (Mount Grace School) and less than 500m from a primary school (Cranbourne Primary School). As the site would provide 570 homes it would be expected to provide a new education facility. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and	++	Site R2 falls mostly within an area with medium accessibility (score of 10.01 to 15). As the site would deliver 570 new homes it is likely to provide a local centre. Furthermore, any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open



SA Objective	SA Score	Justification
facilities for all residents.		space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of 570 new homes would contribute significantly to the level of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site PB2 does not include areas within the 20% most deprived in terms of access to housing and services but is within 100m of Potters Bar Town Centre at Darkes Lane.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	<p>Site PB2 is not within 800m of an NHS GP surgery or hospital but is at the edge of Potters Bar, where capacity for new patients has been identified. The site is within 800m of a number of open spaces, including the King George V playing fields and Furze Field Wood. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility, within 250m of any other waste management facility or within 200m of Hertsmere's strategic road network. However, the site currently comprises Potters Bar Golf Course which would be lost to development, resulting in significant adverse effects. Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant</p>



SA Objective	SA Score	Justification
		negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site comprises Potters Bar Golf Course. It consists mostly of Grade 3 agricultural land whilst the remainder of the site is classified as urban land. The site also falls within a Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<u>Designated Assets</u> There are no statutorily designated assets within the site. A Grade II listed City of London Coal Duty Boundary Marker lies immediate to the northwest corner of the site. The next adjacent markers are already cut off by intervening development and therefore, the setting of this asset is unlikely to be meaningfully changed. The southern edge of the site abuts Darkes Lane West Potters Conservation Area, which is a modern development designed along garden city principles. Within it there are two Grade II listed buildings – Seldon and Tiverton. The character and setting of the conservation area could be affected by development of the site, but the potential for change to the setting of the listed buildings is limited given their location in relation to the site. To the south of the site is another Grade II listed building – Wylots Manor – but it is unlikely that it would be affected by development as its setting does not appear to contribute to its significance. <u>Non-designated Assets</u> There are a number of locally listed buildings to the south of the site, one within the conservation area, Chestnut Tree House. It is unlikely that development of the site would meaningfully affect their setting. There are no Sites of Archaeological Interest within the site. Heritage Gateway records a pillbox (6719) and pillbox and anti-tank obstacles (6724), designed to protect the railway, within the site. These assets will be highly susceptible to physical and setting change as result of development within the site.
<b><u>8. Landscape</u></b> To maintain and enhance the quality of	+?/-?	The development of site PB2 would result in development of a large rural area on the northern edge of Potters Bar. However, any 'Growth through new garden suburbs' option must enhance the green

SA Objective	SA Score	Justification
countryside and landscape.		infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site PB2 falls within one character area (54b. Potters Bar Parkland) considered to be 'moderate' with regards to strength of character. Distinctive features identified in the Landscape Character Assessment such as Gobions Folly Arch could be adversely affected by development at this site. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site PB2 is located within 1km of a railway station (Potters Bar) and within 400m of a number of bus stops but is not within close proximity of a cycle route. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site comprises the Potters Bar Golf Course Ecosite and also contains two areas of deciduous woodland, which is a BAP Priority Habitat. The site is also located in close proximity to the Fields South of Bolton's Park Ecosite and is within 100m of Spring Wood near Hawkshead Bridge Local Wildlife Site. These designations and BAP Priority Habitat may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	Just under half of the site falls within Source Protection Zones 1, 2 and 3. A minor negative but uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account	-	Between 5% and 25% of this site falls within Flood Zone 3 (part of the site also falls within Flood Zone 2). Overall, a minor negative effect is likely.

SA Objective	SA Score	Justification
of climate change.		
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site PB2 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site PB2 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	This option will provide a new local centre, which may provide some employment opportunities. Site PB2 is located within 800m of Potters Bar Local Town Centre at Darkes Lane. Furthermore, the site is located within close proximity (within 500m) of Station Close existing employment area and Cranbourne Road existing employment area. Site PB2 is also located within 800m of two types of sustainable transport link (a railway station and a number of bus stops). Overall, a significant positive effect is likely.

### Wrotham Park, west Barnet Road, east Baker Street (PB3)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training,	++	Site PB3 is within 1km of a secondary school (Dame Alice Owen's School) and less than 500m from a primary school (Pope Paul Catholic Primary School). Additionally, as this site would deliver 880 new homes, it would be expected to make provision for new education facilities. A significant

SA Objective	SA Score	Justification
opportunities for lifelong learning and employability.		positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'medium' accessibility (score 10-15). Furthermore, as site PB3 would deliver 880 new homes it would be expected to provide a local centre as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre more easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of 880 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. This site would also be expected to provide a new local centre. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site PB3 falls within the 20% most deprived areas in terms of access to housing and services. Development at this location may help to overcome barriers to these.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a significant positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	Site PB3 is within 800m of an NHS GP surgery and Potters Bar Community Hospital. The site is also within 800m of a number of open spaces, sports and recreation facilities, including Dame Alice Owen's School sports centre (The F.E. Clearly Sports Centre) and playing fields. Furthermore, any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the

SA Objective	SA Score	Justification
		provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (M25). Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b>  To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	A large proportion of this greenfield site consists of Grade 3 agricultural land. The remainder of the site is classified as urban land. Furthermore, the site falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.
<b><u>7. Historic Environment</u></b>  To protect and, where appropriate, enhance heritage assets and their settings	0?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site.</p> <p>The Royds Potters Bar Conservation Area is immediately adjacent to the northern edge of the site – it contains no nationally or locally listed buildings. There is a key view from Oakroyd Avenue down Oakroyd Close, behind which the site lies. Development of the site could result in change to this view and the spatial and visual quality derived from the layout, size and architectural form of the buildings within their plots and their visual relationship to the wider landscape.</p> <p>To the south of the site, around Bentley Heath there are five Grade II listed buildings, of which three – Elm Farm House, Bentley Heath Farm House and a barn associated with the latter – may have a functional/ historical relationship with the site, or parts of it. Despite this, development of the site is unlikely to fundamentally alter their rural setting, which allows their function to be read, and as such it would have a negligible effect. The other Grade II listed buildings do not appear to have settings that would be sensitive to the development of the site.</p> <p>To the north of the site there are two further Grade II listed buildings – The Lion Public Inn and Pound Farm House. The significance of the latter asset would have been expressed through its original rural setting but this has already been lost. Therefore, neither is likely to be sensitive to setting change as a result of development within the site.</p> <p><u>Non-designated Assets</u></p>

SA Objective	SA Score	Justification
		<p>There are five locally listed buildings to the south of the site around Bentley Heath – these comprise a mix of the cottages and residential properties. It is unlikely that any of them would be meaningful affected by development of the site.</p> <p>There are four locally listed buildings to the north of the site. None of these have settings which would be sensitive to change as a result of development within the site.</p> <p>There are no sites of Archaeological Interest within the Site. Heritage Gateway records the excavation of a 17th century cottage within the site ahead of the construction of the M25. The remains associated with this asset are no longer in-situ. While there are no known assets within the site, there is always the potential for previously unknown remains.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	<p>+?/-?</p>	<p>The development of 880 new homes would have an adverse effect on the quality of the countryside and landscape. The development of site PB3 would result in development of a large area on the edge of Potters Bar, to the south. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site PB3 falls within one character area (24. Arkley Plain) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	<p>+/-</p>	<p>Any sites that fall within the 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Indeed site PB3 is located within 1km of a railway station (Potters Bar), within 400m of a number of bus stops and within 400m of a National cycle route (No. 12). However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and</p>	<p>--?/+?</p>	<p>The site contains Cherry Tree Lane Field Ecosite and is located directly adjacent to an area of deciduous woodland, which is a BAP Priority Habitat. Four Ecosites (Dugdale Hill Pond, Meadow S. of M25 Motorway by Bentley Heath Lane, Elm Farm Pasture and Paddocks by M25, Chase Farm) are</p>

SA Objective	SA Score	Justification
geodiversity.		also located within close proximity to the site, as well as some additional BAP Priority Habitats (deciduous woodland and no main habitat but additional habitats present). However, three of the Ecosites (Meadow S. of M25 Motorway by Bentley Heath Lane, Elm Farm Pasture and Paddocks by M25, Chase Farm) are separated from the site by the presence of the M25. These designations may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Less than 5% of this site falls within Flood Zone 3 and less than 25% of this site falls within Flood Zone 2. As such, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although site PB3 is not located within an AQMA, Dove Lane AQMA is located directly adjacent to the site, along the M25. Additionally, Charleston Paddocks AQMA is also located along the M25, near South Mimms. As such, development of site PB3 will generate traffic that passes both AQMAs. A mixed significant negative and minor positive effect is likely overall.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site PB3 is not expected to have an effect on this SA

SA Objective	SA Score	Justification
renewable energy.		objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	As the site would deliver 880 new homes it would be expected to provide a new local centre and new employment opportunities. Furthermore, site PB3 is located between 501m and 1km of Station Close existing employment area, and within 800m of Potters Bar Darkes Lane Local Town Centre and Potters Bar High Street District Centre. Site PB3 is also located within 800m of two sustainable transport links (a number of bus stops and a National cycle route). Overall, a significant positive effect is likely.

#### Land east of Southgate Road (PB4)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site PB4 is not located within 1km of a secondary school but it is located within 500m of a primary school (Oakmere Primary School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. A mixed minor positive and minor negative effect is therefore expected..
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site PB4 falls mostly within an area with medium accessibility (score of 10.01 to 15). As the site would deliver 440 new homes it is likely to provide new services/facilities but not a local centre. Any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services easily accessible. A minor positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of 440 new homes would contribute to the overall provision of housing in the Borough. A minor positive effect is therefore expected.



SA Objective	SA Score	Justification
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site PB4 does not include areas within the 20% most deprived in terms of access to housing and services and is not within 100m of a town, local or neighbourhood centre.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	<p>Site PB4 is within 800m of the Potters Bar Community Hospital and at the edge of Potters Bar, where capacity for new patients has been identified. The site is also within 800m of a number of open spaces, sports and recreation facilities. Furthermore, any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. The provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (M25). Overall, a mixed significant positive and significant negative effect is likely.</p>
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	<p>Over 25% of this entirely greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. Furthermore, the site falls within a Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.</p>
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	0?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site or in the wider area that are susceptible to setting as a result of its development.</p>

SA Objective	SA Score	Justification
		<p><u>Non-designated Assets</u></p> <p>Two locally listed buildings lie to the northwest of the site; these include 37 Southgate Road and Potters Bar Baptist Church. The site does not appear to be related to these assets setting and their heritage significance and there is intervening built development between these assets and the site.</p> <p>There are no Sites of Archaeological Interest recorded within the site. Heritage Gateway also shows no records within the site. However, there is always the risk of unknown remains being encountered within a site.</p>
<p><b><u>8. Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of site PB4 would result in the development of a rural area on the edge of Potters Bar, to the southeast. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site PB4 falls within one character area (26. Hornbeam Hills, Enfield Chase) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b><u>9. Greenhouse Gas Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	+/-	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site PB4 is located within 400m of a number of bus stops, but is not within close proximity of a railway station or a cycle route. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b><u>10. Biodiversity and Geodiversity</u></b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	+?/-?	<p>The site comprises mostly undesignated greenfield land. A small portion of the site contains an Ecosite (Pond N. of Junction 24 on M25 Motorway Ecosite) and an area of deciduous woodland. The site also lies within close proximity to a number of additional areas of deciduous woodland. However, these areas of deciduous woodland are generally separated from the site by the M25. These designations and BAP Priority Habitats may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling</p>

SA Objective	SA Score	Justification
		and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Less than 5% of this site falls within Flood Zone 3 and less than 25% of this site falls within Flood Zone 2. As such, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although site PB4 is not located within an AQMA, Dove Lane AQMA is located within close proximity to the site, along the M25. Additionally, Charleston Paddocks AQMA is also located along the M25, near South Mimms. As such, development of site PB4 will generate traffic that passes both AQMAs. A mixed significant negative and minor positive effect is likely overall.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore the location of site PB4 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and	+/-	Site PB4 is located within 800m of Potters Bar High Street District Centre, however it is located more than 500m from the nearest local employment site (Hollies Way Business Park) and between 1.0km and 2.0km of the nearest existing employment site (Station Close). The site is located within 800m of

SA Objective	SA Score	Justification
employment opportunities, as well as providing for vital and viable town centres.		one type of sustainable transport link (bus stops). Overall, a mixed minor positive and minor negative effect is likely.

### Land South of Allum Lane (BE1)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site BE1 is not located within 1km of a secondary school but is located within 500m of a primary school (St Nicholas Elstree Church of England School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. As such a mixed minor positive and minor negative effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site BE1 falls within an area with medium accessibility (score of 10.01 to 15). The site would deliver 280 new homes and as such there would be a requirement to provide new services/facilities but not a local centre. Any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services easily accessible. A minor positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of 280 new homes would contribute to the level of housing in the Borough. A minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well	+	Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.

SA Objective	SA Score	Justification
as providing sufficient community spaces.		<p>Site BE1 does not include areas within the 20% most deprived in terms of access to housing and services and is not within 100m of a town, local or neighbourhood centre.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<p><b><u>5. Health</u></b></p> <p>To improve population's health and reduce inequalities.</p>	++/-	<p>Site BE1 is within 800m of an NHS GP surgery (Schopwick Surgery, Elstree) but is not located within Potters Bar or Bushey Village. The site falls within 800m of a number of open spaces, sports and recreation facilities. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity.</p> <p>Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. However, the site is located within 250m of a waste management facility, although it is not located within 200m of Hertsmere's strategic road network. A PRoW runs through the site.</p> <p>Overall, a mixed significant positive and minor negative effect is likely.</p>
<p><b><u>6. Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	-	<p>A large proportion of this mainly greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. Furthermore, the eastern edge of the site falls within a Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.</p>
<p><b><u>7. Historic Environment</u></b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site. To the west of the site lies Elstree Conservation Area, on which development of the site could have a minor adverse effect by diminishing its rural setting and relationship with some of the buildings in the wider area that are significant to the history of the village, particularly, Nicholl Farmhouse on Allum Lane. Also to the west of the site is the Grade II registered park and garden to Aldenham House. This appears to have no form of relationship with the site, and is unlikely to experience any setting change.</p> <p>To the south of the site, beyond the conservation area there are two Grade II listed buildings – The Lodge at the Leys and the entrance and gate piers. Neither of these assets will be affected by</p>

SA Objective	SA Score	Justification
		<p>development of the site.</p> <p>To the north, on the opposite side of Allum Lane, there are three Grade II listed buildings – Nicoll Farmhouse, Barn and Byre at Nicoll Farmhouse and Allum House. The original rural setting of the farmhouse, barn and byre, with which they share a functional and historical relationship, would have aided in the reading of these buildings but this setting has already been largely lost as a result of modern suburban development. The site includes the last remaining part of the rural setting of the house, but it is not clearly associated with it and its loss will be not be significant in comparison to that already lost, although it will diminish the historic relationship between the asset and Elstree village. The third building is a former barn converted into a house; again this asset is now enveloped in suburban development, meaning that its setting does not contribute to its heritage significance and is not sensitive to change as a result of development within the site.</p> <p><u>Non-designated Assets</u></p> <p>There are a large number of locally listed buildings within Elstree Conservation Area but if it is unlikely that development of the site would result in meaningful change to their setting.</p> <p>Heritage Gateway records no assets within the site but two Sites of Archaeological Interest lie adjacent to it, and could potentially extend within it.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of site BE1 would result in the development of a rural area on the western edge of Borehamwood, outside of the settlement boundary. The position and size of the site would mean that development could contribute to the coalescence of Borehamwood and Elstree. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site BE1 falls within one character area (23. Elstree Ridge and Slopes) considered to be 'strong' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	+/-	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site BE1 is located within 1km of a railway station (Elstree &amp; Borehamwood) and within 400m of a number of bus stops, but is not within close proximity of a cycle route. However, improvements to the wider strategic highway network may make driving a more</p>

SA Objective	SA Score	Justification
		attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+/ - ?	The site lies adjacent to two Ecosites (Elstree Cemetery Grassland and Elstree Fields North of Abbotsbury) and areas of deciduous woodland, which is a BAP Priority Habitat. A number of additional Ecosites are located within close proximity of the site. These designations and BAP Priority Habitat may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and minor negative effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although site BE1 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to Allum Lane which connects to Shenley Road, along which Shenley Road AQMA is located. Furthermore traffic along Allum Lane also has potential to pass within the AQMA at Elstree Crossroads. A mixed significant negative and minor positive effect is therefore likely.

SA Objective	SA Score	Justification
<b>14. Energy Efficiency</b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site BE1 is not expected to have an effect on this SA objective.
<b>15. Economy</b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+	Site BE1 is located within 800m of Borehamwood Town Centre. While the site is located more than 500m of a local employment centre it is located and between 0.5 km and 1.0 km of a key employment site (Centennial Park). Site BE1 is also located within 800m of two types of sustainable transport link (a railway station and a number of bus stops). Overall, a minor positive effect is likely.

