

Sustainability Appraisal (SA) of the Brentwood Local Plan

Interim SA Report

REVISION SCHEDULE					
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INTRODUCTION

1 BACKGROUND

- 1.1.1 AECOM is commissioned to undertake Sustainability Appraisal (SA) in support of the emerging Brentwood Local Plan. SA is a mechanism for considering and communicating the likely effects of a draft plan, and alternatives, with a view to avoiding and mitigating adverse effects and maximising the positives. SA of Local Plans is a legal requirement.¹

2 SA EXPLAINED

- 2.1.1 It is a requirement that SA is undertaken in-line with the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004, which were prepared in order to transpose into national law the EU Strategic Environmental Assessment (SEA) Directive.²
- 2.1.2 In-line with the Regulations, a report (known as **the SA Report**) must be published for consultation alongside the draft plan that essentially ‘identifies, describes and evaluates’ the likely significant effects of implementing ‘the plan, and reasonable alternatives’.³ The report must then be taken into account, alongside consultation responses, when finalising the plan.
- 2.1.3 More specifically, the SA Report must answer the following **three questions**:
1. What has Plan-making / SA involved **up to this point**?
 - Including with regards to consideration of ‘reasonable alternatives’.
 2. What are the SA findings **at this stage**?
 - i.e. in relation to the draft plan.
 3. What happens **next**?
 - What steps will be taken to finalise the plan?
 - What measures are proposed to monitor plan implementation?

2.2 This Interim SA Report

- 2.2.1 At the current stage of plan-making the Council is consulting on an *early* draft plan. This ‘Interim’ SA Report is therefore produced (voluntarily) with the intention of informing the consultation and subsequent preparation of the final draft (‘proposed submission’) plan.

Structure of this Interim SA Report

- 2.2.2 Despite the fact that this is an ‘Interim’ SA Report, and does not need to provide the information required of the SA Report, it is nonetheless helpful to structure this report according to the three questions listed above.
- 2.2.3 Before answering Question 1, there is a need to further ‘set the scene’ by answering two initial questions.

¹ Since provision was made through the Planning and Compulsory Purchase Act 2004 it has been understood that local planning authorities must carry out a process of Sustainability Appraisal alongside plan-making. The centrality of SA to Local Plan-making is emphasised in the National Planning Policy Framework (2012). The Town and Country Planning (Local Planning) (England) Regulations 2012 require that an SA Report is published for consultation alongside the ‘Proposed Submission’ plan document.

² Directive 2001/42/EC

³ Regulation 12(2)

3 WHAT IS THE PLAN SEEKING TO ACHIEVE?

- 3.1.1 Once in place, the Local Plan will establish a spatial strategy for growth and change in the Borough over the next 15 years, allocate sites and establish the policies against which planning applications will be determined.
- 3.1.2 The Local Plan will be in general conformity with the National Planning Policy Framework (NPPF), and in-line with planning legislation and regulations including the Localism Act 2011. The Act places a duty on the Council to co-operate with neighbouring authorities - including Basildon, Chelmsford, Epping Forest, Havering and Thurrock - in order to ensure that 'larger than local' issues/opportunities are addressed. Similarly, the Council is required to cooperate with other authorities such as Essex County Council and the Highways England.
- 3.1.3 The Local Plan seeks alignment with the Council's Corporate Plan 2016-19, which identifies the following overarching priorities: 1) Environment and Housing Management; 2) Community and Health; 3) Economic Development; 4) Planning & Licensing; 5) Transformation.
- 3.1.4 The specific objectives that have been developed for the Local Plan are listed in Table 3.1.