### Land North of Stapleton Road (BE2)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b>1. Education</b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site BE2 is not located within 1km of a secondary school but is located within 500m of a primary school (Parkside Community Primary School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. An overall mixed minor positive and minor negative effect is therefore likely.
<b>2. Services</b> To ensure ready access to essential services and facilities for all residents.	+	Site BE2 falls mostly within an area with medium accessibility (score of 10.01 to 15). As the site would deliver 350 new homes it is likely to provide new services/facilities but not a local centre. Any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services easily accessible. A minor positive effect is therefore likely.
<b>3. Housing Provision</b>	+	The provision of up to 350 new homes would contribute to the provision of housing in the Borough. A



SA Objective	SA Score	Justification
To ensure the provision of housing, including affordable housing and a mix that meets local needs.		minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site BE2 does not include areas within the 20% most deprived in terms of access to housing and services and is not within 100m of a town, local or neighbourhood centre.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/-	<p>Site BE2 is not within 800m of an NHS GP surgery or hospital. Furthermore the site is not located within Potters Bar or Bushey Village, the settlements within the Borough which have been identified as having capacity for new patients. However, the site does fall within 800m of a number of open spaces, sports and recreation facilities. Furthermore, any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. Furthermore, it is not located within 200m of Hertsmere's strategic road network. Overall, a mixed significant positive and minor negative effect is likely.</p>
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	<p>The site mainly greenfield comprising Grade 3 agricultural land. Furthermore, almost the entire site falls within a Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.</p>

SA Objective	SA Score	Justification
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site.</p> <p>One designated asset – Lyndhurst - a Grade II listed building, located approximately 270m north of the site. The site may take part of land formerly associated with the house; however, dense vegetation separates the house from the site, meaning that the meaningful setting change is unlikely.</p> <p><u>Non-designated Assets</u></p> <p>There are no locally listed buildings within or near to the site.</p> <p>There are no Sites of Archaeological Interest within the site. Heritage Gateway records grassmarks of possible ditches and pits of unknown date and remnants of eroded medieval ridge and furrow (18035). These, and any potential unknown remains, would be highly susceptible to physical change and would be damaged or lost as a result of development.</p>
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	+?/-?	<p>The development of site BE2 would result in the development of a rural area on the northern edge of Borehamwood. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site BE2 falls within one character area (21. High Cannons Valleys and Ridges) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore reducing greenhouse gas emissions by reducing dependence on the private car. Site BE2 is located within 400m of a number of bus stops, but is not within close proximity of a railway station or a cycle route. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<b><u>10. Biodiversity and Geodiversity</u></b>	--?/ +?	<p>A large proportion of this site falls within the Organ Hill Pastures Local Wildlife Site. . Additionally, two</p>

SA Objective	SA Score	Justification
To protect and enhance biodiversity and geodiversity.		areas of deciduous woodland, which is a BAP Priority Habitat, are located adjacent to the southern edge of Site BE2 while a portion of Lyndhurst Farm Ecosite is adjacent to the site to the north. These designations and BAP Priority Habitat may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although Site BE2 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the B5378, which adjoins Shenley Road AQMA in the centre of Borehamwood. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site BE2 is not expected to have an effect on this SA objective.

SA Objective	SA Score	Justification
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+/-	Site BE2 is over 500m the nearest local employment site (Borehamwood Enterprise Centre) and between 1.0km and 2.0km of the nearest existing employment area (Elstree Way). The site is also located more than 800m of a Local or Town Centre. Site BE2 is located within 800m of a one type of sustainable transport link (bus stops). Overall, a mixed minor positive and minor negative effect is likely.

### Land to north east of Cowley Hill (BE3)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site BE3 is located within 1km of two secondary schools (Hertswood Academy and EUTC: The Industry School for the Creative Production Arts) and within 500m of a primary school (Woodlands Primary School). Additionally, as the site will provide up to 800 new homes, the provision will be made for new educational facilities. Overall, a significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	Site BE3 falls mostly within an area of 'very low' accessibility (score of 0-5). However, as the site would deliver up to 800 new homes it would be expected to provide a local centre, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre more easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 800 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing	+	Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. In addition, this site would be expected to provide a new local centre. The provision of these spaces has the potential to

SA Objective	SA Score	Justification
and preventing crime and deprivation, as well as providing sufficient community spaces.		<p>increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site BE3 does not include areas within the 20% most deprived in terms of access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<p><b><u>5. Health</u></b></p> <p>To improve population's health and reduce inequalities.</p>	++/-?	<p>Site BE3 is not within 800m of an NHS GP surgery, hospital or Potters Bar or Bushey village. However, the site does fall within 800m of a number of open spaces, sports and recreation facilities.</p> <p>Furthermore, any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity.</p> <p>Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. Furthermore, it is not located within 200m of Hertsmere's strategic road network. However, a PRoW runs through the site. Overall, a mixed significant positive and uncertain/minor negative effect is likely.</p>
<p><b><u>6. Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	-	<p>A large proportion of this mainly greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. Furthermore, the entire site falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.</p>
<p><b><u>7. Historic Environment</u></b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	-?	<p><u>Designated Assets</u></p> <p>There are no statutorily designated assets within the site.</p> <p>There is a grade II listed building – the Thatched Cottage - immediately adjacent to the north of the site. This was previously a game keeper's cottage associated with the grade II listed building, High Canons; located to the east of the site. The legibility of the historic relationship between these two</p>

SA Objective	SA Score	Justification
		<p>assets could be diminished by development within the site.</p> <p>Located to the east of the site, on the opposite side of Well End Road is the Grade II listed Wheatsheaf Farm. There would be change to the rural setting of this asset.</p> <p>Two other designated assets lie within 500m of the site - Buckettsland Farm House and barn and Nelson Cottage – both of which are Grade II listed. Neither of these is likely to be meaningfully affected by development of the site.</p> <p><u>Non-designated Assets</u></p> <p>A locally listed building – Cowleyhill Farm lies within the site. It is susceptible to physical change, as well as setting change as a result of change to its rural setting.</p> <p>A second locally listed building, Well End Lodge, lies immediately adjacent to the east of the site. This asset, a 19th century gentleman's residence, originally with landscaped gardens, may also experience setting change as a result of development.</p> <p>There are no Sites of Archaeological Interest within the site. Heritage Gateway records a number of potential assets within the site, these include: the supposed route of a Roman road (4695); a possible post-medieval hedge bank; cropmarks of post-medieval field boundaries and undated ditches (18036); and the hamlet of Green Street and Cowley Hill (12400). Archaeological remains associated with these would be highly susceptible to physical change.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of up to 800 new homes through this option would have an adverse effect on the quality of the countryside and landscape. The development of site BE3 would result in the development of a rural area on the edge of Borehamwood, to the northeast. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site BE3 falls within one character area (21. High Canons Valleys and Ridges) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the</p>	+/-	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing</p>

SA Objective	SA Score	Justification
private car.		dependence on the private car. Indeed site BE3 is located within 400m of a number of bus stops. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+?/-?	The site lies adjacent to a number of areas of deciduous woodland, which is a BAP Priority Habitat, as well as a number of Local Wildlife Sites (Birch Wood, Wood next to Well End Road and Silver Hill Woodland Strip) and one Ecosite (Meadow by Green Street). These designations and BAP Priority Habitat may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and minor negative effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although Site BE3 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the B5378, which adjoins Shenley Road AQMA in the centre of Borehamwood. A mixed significant negative and minor positive effect is therefore likely.

SA Objective	SA Score	Justification
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site BE3 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	As the site would deliver up to 800 new homes it would be expected to provide a local centre, which may provide some employment opportunities. In addition, this scale of development would be expected to provide new employment opportunities. Site BE3 is not located within 800m of a Local or Town Centre. However, it is located between 501m and 1km from Elstree Way existing employment area. Furthermore, site BE3 is located within 800m of a sustainable transport link (bus stops). Overall, a significant positive effect is likely.

#### Land at Well End Road (BE4)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site BE4 is located within 1km of a secondary school (Hertswood Academy) but is not within 500m of a primary school. Additionally, as this site would deliver up to 600 new homes, it would be expected to make provision for new education facilities. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'very low' accessibility (score 0-5). However, as site BE4 would deliver up to 600 new homes it would be expected to provide a local centre, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre easily accessible. A significant positive effect is therefore likely.



SA Objective	SA Score	Justification
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 600 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++?	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The site would also be expected to provide a new local centre. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Around half of site BE4 falls within the 20% most deprived areas in terms of access to housing and services. Development at this location may therefore help to overcome barriers to these.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a significant positive effect is likely, although this is uncertain as it depends on whether development comes forward in the part of the site within the 20% most deprived areas in terms of access to housing and services.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	<p>Site BE4 is not within 800m of an NHS GP surgery or hospital or Potters Bar or Bushey village. However, the site does fall within 800m of a number of open spaces, sports and recreation facilities. Furthermore, any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located within 200m of Hertsmere's strategic road network (A1). Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.</p>
<b><u>6. Soil and minerals</u></b>	-	A large proportion of this mainly greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. Furthermore, the entire site falls within a Minerals

SA Objective	SA Score	Justification
To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.		Consultation Area for sand and gravel. A minor adverse effect is likely overall.
<p><b><u>7. Historic Environment</u></b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings.</p>	-?	<p><u>Designated Assets</u></p> <p>The Grade II listed Buckett's Farm House and Barn lies just within the northern extent of the site boundary. The rural setting of these buildings, which consists of the site, enables them their historic interest and function to be understood. Development would result the total loss of this setting and its contribution to the assets heritage significance.</p> <p>On the opposite side of Buckettsland Lane there are three more Grade II listed buildings – High Canons House, Barnet lodge and Kitchen Garden Wall – which all belong to the same estate, within the non-designated High Canons Park. The main buildings and designed elements of the park are located over 200m from the site and intervening vegetation, especially that along the boundary of the site and the opposite side of Buckettsland Lane, will help minimise the potential for visual change to their setting.</p> <p>To the west of the site is the Grade II listed Wheatsheaf Farm, to the southeast, the Grade II Nelson Cottage is located on the opposite side of Rowley Road to the site. Neither of these assets is likely to be meaningfully affected by development within the site.</p> <p>To the south of the site, again on the opposite side of Rowley Lane, is a Grade II listed barn. The rural setting of this asset contributes to the heritage significance of this asset and development within the site may result in a minor change to the legibility of the asset as a result of the loss of part of this setting.</p> <p><u>Non-designated Assets</u></p> <p>There are two locally listed buildings to the west and north of the site – Well End Lodge and 2 New Cottages, respectively. Neither of these have settings that would be sensitive to development within the site.</p> <p>There are no known archaeological sites of interest within the site, nor does Heritage Gateway record any assets in it. However, there is always the risk of unknown remains being present within a site.</p>

SA Objective	SA Score	Justification
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	+?/-?	The development of up to 600 homes could have an adverse effect on the quality of the countryside and landscape. The development of site BE4 would result in the development of a rural area on the edge of Borehamwood, to the east. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site BE4 falls within one character area (21. High Cannons Valleys and Ridges) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Indeed site BE4 is located within 400m of a number of bus stops. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains two Ecosites (Buckettsland Farm Field and Rowley Lane Grasslands) and three areas of deciduous woodland, which is a BAP Priority Habitat. The site is also located adjacent to a number of Local Wildlife Sites, an Ecosite and some additional BAP Priority Habitats – including lowland heathland as well as deciduous woodland. These designations and BAP Priority Habitat may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.

SA Objective	SA Score	Justification
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site BE4 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site BE4 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	As the site would deliver up to 600 new homes it would be expected to provide a local centre as well as new employment opportunities. Site BE4 is located within 500m of Elstree Way existing employment area but not within 800m of a Local or Town Centre. Site BE4 is located within 800m of a sustainable transport link (bus stops). Overall, a significant positive effect is likely.

## Land north of Barnet Lane (BE6)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++/-	Site BE6 is located within 1km of a secondary school (Yavneh College) and is within 500m of a primary school (Summerswood Primary School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. An overall mixed significant positive and minor negative effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site R2 falls mostly within an area with medium accessibility (score of 10.01 to 15). As the site would deliver 320 new homes it is likely to provide new services/facilities but not a local centre. Any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services easily accessible. A minor positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of up to 320 new homes would contribute to the level of housing in the Borough. A minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site BE6 does not include areas within the 20% most deprived in terms of access to housing and services and is not within 100m of a town, local or neighbourhood centre.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<b><u>5. Health</u></b>	++/--	Site BE6 is not within 800m of an NHS GP surgery or hospital. Furthermore the site is not located

SA Objective	SA Score	Justification
To improve population's health and reduce inequalities.		within Potters Bar or Bushey Village, the settlements within the Borough which have been identified as having capacity for new patients. However, the site does fall within 800m of a number of open spaces, sports and recreation facilities. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian /cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (A411). Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	A large proportion of this greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. Furthermore, the entire site falls within a Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	0?	<u>Designated Assets</u> There are no statutorily designated assets within the site or the wider area that would be susceptible to setting change. <u>Non-designated Assets</u> There is one locally listed building – a Safestore - approximately 500m to the east of the site. Due to intervening built development it is unlikely to be affected by development within the site. There are no Sites of Archaeological Interest within the site. Heritage Gateway records the findspot of a piece of medieval tile (953) within the site. This will have been removed and will not be affected by development. There is always the potential for unknown archaeological remains to be present within the site.
<b><u>8. Landscape</u></b> To maintain and enhance the quality of	+?/-?	The development of site BE6 would result in the development of a rural area on the southern edge of Borehamwood, outside of the settlement boundary, but would not contribute directly to the coalescence of settlements. However, any 'Growth through new garden suburbs' option must

SA Objective	SA Score	Justification
countryside and landscape.		enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site BE6 falls within one character area (23. Elstree Ridge and Slopes) considered to be 'strong' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site BE6 is located within 1km of a railway station (Elstree & Borehamwood) and within 400m of a number of bus stops, but is not within close proximity of a cycle route. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains a large portion of a Local Wildlife Site (Woodcock Hill Fields) and a large portion of an Ecosite (Furze Hill Pastures), areas of deciduous woodland and traditional orchard, all of which are BAP Priority Habitats. The site is also located adjacent to a number of additional BAP Priority Habitats. These designations and BAP Priority Habitats may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.

SA Objective	SA Score	Justification
of climate change.		
<b><u>13. Air Quality</u></b> To improve local air quality.	+/ -	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site BE6 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site BE6 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	Although site BE6 is not located within 800m of a Local or Town Centre, it is located within 500m of the Stirling Way existing employment area. Site BE6 is also located within 800m of two types of sustainable transport link (a railway station and a number of bus stops). Overall, a significant positive effect is likely.



## Land south of Elstree Road & Gravel Allotments (B0)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	--	Site B0 is not located within 1km of a secondary school or within 500m of a primary school. Therefore this site would have limited access to education facilities, and would place increased pressure on existing education establishments. A significant negative effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+/-	The site is assessed as having 'low' accessibility (score 5-10). However, as site B0 would deliver up to 250 new homes it would be expected to provide some new services and facilities, including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services more easily accessible. A mixed minor positive and minor negative effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of up to 250 new homes would contribute to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a minor positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Whilst this site is not within 100m of a town, local or neighbourhood centre, any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site B0 does not include areas within the 20% most deprived in terms of access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>

SA Objective	SA Score	Justification
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	Site B0 is within 800m of an NHS GP surgery (Schopwick Surgery, Bushey). Furthermore, the site falls within 800m of a number of open spaces, sports and recreation facilities. Health facilities in Bushey have capacity to accept new patients. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. However, the site is located within 200m of Hertsmere's strategic road network (the M1 and A41), and a PRoW runs through the site. Furthermore, the western corner of the site currently contains some allotments which could be lost to development, resulting in significant adverse effects. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	A large proportion of this greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. Furthermore, the entire site falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><b><u>Designated Assets</u></b></p> <p>There are no designated assets within or, immediately adjacent to, the site.</p> <p>There are five Grade II listed buildings in close proximity to the site, these include Caldecote to the north of the site and to the east along Elstree Road, Rosary Priory High School and Reverley Lodge, its coach house and stables, and its boiler house, boiler and glasshouse. None of these assets should have the setting meaningfully affected by development within the site.</p> <p><b><u>Non-designated Assets</u></b></p> <p>There are several locally listed buildings in close proximity to the site. These include Caldecote Cottage to the north, 67 and 65 Elstree Road, Three Valleys Water works and offices, and Old Heathbourne Road. None of these should experience meaningful setting change as a result of development within the site.</p>

SA Objective	SA Score	Justification
		There are no Sites of Archaeological Interest within the site. Heritage Gateway records an undated road and post-medieval hamlet (30805) within this part of the site. If any remains survive they will be highly susceptible to physical change as a result of development. Approximately half the site is a historic landfill site, meaning that in this area archaeological potential, if any, will be very limited.
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	+?/-?	The development of up to 250 homes at this site could have an adverse effect on the quality of the countryside and landscape. The development of site B0 would result in the development of an undeveloped area on the edge of Bushey, to the east. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site B0 falls within one character area (23. Elstree Ridge and Slopes) considered to be 'strong' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Indeed site B0 is located within 400m of a number of bus stops. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+?/-?	The site contains one Local Wildlife Site (Elstree Road Pastures), one Ecosite (Wood E. of Bushey Heath) and an area of deciduous woodland, which is a BAP Priority Habitat. The site is also located within close proximity to another Local Wildlife Site and area of deciduous woodland. These designations and BAP Priority Habitat may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and significant negative effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.

SA Objective	SA Score	Justification
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although site B0 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the A411, which contains Elstree Crossroads AQMA. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site B0 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	The site is located within 500m of the Centennial Park existing key employment area and the Lismirrane Industrial Park existing local employment site. Site B0 is also located within 800m of one sustainable transport link (bus stops). Overall, a significant positive effect is likely.

## Land at Little Bushey Lane (B1)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site B1 is located within 1km of a secondary school (Bushey Meads School) but not within 500m of a primary school. However, it is likely that new housing sites will increase pressure on existing education facilities in the area. A mixed minor positive and minor negative effect is therefore expected.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site B1 falls mostly within an area with medium accessibility (score of 10.01 to 15). However, any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services easily accessible. A minor positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The delivery of 240 new homes would contribute to the overall level of housing provision in the Borough. A minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site B1 does not include areas within the 20% most deprived in terms of access to housing and services and is not within 100m of a town, local or neighbourhood centre.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce	++/--	Site B1 is within 800m of an NHS GP surgery (Schopwick Surgery) and is located at the edge of Bushey, where capacity for new patients has been identified. The site also falls within 800m of a number of open spaces, sports and recreation facilities. Any 'Growth through new garden suburbs'

SA Objective	SA Score	Justification
inequalities.		option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. The provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. However, the site is located within 200m of Hertsmere's strategic road network (M1). Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	Around half of this greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban land. The site is also adjacent to Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site. A Grade II listed building – Tyler's Farm lies to the north of the site. There are three Grade II listed buildings to the north and southwest of the site none of which should be affected by its development.</p> <p>Development within the site may be intervisible with the Grade II listed Rosary Priory High School. As a large country house this asset's rural setting is important to its legibility and development may affect this although only to a limited extent.</p> <p>To the east of the site, along Hillfield Lane, there is a Grade II listed lodge sited within an 18th century non-designated park belonging to the Grade II* Hillfield Castle, which, along with its Grade II listed Gatehouse, lies just beyond the study area. Due to extensive intervening vegetation, much of which is designed to shield the M1 and A41, development within the site is unlikely to be visible from these designated assets (nor the non-designated park, which is now much altered) and is otherwise unlikely to affect their setting in a way that affects their heritage significance.</p> <p><u>Non-designated Assets</u></p> <p>There are no locally listed buildings within or near the site that are susceptible to setting change.</p>

SA Objective	SA Score	Justification
		<p>There are also no Sites of Archaeological Interest within the site.</p> <p>Heritage Gateway indicates that there is a post-medieval farmstead with 16th century origins immediately to the north of the site (17845). This asset would be highly susceptible to setting change as a result of the loss of its rural hinterland</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	<p>+?/-?</p>	<p>The development of site B1 would result in the development of a rural area on the eastern edge of Bushey. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site B1 falls within two character areas (22. Borehamwood Plateau, 23. Elstree Ridge and Slopes), one (23. Elstree Ridge and Slopes) of which is considered to be 'strong' with regards to strength of character and the other (22. Borehamwood Plateau) which is considered to have 'moderate' strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	<p>+/-</p>	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site B1 is located within 400m of a number of bus stops, but is not within close proximity of a railway station or a cycle route. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	<p>+?/-?</p>	<p>The site comprises mostly undesignated greenfield land. The site is located directly adjacent to three Ecosites (Meadow near Albany Close, Caldecote Farm Pasture and Meadow North East of Harts Farm). These designations may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and minor negative effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.</p>

SA Objective	SA Score	Justification
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Less than 5% of this site falls within Flood Zone 3 and less than 25% of this site falls within Flood Zone 2. As such, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site B1 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site B1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+/-	Site B1 is not located within 800m of a Town or Local Centre but is within 800m of one type of sustainable transport link (bus stops). The site however is located within 1.0 km and 2.0 km of an existing key employment area (Centennial Park) and more than 500m from the nearest local employment site. Overall, a mixed minor positive and minor negative effect is likely.



## Land adj Little Bushey Lane & Bournehall Avenue (B2)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site B2 is located within 1km of four secondary schools (Queens' School, Falconer School, The Bushey Academy and Bushey Meads School) and within 500m of two primary schools (Bournehall Primary School and Meadow Wood School). Additionally, as this site would deliver up to 850 new homes, it would be expected to make provision for new education facilities. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'medium' accessibility (score 10-15). However, as site B2 would deliver up to 850 new homes it would be expected to provide a local centre, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 850 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The site would also provide a new local centre. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site B2 does not include areas within the 20% most deprived in terms of access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>

SA Objective	SA Score	Justification
<b>5. Health</b> To improve population's health and reduce inequalities.	++/--	Site B2 is not within 800m of an NHS GP surgery, hospital or Potters Bar or Bushey village. However, the site falls within 800m of a number of open spaces, sports and recreation facilities. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. However, the site is located within 200m of Hertsmere's strategic road network (A41). Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.
<b>6. Soil and minerals</b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	A large proportion of this greenfield site consists of Grade 3 agricultural land, whilst the remainder is classified as urban and non-agricultural land. Furthermore, the entire site falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.
<b>7. Historic Environment</b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site. To the southwest of the site there are Grade II listed buildings - the International University and the chapel at the International University. These assets lie within the non-designated Royal Connaught Park, the boundary of which lies on the opposite side of Finch Lane to the site. Development would result in some loss of some of the wider rural landscape that has historically surrounded the park and estate, but there is a strong vegetation cover either side of Finch Lane, meaning that appropriately-scaled development would likely have little effect on the setting and significance of these assets.</p> <p>There is a further Grade II listed building - Tyler's Farm - to the southeast of the site. It is unlikely that development of the site would affect the setting of this asset.</p> <p><u>Non-designated Assets</u></p> <p>There is a group of locally listed buildings at Purcell School to the north of the site, and four further local listed buildings along Finch Lane to the southwest of the site. None of these assets appear to</p>

SA Objective	SA Score	Justification
		<p>have a relationship with the site, and it is unlikely that the setting of these assets will be affected by its development.</p> <p>There are no Sites of Archaeological Interest within the site. Heritage Gateway indicates that the site of Bushey Grange, an early 19th century country house with landscaped gardens/ park (30217) and it is possible that archaeological remains relating to the buildings and features associated with this estate survive. These, and any other potential unknown remains, would be highly susceptible to physical change.</p> <p>There is an area of historic landfill (Bushey Grange Farm) along the eastern edge of the site. Due to the ground intrusive nature of landfill, this area is unlikely to have much, if any, archaeological potential.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of up to 850 new homes in any 'Growth through new garden suburbs' option could have an adverse effect on the quality of the countryside and landscape. The development of site B2 would result in the development of a greenfield area on the edge of Bushey, to the north. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site B2 falls within one character area (22. Borehamwood Plateau) which is considered to have 'moderate' strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	+/-	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Indeed, site B2 is located within 400m of a number of bus stops. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and</p>	--?/+?	<p>The site contains one Local Wildlife Site (Meadow N. W. of Tylers Farm), one Ecosite (Long Pond near Little Bushey Lane) and the edge of an area of deciduous woodland, which is a BAP Priority Habitat. These designations and BAP Priority Habitat may be directly lost to or damaged by</p>

SA Objective	SA Score	Justification
geodiversity.		development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	A large proportion of the site is located within Source Protection Zones 2 and 3. A minor negative effect with uncertainty is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Less than 25% of this site falls within Flood Zone 2. As such, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site B2 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site B2 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and	++	As the site would deliver up to 850 new homes it would be expected to provide a local centre and new employment opportunities. Furthermore, site B2 is located within 800m of Bushey High Street District Centre and between 501m and 1km of Otterspool Way existing employment area. The site

SA Objective	SA Score	Justification
employment opportunities, as well as providing for vital and viable town centres.		is also located within 800m of one sustainable transport link (bus stops). Overall, a significant positive effect is likely.

### Bushey Golf and Country Club (B3)

Whilst it is recognised that there is some uncertainty as to how the site could be utilised, it has been considered in this SA as a strategic housing site option. Whilst this site has not been allocated an 'issues and options site category' in the *Potential Sites for Housing and Employment* public engagement document (2018), the Council has advised that it would most appropriately be classed as a 'Growth through new garden suburbs' option by virtue of its location on the edge of Bushey. In line with the description of 'Growth through new garden suburbs' in the Issues and Options document, we have assumed the site would provide between 300 and 500 homes.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++?/-?	Site B3 is located approximately 500m south-east of Bushey Academy and within 500m of three primary schools, including Sacred Heart, Ashfield and Merry Hill. Given the council's current uncertainty as to how the site will be developed, and assuming that the site will be considered to be a 'growth through new garden suburbs' option, it is considered that the provision of homes will be between 300 and 500 as per the Issues and Options document. Thus the development of the site is unlikely to provide new education facilities. Whilst there is primary and secondary education provision nearby, development of the site for residential use would place increased pressure on existing education establishments. A mixed effect (significant positive and minor negative) is therefore expected, although this is uncertain as the council's decision on how the site should be used is not yet known.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+?	The site lies mostly within an area of 'medium/high' accessibility (score of 15.01-20.00) which will mean that residents are likely to have adequate access to surrounding services and facilities. The development would be required to provide new open space, leisure, recreation and community facilities as stated in the Issues and Options document. A minor positive effect is therefore likely, although this is uncertain as the council's decision on how the site should be used is not yet known.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local	+?	It is assumed that site B3 would provide between 300 and 500 new homes, which would contribute to the provision of housing in the Borough, including affordable homes. A minor positive effect is therefore likely, although this is uncertain as the council's decision on how the site should be used is

SA Objective	SA Score	Justification
needs.		not yet known.
<p><b><u>4. Community Cohesion</u></b></p> <p>To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.</p>	+	<p>Site B3 is within 100m of Bushey Town Centre which will promote social interaction and community cohesion between residents. According to the Issues and Options document, any 'growth through new garden suburbs' options will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces also has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. The site would also be expected to make provision of new services and facilities, but not a new local centre.</p> <p>Site B3 does not fall within the 20% most deprived areas with regard to access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals.</p> <p>Overall, a minor positive effect is expected, although this is uncertain as the council's decision on how the site should be used is not yet known.</p>
<p><b><u>5. Health</u></b></p> <p>To improve population's health and reduce inequalities.</p>	++?/-?	<p>Site B3 is within 800m of Manor View GP surgery and is within 800m of a number of open spaces, including public parks, playing fields, religious grounds and recreational facilities which could encourage physical exercise. There are also a number of PRoWs within 400m. According to the Issues and Options document, any 'growth through new garden suburbs' options will make provision for community spaces including open space, leisure, recreation and community facilities, as well as additional healthcare provision and strategic pedestrian/cycling connectivity.</p> <p>Improvements to pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. However, site B3 comprises the Bushey Golf Club, the development of such would result in the loss of this recreational resource. The site is not located within 500m of an anaerobic digestion facility, but is directly adjacent to the A411: High Street which could adversely affect residents in terms of traffic noise and air pollution. Overall, a mixed effect is identified (significant positive and significant negative), although these effects are uncertain as the council's decision on how the site should be used is not yet known.</p>
<p><b><u>6. Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting</p>	-	<p>This site is mostly within Grade 3 agricultural land, most of which is greenfield land. The site is entirely within a mineral safeguarding area for sand and gravel, which could potentially lead to the sterilisation of resources. A minor negative effect is identified overall.</p>

SA Objective	SA Score	Justification
mineral resources.		
<b><u>7. Historic Environment</u></b>  To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><u>Designated assets</u></p> <p>The site is immediately adjacent to and takes in a small part of the Bushey High Street Conservation Area. Development within the conservation area could lead to change of character or appearance of the area, and will change its setting – potentially harming its significance. The conservation area appraisal<sup>87</sup> lists Bushey Golf Course as a key open space outside the conservation area that contributes to its character and states that there are key views over it. As such, development could result in significant negative effect on the Conservation Area.</p> <p>There are multiple listed buildings within Bushey High Street Conservation Area most of which are unlikely to have a relationship with the site and be affected by setting change. However, the site once formed part of the parkland belonging to the Grade II listed Bushey House and there is likely to be meaningful change to the setting of this asset.</p> <p>On the opposite side of the High Street from the site is a second conservation area – Melbourne Road – which is susceptible to change as it contains several listed buildings, some of which are landmarks, and a Grade II Registered Park and Garden – The Rose Garden - which has views across the site.</p> <p>The setting of a number of other Grade II listed buildings that lie in the vicinity of the site but outside of the two conservation areas are also likely to be changed by development. However, the extent to which that change affects their heritage significance is likely to be at the lower end of the scale.</p> <p><u>Non-designated assets</u></p> <p>The site takes in a small part of a Site of Archaeological Interest, which will be removed or damaged as a result of development.</p> <p>There are no non-designated assets recorded within the site.</p>
<b><u>8. Landscape</u></b>  To maintain and enhance the quality of	+?/-?	<p>The site is within one Landscape Character Area (14. Bushey Hill Pastures) which has a moderate strength of character. The development of site B3 could have an adverse effect on the quality of the landscape through the loss of rural land on the edge of the settlement.</p>

<sup>87</sup> Hertsmere Building Environment Advisory Service. 2008. *Bushey High Street Conservation Area Appraisal 2008*. Pp.9

SA Objective	SA Score	Justification
countryside and landscape.		'Growth through new garden suburbs' options would be required to enhance the green infrastructure network (including parks, green spaces and other natural features) which could contribute towards visual amenity, although the extent of this provision is currently unknown. A mixed effect (minor positive uncertain effect and minor negative uncertain) is identified. These effects are uncertain as the council's decision on how the site should be used is not yet known.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+?/-?	Site B3 is within walking distance (400m) of a number bus stops, although there are no other sustainable transport modes within walking distance. Development of the site as a 'growth through new garden suburbs option' would make improvements to pedestrian/cycle connectivity, as well as bus services, although the extent of this and potential uptake by residents is currently unknown. This is expected to minimise greenhouse gas emissions, at the same time as reducing dependence on the private car. However, the potential development of between 300 and 500 homes may significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated greenhouse gas emissions. As such, a mixed minor positive uncertain and minor negative uncertain effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+?/-?	The development of this greenfield site is likely to have an adverse effect on biodiversity by leading to loss of previously undeveloped land. Greenfield land is generally more likely to support a greater number and range of species than developed land. There are no nature conservation sites within the site, however there is an Ecosite directly adjacent as well as a Local Wildlife Site. However, the development of the site would be required to provide enhancement of the green infrastructure network (including parks, green spaces and other natural features), which has the potential to provide benefits to biodiversity including new biodiversity linkages across the borough, although the extent of this provision is currently not known. Overall, a mixed minor positive uncertain and minor negative uncertain effect is likely. These effects are uncertain as the council's decision on how the site should be used is not yet known.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	The site is not located within a Source Protection Zone, therefore a negligible effect is identified.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Site B3 does not fall within Flood Zones 2 and 3. A negligible effect is recorded.



SA Objective	SA Score	Justification
<b><u>13. Air Quality</u></b> To improve local air quality.	+?/-?	The development of this site will make provision for the improvement of pedestrian/cycle connectivity, as well as bus services within the area. This is expected to help minimise emissions of air pollutants associated with traffic, by reducing dependence on the private car. However, the development of between 300-500 new homes is expected to increase the amount of cars on the road despite availability of more sustainable transport modes, and therefore may increase congestion and associated air pollution. This may have adverse effects on local air quality. This site is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA. Therefore, a mixed minor positive effect and minor negative effect is identified, although these effects are uncertain as the council's decision on how the site should be used is not yet known.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site B3 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+?/-?	Site B3 is within 800 of a number of bus stops which would provide residents with access to employment opportunities throughout the borough. In addition, the site is within 100m of Bushey Town Centre, and the development of between 300 and 500 homes would support local businesses and contribute towards town centre vitality. Site B3 is, however, located more than 1000m from an existing or key employment and further than 500m from an existing local employment site which may limit the potential for local employment opportunities. Overall, a mixed minor positive uncertain and minor negative effect is likely. These effects are uncertain as the council's decision on how the site should be used is not yet known.

## Kemprow Farm (R1)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site R1 is not located within 1km of a secondary school but is located within 500m of two primary schools (St John's VC Infant and Nursery School and Fair Field Junior School). As the site would provide 500 homes it would be expected to provide a new education facility. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	Site R1 lies primarily within an area of 'very low' accessibility (score of 0-5). However, as the site would provide 500 homes, it would be expected to provide a new local centre, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of 500 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++?	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. The site would also be expected to provide a new local centre. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site R1 contains a small area that falls within the 20% most deprived in terms of access to housing and services. Development at this location may therefore help to overcome barriers to these.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a significant positive uncertain effect is likely.</p>

SA Objective	SA Score	Justification
<b>5. Health</b> To improve population's health and reduce inequalities.	++/-	<p>Site R1 is not within 800m of an NHS GP surgery or hospital and the site falls outside of Potters Bar and Bushey Village. However, the site falls within 800m of a number of open spaces, sports and recreation facilities. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity.</p> <p>Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. The site is also not located within 200m of Hertsmere's strategic road network. Overall, a mixed significant positive and minor negative effect is likely.</p>
<b>6. Soil and minerals</b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	<p>This entire greenfield site consists of Grade 3 agricultural land. Furthermore, the entire site falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.</p>
<b>7. Historic Environment</b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site.</p> <p>To the west of the site (c.80m) there are five Grade II listed buildings situated along Kemp Row. Four lie almost adjacent to the site and belong to Kemprow Farm; these include the farmhouse, granary and two barns. The fifth asset is directly on the opposite side of the road is The Nook – a C16th timber-framed house. Development would diminish the historic rural setting of these buildings and effectively conjoin the farmstead to the larger settlement of Radlett.. The Nook is unlikely to be affected (due to intervening tree cover).</p> <p>There are two more Grade II listed buildings to the northwest of the site on Blackbird Lane – Blackbird Farmhouse and No. 5 Blackbird Lane. These should not be affected by development.</p> <p><u>Non-designated Assets</u></p> <p>There are no Sites of Archaeological Interest within the site. Nor does Heritage Gateway record any assets within the site. However, there is always the risk of unknown remains being encountered within</p>

SA Objective	SA Score	Justification
		a site. There are no locally listed buildings in the site or within 500m of it.
<b>8. Landscape</b> To maintain and enhance the quality of countryside and landscape.	+?/-?	The development of 500 homes could have an adverse effect on the quality of the countryside and landscape. The development of site R1 would result in the development of a rural area on the edge of Radlett, to the west. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site R1 falls within one character area (16. Aldenham Plateau) which is considered to have 'moderate' strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b>9. Greenhouse Gas Emissions</b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site R1 is located within 1km of a railway station (Radlett) and within 400m of a number of bus stops. However, improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b>10. Biodiversity and Geodiversity</b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains one Ecosite (Copse by Dellfield Wood) and one Local Wildlife Site (Dellfield Wood). Site R1 is also located directly adjacent to an additional Local Wildlife Site (Copse by Watford Road), which includes BAP Priority Habitat. There are additional local wildlife designations and areas of priority habitat nearby, notably the wooded area and Ecosite to the northeast of the site. These designations and BAP Priority Habitat may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.

SA Objective	SA Score	Justification
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	The site is located within a Source Protection Zone 3. A minor negative effect with uncertainty is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site R1 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site R1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+	As site R1 would provide 500 homes, it would also be expected to provide a new local centre, which may provide some employment opportunities. Site R1 is located within 800m of Radlett Watling Street District Centre and within 800m of one sustainable transport link (bus stops). The site is also within 1km of Beaumont Gate existing employment site. The site is further than 500m from a local employment site.  Overall, a minor positive effect is expected.