Table 3.1: The plan objectives

Plan theme	Plan objective
Managing growth	<ul style="list-style-type: none"> • Direct development growth to the Borough's transport corridors and urban areas in locations well served by existing and proposed local services and facilities • Manage development growth to that capable of being accommodated by existing or proposed infrastructure, services and facilities
Sustainable communities	<ul style="list-style-type: none"> • Plan for housing that meets the needs of the Borough's population and contributes to creating inclusive, balanced, sustainable communities
Economic prosperity	<ul style="list-style-type: none"> • Foster a prosperous, vibrant and diverse local economy by attracting new commercial investment in order to maintain high levels of economic and employment growth • Expand and enhance Brentwood Town Centre's retail offer in particular opportunities for high quality niche shopping • Promote and encourage the continued success of Brentwood Town Centre and local centres to provide a high quality public realm and mixed use development • Optimise the social and economic benefits that arise from Crossrail for the benefit of residents, businesses and visitors to the Borough • Promote and support a prosperous rural economy
Environmental protection and enhancement	<ul style="list-style-type: none"> • Safeguard the Green Belt from inappropriate development and enhance beneficial use • Protect and enhance valuable landscapes and the natural and historic environment
Quality of life and community infrastructure	<ul style="list-style-type: none"> • Protect and nurture existing leisure, cultural and recreational assets such as the Borough's Country Parks for residents and visitors to the Borough and promote and enhance social inclusion, health and wellbeing • Improve public transport, cycling and walking facilities and encourage sustainable transport choices • Secure the delivery of essential infrastructure, including transportation schemes and community facilities in order to support new development growth throughout its delivery

3.2 What is the Local Plan not seeking to achieve?

- 3.2.1 It is important to emphasise that the plan will be strategic in nature. Even the allocation of sites should be considered a strategic undertaking, i.e. a process that omits consideration of some detailed issues. The strategic nature of the Local Plan is reflected in the scope of the SA.

4 WHAT'S THE SCOPE OF THE SA?

4.1 Introduction

- 4.1.1 The aim here is to introduce the reader to the scope of the SA, i.e. the sustainability issues / objectives that should be a focus of (and provide a broad methodological framework for) SA.
- 4.1.2 Further information on the scope of the SA – i.e. a more detailed review of sustainability issues/objectives as highlighted through a review of the sustainability ‘context’ and ‘baseline’ - is presented in **Appendix I**.

Consultation on the scope

- 4.1.3 The Regulations require that *“When deciding on the scope and level of detail of the information that must be included in the Environmental Report [i.e. the SA scope], the responsible authority shall consult the consultation bodies”*. In England, the consultation bodies are Natural England, the Environment Agency and Historic England.⁴ As such, these authorities were consulted on the SA scope in 2013.⁵ Since that time, the SA scope has evolved as new evidence has emerged - however, the scope remains fundamentally similar to that agreed through the dedicated scoping consultation in 2013.

N.B. Stakeholders are also welcome to comment on the SA scope at the current time. Any comments received will be taken into account when undertaking **further work** in the build-up to the Draft (‘Proposed Submission’) Plan / SA Report consultation.

4.2 Key issues / objectives

- 4.2.1 The following table presents the sustainability issues/objectives (henceforth objectives) established through SA scoping, i.e. in-light of context/baseline review and consultation. Objectives are grouped under six sustainability ‘topic’. Taken together, these sustainability topics and objectives provide a methodological ‘framework’ for appraisal.

⁴ In-line with Article 6(3).of the SEA Directive, these consultation bodies were selected because *‘by reason of their specific environmental responsibilities,[they] are likely to be concerned by the environmental effects of implementing plans and programmes.’*

⁵ The SA Scoping Report is available at: <http://www.brentwood.gov.uk/index.php?cid=1219>

Table 4.1: Sustainability topics and objectives (i.e. the SA framework)