## Home Farm (R2)

This is a 'Growth through new garden suburbs' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site R2 is not located within 1km of a secondary school but is located within 500m of Hertsmere Jewish Primary School. The site would deliver 560 new homes and as such would be expected to provide a new education facility. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	Site R2 falls mostly within an area with 'very low' accessibility (score of 0-5). However, the site would deliver 560 new homes and as such would be expected to provide a new local centre. Any 'Growth through new garden suburbs' option will provide a range of services including healthcare, open space, leisure, recreation and community facilities. The provision of strategic pedestrian/cycle connectivity and improvements to inter-urban bus services and the local highway network are expected to make these services and the local centre easily accessible. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 560 new homes would contribute significantly to the provision of housing in the Borough, which will likely include some affordable homes. A significant positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>Any site that falls within the 'Growth through new garden suburbs' category will make provision for community spaces including open space, leisure, recreation and community facilities. Site R2 would also be expected to provide a new local centre. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Around half of site R2 falls within the 20% most deprived areas in terms of access to housing and services. Development at this location may therefore help to overcome barriers to these.</p> <p>As such, an overall significant positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce	++/--	Site R2 is not within 800m of an NHS GP surgery or hospital. Furthermore the site is not located within Potters Bar or Bushey Village, the settlements within the Borough which have been identified as having capacity for new patients. However, the site falls within 800m of a number of open

SA Objective	SA Score	Justification
inequalities.		spaces, sports and recreation facilities. Any 'Growth through new garden suburbs' option will include additional healthcare provision, as well as open space, leisure and recreation facilities. This is expected to have a significant positive effect of people's health by improving access to these facilities and local capacity. Furthermore, the provision of strategic pedestrian/cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improvements to inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. However, a small part of the eastern edge of the site lies adjacent to Hertsmere's strategic road network (A5183). Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	--	A large proportion of this greenfield site consists of Grade 2 agricultural land, whilst the remainder is classified as urban land. The site falls within 250m of a Minerals Safeguarding Area for sand and gravel. A significant negative effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site.</p> <p>To the immediate northeast of the site there are two listed buildings - a Grade II listed barn and the Grade II* listed Batlers Green House. Development will result in change to the rural setting of the barn and the ability to read the structure's function, history and relationships. The setting of the house would also be affected, and it appears to have a historical, functional, and potentially designed relationship with the site.</p> <p>There are three more Grade II listed buildings opposite Batlers Green House and barn, these include Batlers Green Farmhouse and two listed barns. Development of the site is unlikely to result in particularly meaningful setting change to these assets.</p> <p>To the southwest of the site is Letchmore Heath Conservation Area, within which a locally listed building lies within 500m of the site. A second conservation area - Radlett South - lies to the northeast of the site. Within 500m of the site, the conservation area contains a Grade II listed public house and several locally listed buildings. Adjacent to the conservation area is another Grade II listed building - 29A Loom House (a 1960s house). Due to the absence of a relationship with the</p>

SA Objective	SA Score	Justification
		<p>site, as well as intervening built development and vegetation effects to these assets are considered unlikely.</p> <p>To the east of the site is a Grade II listed barn and cowhouse at Little Kendall Farm. Development will have a minor adverse effect on the rural setting of this asset and the ability to read the building.</p> <p><u>Non-designated Assets</u></p> <p>There are a number of locally listed buildings within 500m of the site. However, due to intervening built development and/ or vegetation it is not anticipated that any will be affected by setting change.</p> <p>Heritage Gateway records no assets within the site. However, there is always the risk of unknown remains being encountered within a site, especially as four Sites of Archaeological Interest and Roman Watling Street are in close proximity to the site.,</p>
<p><b><u>8. Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of site R2 would result in the development of a rural area on the southern edge of Radlett, outside of the settlement boundary, but would not contribute directly to the coalescence of settlements. However, any 'Growth through new garden suburbs' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site R2 falls within one character area (16. Aldenham Plateau) which is considered to have 'moderate' strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b><u>9. Greenhouse Gas Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	--/+	<p>Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. However, site R2 is not located within close proximity to any sustainable transport links. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed significant negative and minor positive effect is likely.</p>
<p><b><u>10. Biodiversity and Geodiversity</u></b></p>	+?/-?	<p>The site contains part of one Ecosite (Little Kendals Farm Track) however this land takes up less</p>



SA Objective	SA Score	Justification
To protect and enhance biodiversity and geodiversity.		than 25% of the site. It also lies adjacent to one further Ecosite (Moses Dell) and one Local Wildlife Site (Cobdenhill Dell). The Moses Dell Ecosite also contains BAP Priority Habitat, as does the Cobdenhill Dell Local Wildlife Site. The site is also located within close proximity to a number of other Local Wildlife Sites, Eco Sites and BAP Priority Habitats. These designations and BAP Priority Habitats may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Growth through new garden suburbs' option will include enhancements to the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and minor negative effect is therefore likely. The effects are uncertain as they depend on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	The site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Any 'Growth through new garden suburbs' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Improvements to the wider strategic highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although site R2 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the A5183, which contains Park Road, Radlett AQMA. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site R2 is not expected to have an effect on this SA objective.

SA Objective	SA Score	Justification
<p><b><u>15. Economy</u></b></p> <p>Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.</p>	<p>--/+</p>	<p>This site would provide a new local centre, which may also provide some small-scale employment opportunities. Site R2 is located over 500m the nearest local employment site (Beaumont Gate) and more than 2.0km from the nearest existing employment area (Otterspool Way). Furthermore the site is located more than 800m from the nearest Town or Local Centre (Radlett Watling Street). The site is however located within 800m of one type of sustainable transport link (bus stops). Overall, a mixed significant negative and minor positive effect is likely.</p>

Draft Only

## Land to West of Shenley (S1)

This is a 'Supporting larger rural communities - growth of key villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site S1 is not located within 1km of a secondary school or within 500m of a primary school. However, as this site would deliver up to 530 new homes, it would be expected to make provision for new education facilities. As such, a significant positive effect is likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'low' accessibility (score 5-10). However, as site S1 would deliver up to 530 new homes it would be expected to provide a new local centre, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. This option would also require strategic pedestrian/cycle connectivity; an enhanced green infrastructure network; potential improvements to the wider strategic highway network; and improvements to inter-urban bus services which are also expected to make these services and the local centre more easily accessible. Overall, a significant positive effect is expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 530 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Overall, a significant positive effect is likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>Provision will be made for a new local centre, as well as a number of community spaces, including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Part of site S1 falls within the 20% most deprived areas in terms of access to housing and services. Development at this location may therefore help to overcome barriers to these.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a significant positive effect is likely.</p>

SA Objective	SA Score	Justification
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/-	Site S1 is not within 800m of an NHS GP surgery or hospital and is located outside of Potters Bar and Bushey villages. However, a 'Supporting larger rural communities - growth of key villages' this site would be expected to include additional healthcare provision as well as open space, leisure and recreation facilities. The site also falls within 800m of a number of existing open spaces, sports and recreation facilities. Furthermore, connectivity to the pedestrian and cycle network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. Furthermore, it is not located within 200m of Hertsmere's strategic road network. Overall, a mixed significant positive and uncertain minor negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site falls entirely on Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site. However, to the south it is immediately adjacent to Shenley Conservation area which takes in the historic core of the hamlet and Shenley Park, a former country estate. Although encroached upon by modern development these assets have a wider rural setting that is important to the legibility of their function and history. Development of the site will reduce this setting and be visible from the conservation area.</p> <p>The conservation area contains two Grade II listed buildings that are in close proximity to the site – The Mansion and the Gardens Cottage and Kitchen Garden Wall. These assets are historically and functionally related to the non-designated Porters Park, and formed part of the estate therein. The park has already been physically changed by modern development, firstly with the building of Shenley Hospital and, subsequently, by housing redevelopment. Development of the site would further diminish the legibility of the estate and its key buildings, by separating it entirely from the remaining land holdings of the former estate.</p> <p>To the north, the site is adjacent to a Grade II listed building – Wild Farm. The function and historic interest of this asset is legible as a result of its rural setting, which would be diminished by</p>

SA Objective	SA Score	Justification
		<p>development of the site. The Grade II barn associated with it, may also be susceptible to setting change.</p> <p>The London Coal duty marker to the north of the site is unlikely to be affected by development.</p> <p>If developed in association with S1 to the south there is the potential for cumulative effects on the Grade II listed Farmhouse at Wild Farm, which would be almost cut off entirely from its rural setting.</p> <p><u>Non-designated Assets</u></p> <p>Within 500m of the site there are a number of locally listed buildings in the conservation area to the south of the site. These include: Auriol Lodge, the south lodge, the cricket pavilion, Porterslea at Shenley Park, the bothy, greenhouses, the dairy, stable flats, the engine house and coach house. All of these buildings appear to relate to the former Porter Estate and, like the main listed buildings, will have their legibility further reduced by development of the site, especially those with a functional relationship to the agricultural land.</p> <p>The site takes in a small portion of the site of archaeological interest associated with Wild Farm. The remains of which would be highly susceptible to physical change as a result of development.</p> <p>Heritage Gateway indicates that the southern boundary of the site is formed by the extant remains of part of the western section of the World War II anti-tank ditch that ran through Hertfordshire as part of the Outer London Defence Ring (10234). It cannot be assumed that development will not physically change this asset. In addition, it is susceptible to setting change as it has pillboxes located along its length at every change of direction. Two of these are located close to the site boundary and may have their functional, historical, and probable visual, relationship altered by development.</p> <p>Cumulative effects are likely if developed in association with S1, as this would result in the loss of the whole of Site of Archaeological Interest near Wild Farm.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	<p>+?/-?</p>	<p>The development of up to 530 homes on this site could have an adverse effect on the quality of the countryside and landscape. The development of site S1 would result in the development of a large, rural area on the edge of Shenley, to the southwest. However, any 'Supporting larger rural communities – growth of key villages' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site S1 falls within one character area (20. Shenley Ridge) considered to have 'moderate' strength in character. Distinctive landscape features identified in the Landscape Character Assessment, such as</p>

SA Objective	SA Score	Justification
		Shenley Park, are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Supporting larger rural communities – growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site S1 is located within 400m of a number of bus stops. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains an area of deciduous woodland, which is a BAP Priority Habitat. The site is also located adjacent to some additional areas of deciduous woodland, as well as two Local Wildlife Sites (Cow Banks Wood and Porter Park Golf Course) and one Ecosite (Wild Farm Moat). These designations and BAP Priority Habitat may be lost or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural communities - growth of key villages' option will enhance green infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Less than 25% of this site falls within Flood Zone 2 and less than 5% of this site falls within Flood Zone 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b>	+/-	Pedestrian/cycle connectivity and improvements to inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas

SA Objective	SA Score	Justification
To improve local air quality.		emissions by reducing dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site S1 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site S1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+	As the site would deliver up to 530 new homes it would be expected to provide a new local centre, as well as leisure, recreation and community facilities, which may provide employment opportunities. Site S1 is located between 501m and 1km of Farm Close existing local employment site. The site is also located within 800m of one sustainable transport link (bus stops). Overall, a minor positive effect is likely.

### Harperbury Hospital (S2)

This is a 'Supporting larger rural communities - growth of key villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site S2 is not located within 1km of a secondary school but is located within 500m of a primary school (Clare Shalom School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. As such, a mixed minor positive and minor negative effect is therefore likely.
<b><u>2. Services</u></b>	--/+	Site S2 falls mostly within an area with 'very low' accessibility (score of 0-5). . However, any

SA Objective	SA Score	Justification
To ensure ready access to essential services and facilities for all residents.		'Supporting larger rural communities - growth of key villages' option will make provision for a range of services including healthcare, open space, leisure, recreation and community facilities. However, this site would provide 230 homes, which would not be expected to provide a new local centre or similar. This option would also require strategic pedestrian/cycle connectivity, which is also expected to make these services easily accessible. A mixed significant negative and minor positive effect is therefore expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of up to 230 new homes would contribute to the level of housing in the Borough. A minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Provision will be made for community spaces, including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site S2 falls within the 20% most deprived areas in terms of access to housing and services but is not within 100m of a town, local or neighbourhood centre. Development at this location may therefore help to overcome barriers to these.</p> <p>Whilst levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage, planning a village extension provides greater opportunities to design out crime.</p> <p>As such, an overall minor positive effect is likely.</p>
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	<p>Site S2 is not within 800m of an NHS GP surgery or hospital and furthermore is not located within Potters Bar or Bushey Village. However, the site falls within 800m of a number of open spaces, sports and recreation facilities. Furthermore, connectivity to the pedestrian and cycle network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. However, the northern edge of the site lies within 200m of Hertsmere's strategic road network (M25), and some PRowS run through the site. Additionally, the</p>



SA Objective	SA Score	Justification
		site contains an outdoor sports facility owned by Harperbury Hospital which could be lost to development, resulting in significant adverse effects. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	A large proportion of this greenfield site falls on Grade 3 agricultural land, whilst a small proportion falls on Grade 2 agricultural land. The site also falls within a Minerals Consultation area for sand and gravel. Overall, a minor negative effect is likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><b><u>Designated Assets</u></b></p> <p>The site contains no designated assets. To the southwest of the site is a Grade II listed stable range, presumed to be associated with the nearby Grade II listed Wild Farm (now the White House). The agricultural land around these assets relates to the buildings' function and its diminishment could result in a minor adverse effect to the barn.</p> <p>To the east of the site, on the opposite side of Shenleybury Road is a Grade II* listed St Botolph's - a former parish church now in use as a house - and the Grade II Nicholas Hawksmoor Memorial. As a rural parish church, development encroaching on its rural setting will diminish understanding of its historic function and relationships.</p> <p>To the north of the site is the Grade II* listed All Saints Pastoral Centre and behind which there is a Grade II listed missionary building. East of these, is the Grade II Farm Cottage. Due to intervening built development and vegetation the setting of these assets should not be meaningfully affected.</p> <p>To the northwest of the site are two Grade II listed coal duty markers, with a third to the immediate southwest of the site. These are unlikely to experience meaningful setting change.</p> <p>If developed in association with S1 to the south there is the potential for cumulative effects on the Grade II listed Farmhouse at Wild Farm as a result of setting change.</p> <p>If developed in association with S3 to the east there is the potential for cumulative effects to the Grade II* listed St Botolph's as a result of setting change.</p> <p><b><u>Non-designated Assets</u></b></p> <p>There are no locally listed buildings in the site or in close proximity to it. However, clarification should</p>

SA Objective	SA Score	Justification
		<p>be sought on the potential heritage significance of the buildings at Harperbury hospital; it is possible that some may be non-designated assets.</p> <p>Heritage Gateway records a large post-medieval chalk quarry pit within the site (1 17826); this has negligible archaeological value and has subsequently been used as historic landfill.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of 230 homes on this site could have an adverse effect on the quality of the countryside and landscape. The development of site S2 would result in the development of a large, rural area on the north western edge of Shenley. However, any 'Supporting larger rural communities - growth of key villages' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site S2 falls within one character area (19. Vale of St Albans) which is considered to be 'weak' with regard to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	+/-	<p>Any 'Supporting larger rural communities - growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site S2 is located within 400m of a number of bus stops but is not within close proximity of a cycle route or a railway station. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	--?/+?	<p>The site contains an Ecosite (Model Farm Copse) and several BAP Priority Habitats (deciduous woodland and traditional orchard) which cover over 25% of the site area. The site also lies within close proximity to additional Ecosites, Local Wildlife Sites and BAP Priority Habitats. These designations and BAP Priority Habitats may be lost or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural communities - growth of key villages' option will enhance green infrastructure (including parks, green spaces and other natural features), which may lead to</p>

SA Objective	SA Score	Justification
		habitat improvements and therefore benefit biodiversity. A mixed minor positive and significant negative effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	Parts of this site are located within Source Protection Zones 1, 2 and 3. A minor negative effect with uncertainty is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Pedestrian/cycle connectivity and improvements to inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by minimising dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site S2 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site S2 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+/-	Site S2 is located within 500m of Farm Close, an existing local employment site but not within 800m of a Town or Local Centre. The site is not located within 2.0km of an existing or key employment area. The site is located within 800m of one type of sustainable transport link (bus stops). Overall, a mixed minor positive and minor negative effect is likely.

### Rectory Farm Land (S3)

This is a 'Supporting larger rural communities - growth of key villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site S3 is not located within 1km of a secondary school but is located within 500m of a primary school (Clore Shalom School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. As such, a mixed minor positive and minor negative is likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site S3 falls within an area with medium accessibility (score of 10.01 to 15). The site would deliver 370 new homes and as such there would be a requirement to provide new services/facilities but not a local centre. Any 'Supporting larger rural communities - growth of key villages' option will make provision for a range of services including healthcare, open space, leisure, recreation and community facilities. This option would also require strategic pedestrian/cycle connectivity, which is also expected to make these services easily accessible. Overall, a minor positive effect is expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of 370 new homes would contribute to the level of housing in the Borough. A minor positive effect is therefore likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	Provision will be made for a number of community spaces, including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.  Site S3 falls within the 20% most deprived areas in terms of access to housing and services but is not within 100m of a town, local or neighbourhood centre. Development at this location may therefore help to overcome barriers to these.  As such, an overall minor positive effect is likely.
<b><u>5. Health</u></b>	++/-?	Site S3 is not within 800m of an NHS GP surgery or hospital and furthermore is not located within Potters Bar or Bushey Village. However, the site falls within 800m of a number of open spaces,

SA Objective	SA Score	Justification
To improve population's health and reduce inequalities.		sports and recreation facilities. Furthermore, connectivity to the pedestrian and cycle network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. Furthermore, it is not located within 200m of Hertsmere's strategic road network. A PRoW runs through the site. Overall, a mixed significant positive and minor negative uncertain effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site falls entirely on Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site.</p> <p>To the east of the site there are two listed buildings – the Grade II* St Botolph's – a former parish church now in use as a house - and the Grade II Nicholas Hawksmoor Memorial. As a rural parish church, development encroaching on its rural setting will diminish understanding of its historic function.</p> <p>To the south of the site lies the Shenley Conservation Area. Within there are two Grade II listed buildings located along Pound Lane but given their distance from the site and intervening built development, they should not be affected. However, there is potential for minor setting change to the conservation area as development will urbanise its setting to a greater degree.</p> <p><u>Non-designated Assets</u></p> <p>The site takes in a very small part of a Site of Archaeological Interest around Shenley Farm Cottages. Heritage Gateway also indicates that there are cropmarks of undated ditches and pits, as well as eroded remnants of medieval ridge and furrow evident within the site (18047; 11490). These assets, and any potential unknown ones, would be subject to damage or total loss as a result of development.</p> <p>There are a number of locally listed buildings within 500m of the site. These include: Shenley Water Tower, Winifred Cottage, Frank Cottage, Ginger Bread House, Black Lion Public House and</p>

SA Objective	SA Score	Justification
		outbuilding, 2 Warwick Cottages, and 71 London Road. These all lie to the south of the site and, with the exception of the Water Tower, fall within Shenley Conservation Area. It is not anticipated that development of the site would meaningfully affect the setting of any of these assets.
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	+?/-?	The development of 370 homes on this site could have an adverse effect on the quality of the countryside and landscape. The development of site S3 would result in the development of a large, rural area on the north eastern edge of Shenley. However, any 'Supporting larger rural communities - growth of key villages' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site S3 falls within two character areas (19. Vale of St Albans and 20. Shenley Ridge), one (20. Shenley Ridge) of which is considered to be 'moderate' with regard to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Supporting larger rural communities - growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site S3 is located within 400m of a number of bus stops but is not within close proximity of a cycle route or a railway station. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	-?/+?	The site contains an area of deciduous woodland, which is a BAP Priority Habitat however this constitutes less than 25% of its total area. The site is also located adjacent to a Local Wildlife Site and area of ancient woodland (Combe Wood), as well as being within close proximity to Dell Grove Local Wildlife Site and an Ecosite (Wood at Shenleybury House). These designations and BAP Priority Habitat may be lost or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural communities - growth of key villages' option will enhance green infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor negative and minor positive effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design

SA Objective	SA Score	Justification
		proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	A substantial portion of this site is located within a Source Protection Zones 1, 2 and 3. A minor negative uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	Improvements to pedestrian/cycle connectivity and inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore reducing greenhouse gas emissions by minimising dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Site S3 is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site S3 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+	Site S3 is not located within close proximity of a Town or Local Centre. Furthermore the site is not located within 2.0km of an existing or key employment site. The site however is located adjacent to Farm Close local employment site. The site is also located within 800m of one type of sustainable transport link (bus stops). Overall, a minor positive effect is likely.

## Shenley Grange (S4)

This is a 'Supporting Larger Rural Communities - Growth of Key Villages' Option

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site S4 is not located within 1km of a secondary school but is within 500m of Shenley Primary School. Whilst there is primary education provision nearby, development is likely to place increased pressure on existing education establishments. As such, a mixed minor positive, minor negative effect is likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+/-	The site is assessed as having 'low' accessibility (score of 5.01-10.00). The development would be required to provide new open space, leisure, recreation and community facilities as stated in the Issues and Options document. This option would also require strategic pedestrian/cycle connectivity, which is also expected to make these services easily accessible. Overall, a mixed effect (minor positive and minor negative) is expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of up to 380 new homes would contribute to the provision of housing in the Borough, including affordable homes. Overall, a minor positive effect is likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Site S4 is not within 100m of a local centre. According to the Issues and Options document, any 'Supporting Larger Rural Communities - Growth of Key Villages' options will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces also has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. The site would also be expected to make provision of a new services and facilities, but not a new local centre.</p> <p>Site S4 mostly falls within the 20% most deprived areas with regard to access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals.</p> <p>Overall, a minor positive effect is expected.</p>



SA Objective	SA Score	Justification
<b>5. Health</b> To improve population's health and reduce inequalities.	++/-	Site S4 is not within 800m of an NHS GP surgery or hospital and the site is outside Potter's Bar and Bushey where there is currently healthcare capacity. However, the Issues and Options document states that additional healthcare provision should be provided by the development. The site falls within 800m of a number of open spaces, sports and recreation facilities, and new open space, leisure, recreation and community facilities will also need to be provided as part of the development according to the Issues and Options document which will have benefits for encouraging physical exercise. Furthermore, connectivity to the pedestrian and cycle network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. Furthermore, it is not located within 200m Hertsmeres's strategic road network. Overall, a mixed significant positive and minor negative effect is likely.
<b>6. Soil and minerals</b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site falls entirely on Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b>7. Historic Environment</b> To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><u>Designated Assets</u></p> <p>The site includes part of Shenley Conservation Area, adjacent to London Road. Development would physically affect the character of the conservation area – diminishing the legibility of its historic layout and significance - and result in change to its semi-rural setting.</p> <p>The conservation area contains a large number of Grade II listed buildings, but in the majority of the cases there is intervening built development between these assets and the site, and it is unlikely that their setting will be meaningfully affected by development. An exception to this may be St Martins Church, which sits directly opposite the site.</p> <p><u>Non-designated Assets</u></p> <p>The site contains a locally listed building – 41 London Road – which would be susceptible to physical and setting change. There are several more located along London Road and two more on Radlett Lane, which could be susceptible to some degree of setting change.</p> <p>There are no Sites of Archaeological Interest within the site. Heritage Gateway indicates that the</p>

SA Objective	SA Score	Justification
		<p>site lies within the former parkland associated with the post-medieval Shenley Grange, which is no longer extant. The site of a walled garden is recorded (17147) and there is the potential for other features associated with the park to survive, although the location of the former house lies just east of the site. These assets would be susceptible to damage or total loss.</p> <p>A pillbox is also recorded to the west of the site along Spinney footpath. This asset would be susceptible to physical and setting change.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of approximately 380 homes on this site could have an adverse effect on the quality of the countryside and landscape. The development of site S4 would result in development of a large rural area on the edge of Shenley, to the south. However, any 'Supporting larger rural communities - growth of key villages' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site S4 falls within one character area (21. High Canons Valleys and Ridges) which is considered 'moderate' with regard to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	+/-	<p>Any 'Supporting larger rural communities - growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site S4 is located within 400m of a number of bus stops. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	--?/+?	<p>The site contains three Ecosites (Long View Meadow, Grassland at Twin Pines and Twin Pines area, Shenley) and an area of deciduous woodland, which is a BAP Priority Habitat. The site is also located adjacent to a Local Wildlife Site (Woodhall Spinney). These designations and BAP Priority Habitat may be lost or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural communities - growth of key villages' option would have to enhance green</p>

SA Objective	SA Score	Justification
		infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Improvements to pedestrian/cycle connectivity and inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore reducing greenhouse gas emissions by minimising dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although Site S4 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the B5378, which adjoins Shenley Road AQMA in the centre of Borehamwood. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site S4 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing	--/+	The development of approximately 380 new homes at site S4 will require the provision of new services and facilities (but not a new local centre), as well as leisure, recreation and community facilities, will help to grow and sustain the economies of larger rural communities employment opportunities. The site is located within 800m of one sustainable transport link (bus stops) which will provide employment access opportunities throughout the borough. The development would

SA Objective	SA Score	Justification
for vital and viable town centres.		include high speed broadband network improvements, which may make the area more attractive to businesses and/or increase the ability of residents to work from home, thus further broadening employment opportunities and economic growth. However, site S4 is located more than 2km from existing or key employment areas which will limit easy access to employment centres. Overall, a mixed minor positive and significant negative effect is likely.

Draft Only

## Edgwarebury farm (E1)

This is a 'Supporting larger rural communities - growth of key villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site E1 is not located within 1km of a secondary school or within 500m of a primary school. However, as this site would deliver up to 550 new homes, it would be expected to make the provision for new education facilities. As such, a significant positive effect is likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'medium' accessibility (score 10-15). However, as site S1 would deliver up to 550 new homes it would be expected to provide a new local centre focus, as well as a range of services including education, healthcare, open space, leisure, recreation and community facilities. This option would also require strategic pedestrian/cycle connectivity; an enhanced green infrastructure network; potential improvements to the wider strategic highway network; and improvements to inter-urban bus services which are also expected to make these services and the local centre more easily accessible. Overall, a significant positive effect is expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	The provision of up to 550 new homes would contribute significantly to the provision of housing in the Borough, including affordable homes. Overall, a significant positive effect is expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	<p>Provision will be made for a local centre, as well as a number of community spaces, including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.</p> <p>Site E1 does not include areas within the 20% most deprived in terms of access to housing and services.</p> <p>Levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage.</p> <p>Overall, a minor positive effect is likely.</p>

SA Objective	SA Score	Justification
<b>5. Health</b> To improve population's health and reduce inequalities.	++/--	Site E1 is located within 800m of Schopwick Surgery but not within 800m of a hospital or Potter Bar or Bushey village. However, as a 'Supporting larger rural communities - growth of key villages this site would be expected to include additional healthcare provision. The site falls within 800m of a number of open spaces including Composers Park, as well as sports and recreation facilities. Furthermore, connectivity to the pedestrian and cycle network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of a waste management facility. However, it is located within 200m of Hertsmere's strategic road network (M1, A5183 and A411). Overall, a mixed significant positive and significant negative effect is likely.
<b>6. Soil and minerals</b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site falls entirely on Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b>7. Historic Environment</b> To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><u>Designated Assets</u></p> <p>The site takes in part of Elstree Conservation Area, which otherwise lies immediately north of the site. Development within the site would potentially affect the character and special interest of the conservation area. Within 500m of the site, there are several listed buildings in the conservation area, of which, one is listed Grade II* and the others are all Grade II. With the exception of Hill House, the setting of these assets is unlikely to be susceptible to change and Hill House's is unlikely to be meaningfully affected by development within the site.</p> <p>To the west of the site is the Grade II* listed, The Leys, associated with which are five grade II listed buildings – a garden structure, coach house and tower, entrance gates, lodge and entrance gate piers and gates. The house could be affected by loss of its rural setting, which contributes to its legibility as a country house.</p> <p>There are another three Grade II listed buildings to the southwest of the site – Brockley Grange, Brockley Hill Farmhouse and its associated barn. In terms of setting change, none of these assets should be affected meaningfully. A scheduled monument – Brockley Hill Romano-British pottery and settlement - lies near these assets. It should not be affected by development within the site.</p>

SA Objective	SA Score	Justification
		<p><u>Non-designated Assets</u></p> <p>There are a number of locally listed buildings within the conservation area to the north of the site. Those closest to the site include Edgeware Bury House and farm buildings, St Marys Croft, Summerfield House and five residential villas along Summer Grove. Development within the site would change the rural setting of the farm house but the other assets are unlikely to experience meaningful setting change.</p> <p>There are further locally listed buildings to the east of the site, including the Edgewarebury Hotel, the Lodge and Penniwells. Development within the site would result in setting change to the hotel, a former country house.</p> <p>There are no Sites of Archaeological Interest within the site and Heritage Gateway records only two assets within the site. These include the site of a post-medieval wall (12799) and a linear grassmark (18029) interpreted as a post-medieval track or boundary. These, and any unknown assets within the site, would be highly susceptible to physical change.</p> <p>However, in the wider area there are two Sites of Archaeological Interest to the north of the site and Elstree. Also, Elstree lies along the Roman Road – Watling Street and evidence of Roman activity is known in the vicinity. The village has medieval origins, attested archeologically. This highlights a potential for unknown archaeological remains.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	<p>+?/-?</p>	<p>The development of up to 550 homes on this site could have an adverse effect on the quality of the countryside and landscape. The development of site E1 would result in the development of a large, rural area on the edge of Elstree, to the east. However, any 'Supporting larger rural communities - growth of key villages' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Site E1 falls within one character area (23. Elstree Ridge and Slopes) that is considered which is considered 'strong' with regard to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed minor positive and minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	<p>+/-</p>	<p>Any 'Supporting larger rural communities - growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Indeed site E1 is located</p>

SA Objective	SA Score	Justification
		within 400m of a number of bus stops. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+?/-?	The site lies adjacent to a traditional orchard and some areas of deciduous woodland, both of which are BAP Priority Habitats. These habitats may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural communities - growth of key villages' option will enhance green infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed minor positive and minor negative effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This site is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Improvements to pedestrian/cycle connectivity and inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore reducing greenhouse gas emissions by minimising dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although Site E1 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the A5183, which contains Elstree Crossroads AQMA. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more



SA Objective	SA Score	Justification
energy efficiency, and to increase the use of renewable energy.		by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site E1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	As the site would deliver up to 550 new homes it would be expected to make the provision for a new local centre, as well as leisure, recreation and community facilities, which may provide employment opportunities. Site E1 is located adjacent to Centennial Park existing key employment site. The site is also located within 800m of one sustainable transport link (bus stops). Overall, a significant positive effect is likely.

### South Mimms growth area, southern plot (SM1)

This is a 'Supporting larger rural communities - growth of key villages' Option

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site SM1 is within 500m of St. Giles Church of England Primary School but more than 1km from a secondary school. Whilst there is primary education provision nearby, development of the site would place increased pressure on existing education establishments. A mixed effect is expected (minor positive and minor negative).
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	The site lies mostly within an area of 'medium' accessibility (score of 10.01-15.00). Site SM1 would deliver up to 450 homes, a requirement of which would be the provision of additional local services, as set out in the Issues and Options document. The development would also be required to provide new open space, leisure, recreation and community facilities. A minor positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	Site SM1 would provide 450 new homes which would contribute to the provision of housing in the Borough, including affordable homes. A minor positive effect is therefore likely.

SA Objective	SA Score	Justification
<p><b><u>4. Community Cohesion</u></b></p> <p>To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.</p>	+	<p>According to the Issues and Options document, the development of site SM1 would make provision for community spaces including open space, leisure, recreation, community facilities and new services and facilities, but not a local centre. This provision has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. However, the site is further than 100m from a town, local or neighbourhood centre.</p> <p>Site SM1 falls within the 20% most deprived areas with regard to access to housing and services. Levels of crime and fear of crime will be influenced through more detailed design proposals.</p> <p>Overall, a minor positive effect is expected.</p>
<p><b><u>5. Health</u></b></p> <p>To improve population's health and reduce inequalities.</p>	++/--	<p>Site SM1 is more than 800m from an NHS GP and hospital, and is outside Potters Bar and Bushey Village where there is additional healthcare capacity than other parts of the borough. This could make access to healthcare difficult for new residents of the site. There are also two PROWs within the site which could be lost to development which may otherwise be used for recreational purposes. The site is also directly adjacent to the M1 motorway which could have significant adverse effects on health in terms of traffic noise and air pollution. However, there are a number of greenspaces within 800m, including allotments, religious grounds and a sport facility as well as a number of public paths and bridleways which would encourage outdoor recreation which has benefits for health. In addition, the development of 450 new homes would require the provision of new open space, leisure, recreation facilities and additional healthcare provision to serve those living within the development as set out in the Issues and Options document. Furthermore, improvements to pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. The development would also be required to provide additional healthcare services. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. Overall a mixed effect is identified (significant positive and significant negative).</p>
<p><b><u>6. Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	-	<p>This site consists entirely of Grade 3 agricultural land, all of which is considered to be greenfield. The site is within a mineral safeguarding area for sand and gravel, which could potentially lead to the sterilisation of resources. A minor negative effect is identified overall.</p>

SA Objective	SA Score	Justification
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><u>Designated assets</u></p> <p>This site takes in part of South Mimms Conservation Area, and could potentially have a significant adverse effect on its character and special interest. Within the conservation area the Grade I listed church of St Giles would also be susceptible to setting change.</p> <p>It is unlikely that the heritage significance of the Grade II listed buildings in the conservation area or nearby would be affected, although some may experience setting change.</p> <p><u>Non-designated assets</u></p> <p>Development is unlikely to result in meaningful setting change to any locally listed buildings.</p> <p>The site includes a small part of a Site of Archaeological Interest, which would be highly susceptible to physical change.</p> <p>Heritage Gateway records the site of a Caltrop Anti-tank obstacle within the site and notes that the London outer stop line was located nearby, suggesting a potential for further associated defences.</p>
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	+?/-?	<p>The site is within one Landscape Character Area (27. Catherine Bourne Valley) which has a weak strength of character. However, the development of approximately 450 homes on this site could have an adverse effect on the quality of the countryside and landscape particularly considering its large size in comparison to the village of South Mimms. The development of site SM1 would result in development of a large rural area on the south western edge of South Mimms, although the motorway forms a clear boundary for this development, reducing the rurality of the site.</p> <p>Development of this type would be required to enhance the green infrastructure network (including parks, green spaces and other natural features) which could contribute towards visual amenity, although the extent of this provision is currently unknown. A minor positive uncertain effect is therefore identified.</p>
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	<p>Site SM1 is within walking distance (400m) of a number of bus stops, although there are no other sustainable transport modes (rail or cycle routes) within walking distance. Development of the site will make improvements to pedestrian/cycle connectivity, as well as bus services. This is expected to minimise greenhouse gas emissions, at the same time as reducing dependence on the private car. Additionally, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. However, the development of around 450 homes is expected to significantly increase the amount of cars on the</p>

SA Objective	SA Score	Justification
		road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated greenhouse gas emissions. As such, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	+/ -?	The development of this greenfield site is likely to have an adverse effect on biodiversity by leading to loss of previously undeveloped land. Greenfield land is generally more likely to support a greater number and range of species than developed land. The site is not within any nature conservation sites, although the St Giles Church Ecosite is directly adjacent to the east. However, the development of the site would be required to provide enhancement of the green infrastructure network (including parks, green spaces and other natural features), which has the potential to provide benefits to biodiversity including new biodiversity linkages across the borough, although the extent of this provision is currently not known. Overall, a mixed minor positive uncertain and minor negative uncertain effect is likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	The site is mostly located within a Source Protection Zone, which could have an adverse effect on water sources, therefore a minor negative effect is expected. This effect is uncertain dependent upon the detailed design of the development.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	-	Between 5% and 25% of the site area falls within Flood Zone 3, leading to a minor negative effect.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	The development of this site will make provision for the improvement of pedestrian/cycle connectivity, as well as bus services within the area. This is expected to help minimise emissions of air pollutants associated with traffic, by reducing dependence on the private car. Furthermore, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. However, the development of around 450 new homes would be expected to increase the amount of cars on the road despite availability of more sustainable transport modes, and therefore may increase congestion and associated air pollution. This may have adverse effects on local air quality. This site is not located within an AQMA; however Blanche Lane AQMA is within 200m to the south. It is considered that the development would likely generate traffic that interacts with the AQMA. Therefore, a mixed minor positive effect and significant negative effect is identified.

SA Objective	SA Score	Justification
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site SM1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+/-	Site SM1 is within walking distance (400m) of a number of bus stops which would provide residents with access to employment opportunities throughout the borough. The development of this site is likely to help facilitate a sustainable and growing economy of rural communities. In addition, this development site would include high speed broadband network improvements, which may make the area more attractive to businesses and may increase opportunities for residents to work from home, further broadening employment opportunities and economic growth. Site SM1 is, however, located more than 1000m from an existing or key employment and further than 500m from an existing local employment site. Overall, a mixed minor positive uncertain and minor negative effect is likely.

### South Mimms growth area, western plot (SM2)

This is a 'Supporting larger rural communities - growth of key villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site SM2 is not located within 1km of a secondary school but is located within 500m of one primary school (St Giles Church of England Primary School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. As such, a mixed minor positive and minor negative effect is likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site SM2 falls mostly within an area with low accessibility (score of 5.01 to 10.00). As the site would deliver 390 new homes it would provide new services/facilities but not a local centre. Any 'Supporting larger rural communities - growth of key villages' option will make provision for a range of services including healthcare, open space, leisure, recreation and community facilities. This option would also require strategic pedestrian/cycle connectivity, which is also expected to

SA Objective	SA Score	Justification
		make these services easily accessible. A minor positive effect is therefore expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of 390 new homes would contribute to the level of housing in the Borough. A minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	Provision will be made for a number of community spaces, including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. Site SM2 falls within the 20% most deprived areas in terms of access to housing and services but is not within 100m of a town, local or neighbourhood centre. Development at this location may therefore help to overcome barriers to these. As such, an overall minor positive effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	Site SM2 is not within 800m of an NHS GP surgery or hospital and furthermore is not located within Potters Bar or Bushey Village. However the site lies adjacent to a children's play area, and is within close proximity of some additional areas of open space. Furthermore, connectivity to the pedestrian and cycle network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, the site is located adjacent to Hertsmere's strategic road network (M25), where high pollution levels and noise disturbance could have an adverse effect on residents of the garden village. Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site falls on Grade 3 agricultural land. The site also falls within the Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.

SA Objective	SA Score	Justification
<p><b>7. Historic Environment</b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site. However, a Grade II listed building – The Black Horse Public House – lies on the opposite side of Black Horse Lane. Its setting should not be sensitive to development within the site.</p> <p>To the south of the site lies South Mimms Conservation Area, which takes in the historic core of this originally rural village. Development within the site would reduce its wider rural setting and could potentially affect the ability to understand the historic origins of the village.</p> <p>Within 500m of the site, there are several Grade II listed buildings within the conservation area. None of these appear to be sensitive to setting change as a result of development within the site.</p> <p><u>Non-designated Assets</u></p> <p>A locally listed building – the Town Farm House, Blackhorse Lane – is located on the opposite side of Black Horse Lane to the site. This asset, which comprises a small 19th century farmhouse and two outbuildings to the rear, would be susceptible to setting change as a result of development. The level of harm associated with this would increase if the site was developed in tandem with SM3.</p> <p>Two more locally listed buildings – the Old Police Station and Arlingham House – lie to the south of the western part of the site. These are unlikely to experience any meaningful setting change. However, a third locally listed building – North Mymms South Lodge – located to the north the site, may be susceptible to minor setting change.</p> <p>Cumulative effects are possible on North Mymms South Lodge, if the site is developed in tandem with H2. This would cause the loss of the estate with which it is associated, and its wider rural setting.</p> <p>Heritage Gateway does not record any non-designated assets within the site.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	+?/-?	<p>The development of site SM2 would result in development of a large rural area on the north western edge of South Mimms. The development of approximately 390 homes on this site could have an adverse effect on the quality of the countryside and landscape particularly considering its large size in comparison to the village of South Mimms. Whilst the development would be a big impact on South Mimms itself, in line with the assessment methodology the effects are considered minor, given the overall scale and existing landscape character. Any 'Supporting larger rural communities – growth of key villages' option must enhance the green infrastructure network</p>

SA Objective	SA Score	Justification
		including parks, green spaces and other natural features, which could enhance visual amenity. Site SM2 falls within the Catherine Bourne Valley character area, which is considered to be 'weak' with regards to strength of character. Distinctive features identified in the Landscape Character Assessment such as Castle Lime Works Quarry, could be lost by development at this site. Overall, a mixed minor positive and significant negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'Supporting larger rural communities - growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site SM2 is located within 400m of a number of bus stops but is not within close proximity of a railway station or a cycle route. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site is on undesignated greenfield and it falls within 100m of the Redwell Wood SSSI and within the 1RZ for this SSSI for residential developments of 50 units or more.. The SSSI may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural communities - growth of key villages' option will enhance green infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	A large proportion of the site is located within Source Protection Zones 1, 2 and 3. A minor negative but uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	-	A small part of site SM2 falls within Flood Zones 2 and 3. Furthermore, the extent of new development is likely to lead to a large increase in impermeable surfaces, and therefore reduce the drainage ability of the ground. This may result in increases in surface water flooding, therefore a



SA Objective	SA Score	Justification
		minor negative effect is expected.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Improvements to pedestrian/cycle connectivity and inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore reducing greenhouse gas emissions by minimising dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although Site SM2 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site lies adjacent to the M25, which adjoins Blanche Lane AQMA at South Mimms. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site SM2 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+/-	Site SM2 is not located within 500m a local employment site or within 800m of a Town or Local Centre. The site is located between 1.0km and 2.0km of Cranborne Road existing key employment site. The site is located within 800m of one type of sustainable transport link (bus stops). Overall, a mixed minor positive and minor negative effect is likely.

### South Mimms growth area, eastern plot (SM3)

This is a 'Supporting larger rural communities - growth of key villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	+/-	Site SM3 is not located within 1km of a secondary school but is located within 500m of one primary school (St Giles Church of England Primary School). However, it is likely that new housing sites will increase pressure on existing education facilities in the area. As such, a mixed minor positive and minor negative positive effect is likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	+	Site SM3 falls mostly within an area with medium accessibility (score of 10.01 to 15). As the site would deliver 270 new homes there will be a requirement to provide new services/facilities but not a local centre. Any 'Supporting larger rural communities - growth of key villages' option will make provision for a range of services including healthcare, open space, leisure, recreation and community facilities. This option would also require strategic pedestrian/cycle connectivity, which is also expected to make these services easily accessible. A minor positive effect is therefore expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	+	The provision of 270 new homes would contribute to the provision of housing in the Borough. A minor positive effect is therefore expected.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	+	Provision will be made for a number of community spaces, including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour.  Site SM3 falls within the 20% most deprived areas in terms of access to housing and services but is not within 100m of a town, local or neighbourhood centre. Development at this location may therefore help to overcome barriers to these.  As such, an overall minor positive effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce	++/-?	Site SM3 is not within 800m of an NHS GP surgery or hospital and furthermore is not located within Potters Bar or Bushey Village. However, the site lies adjacent to a children's play area, as well as a number of additional areas of open space. Furthermore, connectivity to the pedestrian and cycle

SA Objective	SA Score	Justification
inequalities.		network could encourage active travel, therefore increasing physical activity of residents. In addition, improved inter-urban bus services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. The site is not located within 200m of Hertsmere's strategic road network. Additionally, a PRoW runs through the site. Overall, a mixed significant positive and minor negative uncertain effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	The site is located almost entirely on greenfield land which includes Grade 3 agricultural land. The site also falls within the Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><b><u>Designated Assets</u></b></p> <p>There are no designated assets within the site. However, it is immediately adjacent to a Grade II listed building – The Black Horse Public House. Its setting should not be sensitive to development within the site.</p> <p>To the south of the site lies South Mimms Conservation Area, which takes in the historic core of this originally rural village. Development within the site could have a minor adverse effect on this asset by reducing its wider rural setting and could potentially affect the ability to understand the historic origins of the village. The level of effect will be greater if developed in tandem with SM2, SM3 and H2.</p> <p>There are a number of listed buildings within the conservation area, none of which appear to be sensitive to setting change as a result of development within the site.</p> <p><b><u>Non-designated Assets</u></b></p> <p>A locally listed building – the Town Farm House, Blackhorse Lane – is located within the site. This asset, which comprises a small 19th century farmhouse and two outbuildings to the rear, would be susceptible to physical and setting change as a result of development.</p> <p>Two more locally listed buildings - the Old Police Station and Arlingham House - lie to the south of the western part of the site. These are unlikely to experience any meaningful setting change. However, a third locally listed building - North Mymms South Lodge - located to the north the site,</p>

SA Objective	SA Score	Justification
		<p>may be susceptible to minor setting change.</p> <p>Cumulative effects are possible on North Mymms South Lodge, if the site is developed in tandem with H2. This would cause the loss of the estate with which it is associated, and its wider rural setting.</p> <p>Heritage Gateway does not record any non-designated assets within the site.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	<p>+?/-?</p>	<p>The development of site SM3 would result in development of a large rural area on the northern edge of South Mimms. Site SM3 falls within the Catherine Bourne Valley character area, which is considered to be 'weak' with regards to strength of character. Distinctive features identified in the Landscape Character Assessment such as Castle Lime Works Quarry, could be lost by development at this site. The development of approximately 270 homes on this site could have an adverse effect on the quality of the countryside and landscape particularly considering its size in comparison to the village of South Mimms. Whilst the development would be a big impact on South Mimms itself, in line with the assessment methodology the effects are considered minor, given the overall scale and existing landscape character. However, any 'Supporting larger rural communities - growth of key villages' option must enhance the green infrastructure network including parks, green spaces and other natural features, which could enhance visual amenity. Overall, a mixed minor positive and significant negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	<p>+/-</p>	<p>Any 'Supporting larger rural communities - growth of key villages' option will include strategic pedestrian/cycle connectivity, as well as improvements to inter-urban bus services. This is expected to encourage people to use more sustainable modes of transport, therefore minimising greenhouse gas emissions by reducing dependence on the private car. Site SM3 is located within 400m of a number of bus stops but is not within close proximity of a railway station or a cycle route. However, local highway network improvements may make driving a more attractive mode of travel, thus encouraging more people to travel by car. Despite this, increased efficiency of the local highways network may reduce congestion, thus minimising greenhouse gas emissions. Overall, a mixed minor positive and minor negative effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	<p>--?/+?</p>	<p>The site is on undesignated greenfield land, however it falls within the Redwell Wood SSSI IRZ for residential developments of 50 units or more. This means that one or more SSSIs may be damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. Any 'Supporting larger rural</p>

SA Objective	SA Score	Justification
		communities - growth of key villages' option will enhance green infrastructure (including parks, green spaces and other natural features), which may lead to habitat improvements and therefore benefit biodiversity. A mixed significant negative and minor positive effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	A large proportion of the site is located within Source Protection Zones 1, 2 and 3. A minor negative but uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	-	A small part of site SM3 falls within Flood Zones 2 and 3. This may result in increases in surface water flooding, therefore a minor negative effect is expected.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Improvements to pedestrian/cycle connectivity and inter-urban bus services are expected to encourage people to use more sustainable modes of transport, therefore reducing greenhouse gas emissions by minimising dependence on the private car. Improvements to the local highway network may make driving a more attractive mode of travel, thus encouraging more people to travel by car, although increased efficiency of the highways network may reduce congestion, thus minimising greenhouse gas emissions. Although Site SM3 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site is located on Blackhorse Lane which adjoins Blanche Lane AQMA at South Mimms. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site SM3 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing	+/-	Site SM3 is not located within 500m of a local employment site or within 800m of a Town or Local Centre. The site is located between 1.0km and 2.0km of Cranborne Road existing key employment site. The site is located within 800m of two types of sustainable transport link (bus stops and a National cycle route). Overall, a mixed minor positive and minor negative effect is likely.

SA Objective	SA Score	Justification
for vital and viable town centres.		

Draft Only

## Rabley Green (H1)

This is a 'New garden village' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site H1 is not located within 1km of a secondary school or within 500m of a primary school (Shenley Primary School). However, the site would deliver 1,500 new homes and as such it would be required to provide a new education facility. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	Site H1 falls mostly within an area with 'very low' accessibility (score of 0-5). However, any 'New garden village' option will provide a range of services including healthcare, open space, recreation and community facilities the site would deliver 1,500 new homes and as such it would be required to provide a new local centre. Provision of pedestrian/cycle routes and bus routes with possible guided busways to connect with other town centres is also expected to make these services and the village centre easily accessible. Overall, a significant positive effect is expected.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++?	Site H1 will provide 1,500 houses, which will contribute significantly to the level of housing in the Borough, which will likely include some affordable homes. However, development of a new village is likely to have a longer lead-in time and will need infrastructure to be in place before residents can move in. As such, housing might not be able to be provided through this option until later in the plan period, leading to some uncertainty. Overall, significant positive effects with uncertainty are considered likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>Any 'New garden village' option will provide a number of community spaces including open space, leisure and sports facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. As site H1 would deliver 1,500 homes, it would be expected to provide a new local centre.</p> <p>A small proportion of site H1 falls within the 20% most deprived areas in terms of access to housing and services. Depending on the exact layout, development of this site may help to overcome barriers to these.</p> <p>Whilst levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage, planning a new village provides greater opportunities to design out crime.</p>

SA Objective	SA Score	Justification
		As such, an overall significant positive effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	++/--	<p>Site H1 is not within 800m of an NHS GP surgery or hospital but lies within 800m of Manor Lodge playing fields, outdoor sports facilities at Cage Pond Road and Shenley Primary School's playing fields as well as some areas of green space. However, it is unknown whether the School's playing fields are publicly accessible. Any 'New garden village' option will include additional healthcare provision, as well as open space, leisure and sports facilities. This is expected to have a significant positive effect on people's health by improving access to these facilities and local capacity. Furthermore, new pedestrian and cycle routes could encourage active travel, therefore increasing physical activity of residents. In addition, bus routes with possible guided busways to connect with other town centres may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, the site is located adjacent to Hertsmere's strategic road network (M25), where high pollution levels and noise disturbance could have an adverse effect on residents of the garden village. Additionally, a PRoW runs through the site. Overall, a mixed significant positive and significant negative effect is expected.</p>
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	<p>This greenfield site consists entirely of Grade 3 agricultural land. The site also falls within the Minerals Consultation Area for sand and gravel. A minor negative effect is likely overall.</p>
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><b><u>Designated Assets</u></b></p> <p>Development within the site could potentially have an adverse effect on two Grade II listed buildings within the site - Rabley Park Farmhouse and a barn 15m to the west of it, either physically or in terms of setting. Loss of the buildings would result in a significant adverse effect.</p> <p>A very small part of Shenley Conservation Area extends into the site. Development could have a negative adverse effect on the character and special historic interest of the conservation area, as it derives its special historic interest and character from its largely intact historic layout and rural setting.</p> <p>A number of Grade II listed buildings lie within the conservation area to the west of the site. Of these there is the potential for harmful setting change to Shenley Hill Farmhouse and a barn 30m</p>



SA Objective	SA Score	Justification
		<p>east of it, and Shenley Hall all of these assets have historical and functional relationships with the surrounding rural land, which was formerly the parkland of Shenley Hall.</p> <p>In addition Manor Cottages and Elliot's Farmhouse, Shenley Lodge Farm and Ravenscroft Farm. are likely to have a functional and as well as historical relationship with the rural landscape that forms the majority of the site. The reduction of this will have a negative effect on their setting and the ability to understand the buildings.</p> <p><u>Non-designated Assets</u></p> <p>Several locally listed buildings lie within the Conservation Area as it extends east into the site but none are likely to adversely affected by development of the site.</p> <p>Heritage Gateway suggests that Rabley Park, which lies to the west of the site, may be a non-designated heritage. This asset comprises a small post-medieval park (with possible medieval origins) and 19th century country house. There is the potential for this asset to experience setting change as a result of development within the site.</p> <p>Heritage Gateway also records a pillbox (6612) beyond the site to the south. This may have a historical and functional relationship with WWII defences within the site (see below). This relationship would be lost as a result of development within the site.</p> <p>There are no Sites of Archaeological Interest within the site. However, Heritage Gateway records multiple assets within the site. These include: two chalk pits (9211 and 9212); the site of former brickworks and brick fields (9210 and 9563); two linear cropmarks (10256); and an anti-tank obstacle (6610). There is also the potential for unknown remains. The chalk pits – which are of negligible value - have been reused for landfill and there is unlikely to be any archaeological potential surviving within their footprint.</p> <p>In the areas subject to post-medieval brickearth quarrying it is also unlikely that archaeological remains of earlier date will survive, but there may be remains relating to the brickworks themselves.</p> <p>Where archaeological remains are present they will be subject to damage or total removal as a result of development.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of</p>	<p>--?/+?</p>	<p>The development of up to 1,500 homes through a new garden village would have significant effects on the landscape, due to the scale of such development in a predominantly rural area. The development of site H1 would result in development of a large, rural area outside existing</p>

SA Objective	SA Score	Justification
countryside and landscape.		settlement boundaries. However, any 'New garden village' option will make provision for the enhancement of the green infrastructure network including parks, green spaces and other natural features, which may help to ensure the new village is an attractive settlement. Site H1 falls within two character areas (21. High Cannons Valleys and Ridges, 27. Catherine Bourne Valley), one (21. High Cannons Valleys and Ridges) of which is considered to be 'moderate' in character, and the other (27. Catherine Bourne Valley) 'weak'. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a mixed significant negative uncertain and minor positive uncertain effect is expected.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/ -	Any 'New garden village' option will provide new pedestrian/cycle routes, as well as the provision of bus routes with possible guided busways to connect with other town centres. This is expected to minimise dependence on the private car and greenhouse gas emissions. Additionally, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. Site H1 is located within 400m of a number of bus stops, but is not within close proximity of a railway station or a cycle route. Furthermore, development of this size is expected to provide employment opportunities, minimising the need to out-commute for work. However, the development of around 1,500 homes is expected to significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated greenhouse gas emissions. As such, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains Shenley Chalk Mine RIGS, three Local Wildlife Sites (Shenley Chalk Mine, Dovers Green Lane and Packhorse Lane Pits), three Ecosites (Pinks Meadow, Field West of Rabley Willow and St Catherin Farm Meadow) and BAP Priority Habitats, namely small areas of deciduous woodland. It is also located within close proximity of an area of ancient woodland (Combe Wood) and other habitats and designated sites. These habitats and designations may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson. However, any 'New garden village' option is required to enhance the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. Despite this and due to the scale of development, it is considered unlikely that any effects on biodiversity can be avoided. A mixed significant negative and minor positive effect is therefore likely. This effect is uncertain as it depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b>	-?	Part of the site is located within Source Protection Zones 1, 2 and 3. A minor negative but

SA Objective	SA Score	Justification
To improve water quality and manage water resources sustainably.		uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	H1 contains less than 25% of land within Flood Zone 2 and less than 5% of land within Flood Zone 3. Therefore, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Provision will be made for pedestrian and cycle routes in any 'New garden village' option, as well as bus routes with possible guided busways to connect with other town centres. This is likely to reduce dependence on the private car, therefore minimising local air pollution. Furthermore, high speed broadband network improvement may increase the ability of residents to work from home, reducing the number of journeys they make by car, therefore minimising local air pollution. Additionally, development this size is expected to provide employment opportunities, minimising the need to out-commute for work. However, the development of up to 1,500 new homes is expected to significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated air pollution. This may have adverse effects on local air quality. Although site H1 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The site abuts the M25 which adjoins Blanche Lane AQMA at South Mimms. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site H1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	Development of a garden village to provide 1,500 new homes is likely to deliver of new employment opportunities in the Borough. The garden village would also include a local centre, which may also provide some employment opportunities. The garden village would include high speed broadband network improvements, which may make the area more attractive to businesses and/or increase the ability of residents to work from home, thus further broadening employment opportunities and economic growth. The site is also located within 800m of one sustainable transport link (bus stops). Overall, a significant positive effect is likely

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## Tyttenhanger Estate (H2)

This is a 'New Garden Village' Option

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site H2 is not located within 1km of a secondary school or within 500m of a primary school. However, as the site would provide 4,000 or more homes, there would be a requirement to make provision for at least one new education facility to serve the increased population. A significant positive effect is therefore likely.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'very low' accessibility (score of 0-5). However, as site H2 would deliver 4,000 or more new homes, it would be expected to provide a new local centre, which would provide residents with access to services and facilities. The development will also be required to provide new open space, leisure, recreation and community facilities. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++?	Site H2 will provide 4,000 or more houses, which will contribute significantly to the provision of housing in the Borough, including affordable homes. Furthermore, this scale of development is expected to provide a mix of housing. However, development of a new village is likely to have a longer lead-in time and will need infrastructure to be in place before residents can relocate to the area. As such, housing might not be able to be provided through this option until later in the plan period, leading to some uncertainty. Overall, significant positive effects with uncertainty are considered likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>According to the Issues and Options document, any 'new garden village' options will make provision for community spaces including open space, leisure and sports facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. As site H2 would deliver up to 4,000 or more new homes, it would be expected to provide a new local centre. Site H2 is mostly within a 20% most deprived area in terms of access to housing and services. Development at this location may help to overcome barriers to these.</p> <p>Whilst levels of crime and fear of crime will be influenced through more detailed design proposals, which are unknown at this stage, planning a new village provides greater opportunities to design out crime. As such, an overall significant positive effect is likely.</p>

SA Objective	SA Score	Justification
<p><b>5. Health</b></p> <p>To improve population's health and reduce inequalities.</p>	++/--	<p>Site H2 would provide up to 4,000 or more new homes, which would be expected to provide new healthcare provision. The site is within 800m of a number of open spaces, including public parks, playing fields, religious grounds and recreational facilities which could encourage physical exercise. There are also a number of PROWs within 400m. The site would also be required to make provision for new open space, leisure and sports facilities according to the Issues and Options document. This is likely to have a significant positive effect on people's health by improving access to these facilities and local capacity. Furthermore, new pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improved public transport services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. There are two anaerobic digestion facilities within the site, however there are no other waste management facilities within 250m. The site is adjacent to the M25 at its south-western corner and within 200m of the A1081 and A414 at its western and northern ends which could potentially have adverse effects on health in terms of air pollution and noise. Overall, a mixed effect is identified (significant positive and significant negative).</p>
<p><b>6. Soil and minerals</b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.</p>	--	<p>This site is mostly on greenfield land. It falls on mostly Grade 3 agricultural land although more than 25% is on Grade 2 agricultural land, whilst a smaller proportion of the site falls on non-agricultural land and urban land. The site also falls within a Minerals Consultation Area for sand and gravel. However, around half of the site has already been used for minerals extraction. Despite this, development of the site could prevent minerals extraction from taking place in surrounding areas. A significant adverse effect is likely overall.</p>
<p><b>7. Historic Environment</b></p> <p>To protect and, where appropriate, enhance heritage assets and their settings</p>	--?	<p><u>Designated Assets</u></p> <p>The site contains three listed buildings; the Grade I listed Tyttenhanger House and its Grade II listed stable block and kitchen wall; as well as the Grade II listed Coursers Farm. All of these would be highly susceptible to physical and setting change. Physical change would result in a significant negative effect. So too could the potential effect of setting change.</p> <p>There is a London Coal Duty Marker immediate to the eastern boundary of the site and another to the north of the site. Development of the site may change the setting of these assets, by reducing the legibility of their relationship with each other.</p> <p>Other assets lying east of the site include a Grade II listed ice house, associated the Grade I listed North Mymms Park and Grade II listed stable block. There is dense vegetation separating the development site from these assets meaning that they should not experience any setting change,</p>

SA Objective	SA Score	Justification
		<p>although legibility of the rural origins and character of the estate as a whole would be diminished.</p> <p>To the northeast of the site there are a further four Grade II listed buildings, none of which is likely to experience adverse setting change as a result of development within the site.</p> <p>To the west of the site lies the Grade I listed Salisbury Hall and its five associated grade II listed buildings. Due to intervening development (the M25), topography and vegetation, these assets are unlikely to experience any meaningful setting change. South of Salisbury Hall there are two Grade II listed milestones along the B556, set back from which is the Grade II listed Shenley Lodge. Again, none of these assets should experience meaningful setting change.</p> <p><u>Non-designated Assets</u></p> <p>A locally listed building – the south lodge and gate piers to North Mymms Park – lie at the southeast corner of the site. The setting of this asset would be changed by development within the site, but not significantly.</p> <p>There are four sites of archaeological interest that lie wholly within the site. Two and a half of these sites also lie within an area of authorised landfill, which covers roughly half the site, and in these areas there is unlikely to be any remaining archaeological potential.</p> <p>Heritage Gateway lists a large number of assets within the site, these include Mesolithic worked flints (11570), cropmarks of circular and linear features (18087), probable ring ditches/ round barrows (11780, 7985, 9648, 2672, 9652 and 2670), linear features (18085 and 7983), an enclosure (7982) and a macula (7986); a possible medieval moated site at Courser's Farm (6214, 11527 and 18087); and a possible medieval road (17801). There are also several non-designated assets of medieval date recorded that relate to the Grade I listed Tyttenhanger House and its former estate. These include its former medieval and post-medieval park (9972 and 12765), the site of medieval buildings (12763 and 11784) and the remains of a moat and fishponds (12764). Some of these have already been investigated as a result of the on-going mineral extraction/ landfill. However, the high number of assets suggests a potential for further unknown remains which, in addition to those that remain, would be highly susceptible to physical change as a result of development.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of</p>	<p>--?/+?</p>	<p>The development of around 4,000 homes through a new garden village would have significant effects on the landscape, due to the scale of such development in a predominantly rural area. The development of site H2 would result in development of a large, rural area outside existing</p>

SA Objective	SA Score	Justification
countryside and landscape.		settlement boundaries and there is a risk of coalescence with London Colney, although this is dependent on the exact location and design of development. However, any 'New garden village' option will make provision for the enhancement of the green infrastructure network including parks, green spaces and other natural features, which may help to ensure the new village is an attractive settlement. Site H2 falls within three character areas (19. Vale of St Albans, 20. Shenley Ridge, 28. North Mymms Park and Redwell Woods), two (20. Shenley Ridge and 28. North Mymms Park and Redwell Woods) of which are considered to be 'moderate' with regards to strength of character. Distinctive features identified in the Landscape Character Assessment, such as the setting of the grain silo at Redwell Farm, could be adversely affected by development at this site. Overall, a mixed significant negative uncertain and minor positive uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	Any 'New garden village' option will provide new pedestrian/cycle routes, as well as the provision of bus routes with possible guided busways to connect with other town centres. This is expected to minimise dependence on the private car and greenhouse gas emissions. Additionally, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. Indeed site H2 is located within 400m of a number of bus stops. Furthermore, development of a garden village would include a new office/high tech business park, therefore providing employment opportunities, minimising the need to travel for work. However, the development of up to 4,000 homes is expected to significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated greenhouse gas emissions. As such, a mixed minor positive and minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--?/+?	The site contains Redwell Wood SSSI, seven Local Wildlife Sites, six Ecosites, three areas of Ancient Woodland (Coppice Wood, Cobs Ash/Cangsley Grove and Redwell/Hawkshead Woods) and BAP Priority Habitats, including deciduous woodland and good quality semi-improved grassland. It is also located adjacent to a number of additional habitats and designated sites. These habitats and designations may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including predation of species by cats and dogs, trampling and arson, although it is assumed that the SSSI will be safeguarded due to its status. However, any 'New garden village' option is required to enhance the green infrastructure network, which may lead to habitat improvements and therefore benefit biodiversity. However, due to the scale of development, it is considered unlikely that any effects on biodiversity can be avoided. A mixed significant negative and minor positive effect is therefore likely. This effect is uncertain as it



SA Objective	SA Score	Justification
		depends on the exact location and detailed design proposals of development.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	Approximately half of the site falls within a Source Protection Zone. A minor negative but uncertain effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	-	Between 5% and 25% of the site falls within Flood Zones 2 and 3, largely around, and including, the lakes in the northern part of the site. In addition, the extent of new development is likely to lead to a large increase in impermeable surfaces, particularly through the loss of greenfield land, and therefore reduce the drainage ability of the ground. This may result in increases in surface water flooding; therefore a minor negative effect is expected.
<b><u>13. Air Quality</u></b> To improve local air quality.	--/+	Provision will be made for pedestrian and cycle routes in any 'New garden village' option, as well as bus routes with possible guided busways to connect with other town centres. This is likely to reduce dependence on the private car, therefore minimising local air pollution. Furthermore, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car, therefore minimising local air pollution. Additionally, development of a garden village would include a new office/high tech business park, therefore providing employment opportunities, minimising the need to out-commute for work. However, the development of up to 4,000 new homes is expected to significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated air pollution. This may have adverse effects on local air quality. Although site H2 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The western edge of the site is bordered by the M25, which adjoins Blanche Lane AQMA at South Mimms. A mixed significant negative and minor positive effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site H2 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b>	++	Development of a garden village would include a new employment provision, due to the large size of such options. The garden village will also be required to provide a new local centre with shops,

SA Objective	SA Score	Justification
Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.		services, leisure and community facilities, which may also provide some employment opportunities. The garden village would include high speed broadband network improvements, which may make the area more attractive to businesses and/or increase the ability of residents to work from home, thus further broadening employment opportunities and economic growth. Site H2 is located within 800m of one sustainable transport link (bus stops) which will provide access to employment opportunities throughout the borough. Overall, a significant positive effect is likely.

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### Fields south of Letchmore Heath (H3)

This is a 'Meeting the Needs of Other Villages' option.

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	++	Site H3 is not located within 1km of a secondary school or 500m of a primary school, however as the site would provide up to 500 new homes, it would be expected to provide at least one education facility to service the development. As such, a significant positive effect is expected.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	++	The site is assessed as having 'very low' accessibility (score of 0-5). However, as site H3 would deliver up to 500 homes, it would be expected to provide a new local centre, which would provide residents with access to services and facilities. The development would also be required to provide new open space, leisure, recreation and community facilities and make improvements to pedestrian/cycle connectivity, as well as bus services. A significant positive effect is therefore likely.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	++	Site H3 would provide up to 500 new homes, which would contribute significantly to the provision of housing in the Borough, including affordable homes. A significant positive effect is therefore likely.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	++	<p>According to the Issues and Options document, any 'meeting the needs of other villages' option will make provision for community spaces including open space, leisure, recreation and community facilities. The provision of these spaces has the potential to increase social interaction between residents, which could help improve community cohesion at the same time as reducing anti-social behaviour. As site H3 would deliver up to 500 new homes, it would be expected to provide a new local centre.</p> <p>Site H3 falls within the 20% most deprived areas with regard to access to housing and services. Levels of crime and fear of crime will be influenced through more detailed design proposals. Overall, a significant positive effect is expected.</p>
<b><u>5. Health</u></b> To improve population's health and reduce	++/-	Site H3 would provide up to 500 new homes, which would be expected to contribute towards additional healthcare provision, however the site is outside Potters Bar and Bushey Village where

SA Objective	SA Score	Justification
inequalities.		there is additional healthcare capacity to accommodate new residents. The site is located within 800m of school playing fields and other areas of open space including allotments and religious grounds. Development would also be expected to make provision for open space, leisure and recreation facilities. This is likely to have a significant positive effect on people's health by improving access to these facilities and local capacity. Furthermore, improvements to pedestrian and cycle connectivity could encourage active travel, therefore increasing physical activity of residents. In addition, improved public transport services may reduce inequalities by improving accessibility to services and reducing reliance on the private car. The site is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. Overall, a mixed effect is identified (significant positive and minor negative).
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This site is entirely within Grade 3 agricultural land, all of which is greenfield land. The site is partly within a mineral safeguarding area for sand and gravel, which could potentially lead to the sterilisation of resources. A minor negative effect is identified overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>The site includes a very small area of Letchmore Heath Conservation Area, which otherwise lies immediately to the north of the site. Development will diminish the rural setting of the conservation area and in turn affect its character and special interest. Potential for setting change to listed buildings within the conservation area is limited, the possible exception being the Grade II listed Bhaktivedanta Manor, which lies adjacent to the site.</p> <p>There could also be minor adverse change to the Grade II listed Hillfield Farm to the southwest of the site, as a result of setting change arising from a loss of rural setting.</p> <p>Two more conservation areas - Round Bush and Pratchetts Green and Delrow - could also be adversely affected as a consequence of setting change, although only to a minor extent.</p> <p><u>Non-designated Assets</u></p> <p>There are a number of locally listed buildings within 500m of the site but none are likely to have their heritage significance adversely affected via their setting.</p> <p>The HER records findspots of Roman tile, medieval to post-medieval pottery and a post-medieval</p>

SA Objective	SA Score	Justification
		coin hoard within the site. There is also a cropmark (10823) interpreted as a post-medieval field boundary. The latter will be susceptible to physical change.
<b>8. Landscape</b> To maintain and enhance the quality of countryside and landscape.	+?/-?	<p>The site is within one Landscape Character Area (22. Borehamwood Plateau) which has a moderate strength of character. The development of site H3 could have an adverse effect on the quality of the landscape through the loss of rural, open land.</p> <p>Development of this type would be required to enhance the green infrastructure network (including parks, green spaces and other natural features) which could contribute towards visual amenity, although the extent of this provision is currently unknown. A mixed effect (minor positive uncertain effect and minor negative) is identified.</p>
<b>9. Greenhouse Gas Emissions</b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	+/-	<p>Site H3 is within walking distance (400m) of two bus stops, although there are no other sustainable transport modes within walking distance. Development of the site will make improvements to pedestrian/cycle connectivity, as well as bus services, although the extent of this and potential uptake by residents is currently unknown. This is expected to minimise greenhouse gas emissions, at the same time as reducing dependence on the private car. Additionally, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. However, the development of around 500 homes is expected to significantly increase the amount of cars on the road overall, despite availability of more sustainable transport modes, and therefore may increase congestion and associated greenhouse gas emissions. As such, a mixed minor positive uncertain and minor negative effect is likely.</p>
<b>10. Biodiversity and Geodiversity</b> To protect and enhance biodiversity and geodiversity.	+?/-?	<p>The development of this greenfield site is likely to have an adverse effect on biodiversity by leading to loss of previously undeveloped land. Greenfield land is generally more likely to support a greater number and range of species than developed land. A small part of the lies within a Local Wildlife Site which could be partially lost to development. However, the development of the site would be required to provide enhancement of the green infrastructure network (including parks, green spaces and other natural features), which has the potential to provide benefits to biodiversity including new biodiversity linkages across the borough, although the extent of this provision is currently not known. Overall, a mixed minor positive uncertain and minor negative uncertain effect is likely.</p>
<b>11. Water quality and quantity</b> To improve water quality and manage water	-?	<p>The site is partly located within a Source Protection Zone which could have an adverse effect on water sources therefore a minor negative effect is identified. The effect is recorded as uncertain</p>

SA Objective	SA Score	Justification
resources sustainably.		dependent upon the detailed design of the development.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Site H3 does not fall within Flood Zones 2 or 3. A negligible effect is recorded.
<b><u>13. Air Quality</u></b> To improve local air quality.	+/-	The development of this site will make provision for the improvement of pedestrian/cycle connectivity, as well as bus services within the area. This is expected to help minimise emissions of air pollutants associated with traffic, by reducing dependence on the private car. Furthermore, high speed broadband network improvements may increase the ability of residents to work from home, reducing the number of journeys they make by car. However, the development of around 500 new homes is expected to increase the amount of cars on the road despite availability of more sustainable transport modes, and therefore may increase congestion and associated air pollution. This may have adverse effects on local air quality. This site is not located within an AQMA, and is unlikely to generate traffic that uses an AQMA route as its primary access. Therefore, a mixed minor positive effect and minor negative effect is expected.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site H3 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	+/-	Site H3 is within 800m of a number of bus stops which would provide residents with access to employment opportunities throughout the borough. In addition, this development site would include high speed broadband network improvements, which may make the area more attractive to businesses and may increase opportunities for residents to work from home, further broadening employment opportunities and economic growth. Site H3 is, however, located more than 1000m from an existing or key employment and further than 500m from an existing local employment site which may limit the potential for local employment opportunities. Overall, a mixed minor positive uncertain and minor negative effect is likely.

## Employment Sites

### Centennial Land (EMP1)

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	EMP1 is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	--	EMP1 is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located within 200m of Hertsmere's strategic road network (A411), where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including	-	This greenfield site consists entirely of Grade 3 agricultural land. The site falls partly within a Minerals Consultation Area. Overall, a minor negative effect is likely.

SA Objective	SA Score	Justification
reducing contamination and prioritising previously developed land, as well as protecting mineral resources.		
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	0?	<p><u>Designated Assets</u></p> <p>There are no designated assets within or, immediate to the site.</p> <p>Elstree Conservation Area lies to the east of the site and within it a Grade II listed building - Hill House. Neither of these assets should be meaningfully affected by development within the site.</p> <p><u>Non-designated Assets</u></p> <p>The locally listed Edgwarebury House and farm buildings lie near to the site but development of it should not affect their setting.</p> <p>The site does not contain any Sites of Archaeological Interest. Heritage Gateway records no assets within the site.</p>
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	-?	<p>The development of this employment site could have an adverse effect on the quality of the countryside and landscape because it would result in the development of a rural area within close proximity to the edge of Elstree, adjacent to Aldenham Reservoir. EMP1 falls within one character area (22. Borehamwood Plateau) considered to be 'Moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	-	<p>EMP1 is located within 400m of one sustainable transport link (bus stops). As such, a minor negative effect is likely.</p>
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	--	<p>This site contains an Ecosite (Land S. of Watford Road, Elstree) and area of deciduous woodland, which is a BAP Priority Habitat. It is also located adjacent to another Ecosite (Aldenham Country Park Events Field &amp; North Park) and two Local Wildlife Sites (Composers Park and Aldenham Country Park Grasslands &amp; Reservoir Margins). These designations and BAP Priority Habitat may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. A significant negative effect is</p>



SA Objective	SA Score	Justification
		therefore likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This employment site does not fall within a Source Protection Zone. Therefore, a negligible effect is likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Although EMP1 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The A411 runs alongside the northern edge of the site, and contains an AQMA (Elstree Crossroad AQMA). Overall, a significant negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore EMP1 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	EMP1 is a large allocation that is approximately 7ha in size. Overall, a significant positive effect is likely.

### Elton Way Sanders Laing (EMP2)<sup>88</sup>

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	Site EMP2 is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	--	Site EMP2 is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility which could adversely affect employee health. However, it is located adjacent to Hertsmere's strategic road network (M1), where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising	-	This mainly greenfield site falls on Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.

<sup>88</sup> Land NE side of Western Avenue lies entirely within this site.

SA Objective	SA Score	Justification
previously developed land, as well as protecting mineral resources.		
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<p><u>Designated Assets</u></p> <p>There are no designated assets within the site. Patchetts Green and Delrow Conservation Area lies to the northeast of the site, on the opposite side of the M1. It is possible that development of the site may result in a minor adverse effect on the conservation area, but none of the Grade II buildings within it are likely to be affected.</p> <p><u>Non-designated Assets</u></p> <p>There are no locally listed buildings in or near the site.</p> <p>There are no Sites of Archaeological Interest in the site.</p> <p>There are no non-designated assets within the site and approximately 50% of the site has been utilised for historic landfill, meaning that archaeological deposits are unlikely to survive in this area.</p>
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	-?	<p>The development of site EMP2 would result in development of a large, mostly greenfield area on the edge of Patchetts Green. EMP2 falls within one character area (15. Bushey Swords), which is considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	-	<p>Site EMP2 is located within 400m of one sustainable transport link (bus stops). As such, a minor negative effect is likely.</p>
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	-	<p>Site EMP2 lies mostly on greenfield land and is also within an Ecosite (Meadow N. of Great Western Avenue). It is also located within close proximity to other Ecosites. The site and surrounding area also contains some deciduous woodland, which is a BAP Priority Habitat. This habitat and designations may be damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. A minor negative effect is</p>

SA Objective	SA Score	Justification
		therefore likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	Site EMP2 is within a Source Protection Zone. A minor negative uncertain effect is identified although this is uncertain dependent upon the detailed design of the development.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Site EMP2 contains less than 25% of land within Flood Zone 2 and less than 5% of land within Flood Zone 3. Therefore, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Site EMP2 is directly adjacent to the AQMA at Harspring Lane off the B642 and is likely to generate traffic that will interact with the AQMA. A significant negative effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site EMP2 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	Site EMP2 is a large allocation that is approximately 25ha in size. A smaller area within the site (site HEL208 in the HELAA) of around 11ha is also promoted for open storage and school use. Overall, a significant positive effect is likely for either option.

### Land east of Rowley Lane (EMP3)

SA Objective	SA Score	Justification
<b><u>1. Education</u></b>	0	Employment sites are considered to have a negligible effect on this objective.

SA Objective	SA Score	Justification
To improve access to education, training, opportunities for lifelong learning and employability.		
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	Site EMP3 is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	--	Site EMP3 is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (A1), where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This mainly greenfield site falls on Grade 3 agricultural land, whilst a smaller proportion of the site falls on urban land. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	0?	<b><u>Designated Assets</u></b> There are no statutorily designated assets within or, immediate to the site. To the north of the site there are two Grade II listed buildings – a barn and Nelson Cottage.. Neither

SA Objective	SA Score	Justification
		<p>should experience meaningful setting change as a result of development within the site.</p> <p><u>Non-designated Assets</u></p> <p>To the west of the site there are two locally listed buildings – 4 and 5 Elstree Way. Development within the site would not affect the setting of either of these assets.</p> <p>There are no Sites of Archaeological Interest within the site and Heritage Gateway records no assets. However, there is always the potential for unknown remains to be present within the site.</p>
<p><b><u>8. Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	-?	<p>The development of site EMP3 would result in development of a large, rural area on the eastern edge of Borehamwood. EMP3 falls within one character area (24. Arkley Plain), which is considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b><u>9. Greenhouse Gas Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	-	<p>EMP3 is located within 400m of one sustainable transport link (bus stops). As such, a minor negative effect is likely.</p>
<p><b><u>10. Biodiversity and Geodiversity</u></b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	-	<p>EMP3 lies adjacent to an Ecosite (Rowley Lane Pastures). It is also located within close proximity to another Ecosite (Saffron Green Pasture) and a Local Wildlife Site (Regents Shooting Ground, Rowley Green), both of which are located to the west of the A1. The area to the west of the A1 also contains some lowland meadows and deciduous woodland, which are BAP Priority Habitats. These habitats and designations may be damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. A minor negative effect is therefore likely.</p>
<p><b><u>11. Water quality and quantity</u></b></p> <p>To improve water quality and manage water resources sustainably.</p>	0	<p>Site EMP3 is not located within a Source Protection Zone. A negligible effect is therefore likely.</p>
<p><b><u>12. Flooding</u></b></p> <p>To minimise the risk of flooding taking account</p>	-	<p>Site EMP3 contains less than 25% of land within Flood Zone 2 and between 5% and 25% of land within Flood Zone 3. Therefore, a minor negative effect is likely.</p>

SA Objective	SA Score	Justification
of climate change.		
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Although site EMP3 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The southwestern edge of the site is bordered by the A5135, which contains Shenley Road AQMA. A significant negative effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site EMP3 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	Site EMP3 is a large allocation that is approximately 30ha in size. Overall, a significant positive effect is likely.

#### Rowley Lane (Safeguarded Site) (EMP3 (safeguarded))

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	0	Employment sites are considered to have a negligible effect on this objective.

SA Objective	SA Score	Justification
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	Site EMP3 (safeguarded) is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	--	Site EMP3 (safeguarded) is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (A1), where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This mainly greenfield site comprises of about 50% Grade 3 agricultural land, and around 50% land classified as urban. The site also falls within a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	0?	<p><u>Designated Assets</u></p> <p>There are no designated assets within or, immediate to the site.</p> <p>Two grade II listed buildings – a barn and Nelson Cottage - lie to the north of the site. Neither should experience meaningful setting change as a result of development within the site.</p> <p><u>Non-designated Assets</u></p> <p>To the west of the site there are two locally listed buildings – 4 and 5 Elstree Way. Development within the site would not affect the setting of either of these assets.</p> <p>There are no Sites of Archaeological Interest within the site and Heritage Gateway records no assets. However, there is always the potential for unknown remains to be present within the site.</p>



SA Objective	SA Score	Justification
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	-?	The development of site EMP3 (safeguarded) would result in development of a large area on the eastern edge of Borehamwood. Site EMP3 (safeguarded) falls within one character area (24. Arkley Plain), which is considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	-	Site EMP3 (safeguarded) is located within 400m of one sustainable transport link (bus stops). As such, a minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	-	Site EMP3 (safeguarded) lies adjacent to an Ecosite (Rowley Lane Pastures). It is also located within close proximity to another Ecosite (Saffron Green Pasture) and a Local Wildlife Site (Regents Shooting Ground, Rowley Green), both of which are located to the west of the A1. The area to the west of the A1 also contains some lowland meadows and deciduous woodland, which are BAP Priority Habitats. These habitats and designations may be damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. A minor negative effect is therefore likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	Site EMP3 (safeguarded) is not located within a Source Protection Zone. A negligible effect is therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	-	Site EMP3 (safeguarded) contains less than 25% of land within Flood Zone 2 and between 5% and 25% of land within Flood Zone 3. Therefore, a minor negative effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Site EMP3 (safeguarded) is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The southwestern edge of the site is bordered by the A5135, which contains Shenley Road AQMA. A significant negative effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more

SA Objective	SA Score	Justification
energy efficiency, and to increase the use of renewable energy.		by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site EMP3 (safeguarded) is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	Site EMP3 (safeguarded) is a large allocation that is approximately 15ha in size. Overall, a significant positive effect is likely.

Draft Only

### Land adj to Elstree Road, A41 and Dagger Lane (EMP4)

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	EMP4 is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	---	EMP4 is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located within 200m of Hertsmere's strategic road network (A41 and M1), where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site consists entirely of Grade 3 agricultural land. The site does not fall within a Minerals Consultation Area. Overall, a minor negative effect is likely.

SA Objective	SA Score	Justification
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	0?	<u>Designated Assets</u> There are no designated assets within or, immediate to the site. There is a Grade II listed building - Caldecote - to the west of the site; it should not be affected by development within the site. <u>Non-designated Assets</u> There is a single locally listed building- Caldecote Cottage - to the west of the site. Its setting should not be sensitive to change as a result of development within the site. There are no Sites of Archaeological Interest within the site and Heritage Gateway records no assets within it. However, there is always the risk of unknown archaeological remains being present.
<b><u>8. Landscape</u></b> To maintain and enhance the quality of countryside and landscape.	-?	The development of this employment site could have an adverse effect on the quality of the countryside and landscape because it would result in the development of a rural area within close proximity to Elstree, adjacent to Aldenham Country Park and Aldenham Reservoir. EMP4 falls within one character area (22. Borehamwood Plateau) considered to be 'Moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.
<b><u>9. Greenhouse Gas Emissions</u></b> To reduce greenhouse gas emissions, including a reduced dependence on the private car.	-	EMP4 is located within 400m of one sustainable transport link (bus stops). As such, a minor negative effect is likely.
<b><u>10. Biodiversity and Geodiversity</u></b> To protect and enhance biodiversity and geodiversity.	-	This site lies adjacent to two Local Wildlife Sites (Hilfield Park Reservoir and Aldenham Country Park Grasslands & Reservoir Margins), an Ecosite (Aldenham Country Park Events Field & North Park), a Nature Reserve (Hilfield Park Reservoir) and a number of areas of deciduous woodland, which is a BAP Priority Habitat. These habitats and designations may be damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. Overall, a minor negative effect is likely.
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	This employment site does not fall within a Source Protection Zone. Therefore, a negligible effect is likely.

SA Objective	SA Score	Justification
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	This site does not fall within Flood Zones 2 or 3. A negligible effect is therefore likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Although EMP4 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA route as its primary access. The A411 runs alongside the southern edge of the site, and contains an AQMA (Elstree Crossroad AQMA). Overall, a significant negative effect is likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore EMP4 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	EMP4 is a large allocation that is approximately 16.9ha in size. Overall, a significant positive effect is likely.

#### Wrotham Park west of Baker Street (EMP5)

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>2. Services</u></b>	0	Employment sites are considered to have a negligible effect on this objective.

SA Objective	SA Score	Justification
To ensure ready access to essential services and facilities for all residents.		
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	EMP5 is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is likely.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	--	EMP5 is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility. However, it is located adjacent to Hertsmere's strategic road network (M25), where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site consists of Grade 3 agricultural land. The site also falls within a Minerals Consultation Area for sand and gravel. A minor adverse effect is likely overall.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	--?	<p><u>Designated Assets</u></p> <p>This site contains two Grade II listed buildings – Bridgefoot Farmhouse and a cottage 30m south of it. Both of these assets would be susceptible to physical change and significant setting change.</p> <p>In the wider area there are another two Grade II listed buildings to the south of the site on the opposite side of the M25 – Dancers Hill Farmhouse and a bridge over Mimmshall Brook. Neither asset should be susceptible to setting change as a result of development within the site.</p> <p><u>Non-designated Assets</u></p> <p>There are no Sites of Archaeological Interest within the site, although one lies at the northern edge</p>

SA Objective	SA Score	Justification
		<p>of the study area.</p> <p>There are three locally listed buildings in the study area – the Stafford Arms, Windmore Hall and Bridgefoot Lodge. The latter asset would be susceptible to setting change as a development would affect its historic and functional relationship with Bridgefoot Farmhouse and Cottage; the other two assets would not be affected. Neither of the other local listed buildings – Windmore Hall and Strafford Arms – would be affected.</p> <p>There are no Sites of Archaeological Interest recorded within the site. Heritage Gateway records several assets including the site of a purported (but unsubstantiated) medieval settlement at South Mimms (1027) and the site of the post-medieval Bridgefoot House and the gardens and park that were formerly associated with it (16614). Any remains associated with these assets would be damaged or entirely lost as a result of development.</p> <p>Also recorded within the site are the findspot of a Roman coin hoard (9240) and another of a medieval seal matrix (15922). These assets have already been removed and so would not be subject to physical change.</p>
<p><b>8. Landscape</b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	-?	<p>The development of EMP5 would result in development of a large rural area on the edge of Potters Bar, to the southwest. EMP5 falls within one character area (24. Arkley Plain) considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b>9. Greenhouse Gas Emissions</b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	+	<p>EMP5 is located within 400m of two sustainable transport links (bus stops and a National cycle route). As such, a minor positive effect is likely.</p>
<p><b>10. Biodiversity and Geodiversity</b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	--	<p>The site contains Bridgefoot House area Local Wildlife Site, as well as Wood and Green Lane off Bridgefoot Lane Ecosite. It also contains four areas of deciduous woodland, which is a BAP Priority Habitat. Furthermore, the site is located directly adjacent to a number of Local Wildlife Sites, Ecosites and BAP Priority Habitats. These designations and habitats may be directly lost to or damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. A significant negative effect is therefore likely.</p>

SA Objective	SA Score	Justification
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	-?	Part of this site falls within Source Protection Zones 1, 2 and 3. A minor negative but uncertain effect it therefore likely.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	EMP5 contains less than 5% of land within Flood Zone 3 and less than 25% of land within Flood Zone 2. Therefore, a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Although EMP5 is not located within an AQMA, it is still likely to generate traffic that uses an AQMA as its primary access. The site lies adjacent to the M25, which adjoins Charleston Paddocks AQMA. A significant negative effect is therefore likely.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore EMP5 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	EMP5 is a large allocation that is approximately 101.9ha in size. Overall, a significant positive effect is likely.

#### Aldenham Reservoir (EMP6)

SA Objective	SA Score	Justification
<b><u>1. Education</u></b> To improve access to education, training,	0	Employment sites are considered to have a negligible effect on this objective.



SA Objective	SA Score	Justification
opportunities for lifelong learning and employability.		
<b><u>2. Services</u></b> To ensure ready access to essential services and facilities for all residents.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>3. Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs.	0	Employment sites are considered to have a negligible effect on this objective.
<b><u>4. Community Cohesion</u></b> To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces.	0	Site EMP6 is not located within one of the 20% most deprived areas in terms of access to employment within the Borough; therefore a negligible effect is identified.
<b><u>5. Health</u></b> To improve population's health and reduce inequalities.	--	Site EMP6 is not located within 500m of an anaerobic digestion facility or within 250m of any other waste management facility which could adversely affect employee health. However, it is located adjacent to the A411: Watford Road, where high pollution levels and noise disturbance could have an adverse effect on users of the employment site. Overall, a significant negative effect is likely.
<b><u>6. Soil and minerals</u></b> To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources.	-	This greenfield site falls on Grade 3 agricultural land. The site also falls within 250m of a Minerals Consultation Area for sand and gravel. Overall, a minor negative effect is likely.
<b><u>7. Historic Environment</u></b> To protect and, where appropriate, enhance heritage assets and their settings	-?	<b><u>Designated Assets</u></b> There are no designated assets on the site. However, to the northeast of the site are Aldenham House, a Grade II Registered Park and Garden. Within which there is the Grade II listed Butterfield Cottages and Home Farm House as well as the Grade II* listed Aldenham House and Stable block and a scheduled monument (Penne's Place moated site). Development within the site would result

SA Objective	SA Score	Justification
		<p>in a minor change to the historic rural setting of the registered park and the Grade II registered cottages.</p> <p><u>Non-designated Assets</u></p> <p>There are no locally listed buildings within the site or its vicinity but Heritage Gateway records the 19th century Fishery Inn (30810) in the southeast of the site. This asset is extant and highly susceptible to physical and setting change.</p> <p>Further non-designated assets within the site include the reservoir and dam (9040), which was built in the 1790s by Napoleonic prisoners of war, to maintain Grand Junction Canal water levels. It is assumed that this asset will be retained but it will remain susceptible to setting change. The site of the former Pump Master House (30891), which has subsequently been built over, is also identified. As archaeological remains this asset is susceptible to physical change.</p>
<p><b><u>8. Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape.</p>	-?	<p>The development of site EMP6 would result in development around the edge of Aldenham Reservoir. EMP6 falls within one character area (22. Borehamwood Plateau), which is considered to be 'moderate' with regards to strength of character. No distinctive landscape features identified in the Landscape Character Assessment are likely to be affected by development, although development around the reservoir edge could interrupt views to and from the reservoir and its setting. Overall, a minor negative but uncertain effect is likely, as effects depend on the exact size, location and design of development.</p>
<p><b><u>9. Greenhouse Gas Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car.</p>	-	<p>Site EMP6 is located within 400m of one sustainable transport link (bus stops). As such, a minor negative effect is likely.</p>
<p><b><u>10. Biodiversity and Geodiversity</u></b></p> <p>To protect and enhance biodiversity and geodiversity.</p>	-	<p>The developable area of site EMP6 lies on greenfield land and is also within an Ecosite (Aldenham Country Park Events Field). It is also located within close proximity to other Ecosites. The site and surrounding area also contains some deciduous woodland, which is a BAP Priority Habitat. This habitat and designation may be damaged by development, or may be degraded through an increase in urban edge effects, including trampling and noise and light disturbance. A minor negative effect is therefore likely.</p>

SA Objective	SA Score	Justification
<b><u>11. Water quality and quantity</u></b> To improve water quality and manage water resources sustainably.	0	Site EMP6 is not within a Source Protection Zone. A negligible effect is identified.
<b><u>12. Flooding</u></b> To minimise the risk of flooding taking account of climate change.	0	Site EMP6 is not within Flood Zone 2 or 3, therefore a negligible effect is likely.
<b><u>13. Air Quality</u></b> To improve local air quality.	--	Site EMP6 is not within an AQMA; however Elstree Crossroads AQMA is within 600m to the east and is likely to interact with traffic associated with site EMP6. A significant negative effect is therefore identified.
<b><u>14. Energy Efficiency</u></b> To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy.	0	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore site EMP6 is not expected to have an effect on this SA objective.
<b><u>15. Economy</u></b> Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres.	++	Site EMP6 is a large allocation, with a developable area of approximately 10ha in size. Overall, a significant positive effect is likely.