Topic	Objectives
Air quality	<ul style="list-style-type: none"> • Air pollution (and associated risks to health) must be an on-going consideration particularly that which results from traffic congestion in Brentwood Town Centre. • The health of those in the Borough must be protected from the adverse effects of development through avoidance or mitigation measures.
Biodiversity	<ul style="list-style-type: none"> • The borough's existing natural assets need to be protected from the impacts of future development and where possible enhanced. • The borough's network of green infrastructure should be protected, enhanced and strategically expanded to deliver benefits for people and wildlife. • Areas that are home to declining species or habitats should be a particular target for protection and ecological restoration.
Climate change mitigation	<ul style="list-style-type: none"> • With regionally high levels of domestic GHG emissions, it will be necessary to improve the energy efficiency of all buildings in the Borough. • A shift towards low carbon forms of transport will be required in order to reduce per capita transport related emissions. • An opportunity exists to obtain a greater proportion of energy from renewable sources. • Development should be constructed and situated in order to minimise resource use and to maximise the opportunities for reuse and recycling. • There is the need for businesses in the Borough to contribute to the creation of a low-carbon economy, including reduced levels of energy use in buildings and from transport.
Community and well-being	<ul style="list-style-type: none"> • As the number of people aged over 85 in the Borough grows there will be a need for provision of services and suitable accommodation for older people. • There is a need to reduce health inequalities. • Ensure that Gypsy and Traveller communities have suitable access to services and healthcare and that sufficient sites are available to meet demand. • Efforts are needed to tackle the Borough's high levels of inequality, with a particular focus on those areas suffering from the highest levels of deprivation. • There is a need to improve levels of educational performance in certain areas of the Borough. • As the number of young people grows there will be a need to ensure that there is sufficient provision of education facilities across the Borough. • There is a need for better access to services and facilities in rural areas of the Borough. • Improved open spaces and recreation facilities are a requirement in certain areas, with a particular focus on youth facilities needed in many places.
Cultural heritage	<ul style="list-style-type: none"> • The borough's heritage assets must be given protection relative to their importance. • Areas of identified historic character should be protected as should the historic buildings that contribute most to local character. • Development must be of an appropriate scale and design, respecting existing character.
Economy and employment	<ul style="list-style-type: none"> • There is a need to protect and support the Borough's smaller centres and parades. • The competitiveness of key employment areas such as Brentwood Town Centre (including the area around Brentwood station), and Warley Business Park must be supported, including by promoting sites for high quality office development. • Opportunities exist to support investment that leads to high value, knowledge-based

Topic	Objectives
	<p>employment activities.</p> <ul style="list-style-type: none"> • There is a need to consider future opportunities and consequences associated with the Shenfield and Brentwood Crossrail link. • There is a need to support a thriving town centre focused in and around Brentwood High Street through a good balance of shopping (comparison and convenience retail) and other uses – services, employment and residential.
Flooding	<ul style="list-style-type: none"> • Action is needed to reduce the risk of flooding, including the increased risk that climate change may pose. • There is a need to protect and enhance existing natural flood risk management infrastructure and ensure all development incorporates sustainable drainage systems to minimise flood risk.
Housing	<ul style="list-style-type: none"> • Housing affordability is a significant issue for many in the Borough and demand for affordable housing is likely to continue to rise; as such there is a need to increase delivery of affordable and intermediate housing. • New housing must be of an appropriate size, tenure and design so as to meet the needs of existing and future residents (including the elderly, disabled people and those in poor health) and ensure that people are able to remain in the Borough as their circumstances change.
Landscape	<ul style="list-style-type: none"> • The borough includes highly valued rural landscapes that require protection and careful management with a view to supporting distinctiveness. • Urban fringe landscapes should also be a focus of careful planning.
Soil and contamination	<ul style="list-style-type: none"> • There is a need to make best use of brownfield land and protect the Borough’s resource of highly productive agricultural land.
Waste	<ul style="list-style-type: none"> • A primary concern is to promote the integration of facilities to enable efficient recycling as part of new developments. • Developers should be encouraged to adopt sustainable construction practices, including handling waste arisings, recycling, and disposal in a sustainable manner as part of a life cycle approach to resource use.
Water quality and water resources	<ul style="list-style-type: none"> • Water quality is a concern in the Borough, with efforts needed to improve the ecological status of waterways. • Given the Borough’s position in an area of serious water stress, water efficiency measures should be sought.

PART 1: WHAT HAS PLAN-MAKING / SA INVOLVED UP TO THIS POINT?

5 INTRODUCTION (TO PART 1)

- 5.1.1 Plan-making has been underway since 2009, with several consultations having been held (under Regulation 18 of the Local Planning Regulations) prior to this current consultation (also under Regulation 18), and two Interim SA Reports having previously been published.
- 5.1.1 Rather than recap the entire 'story', the intention here is to explain the work undertaken in 2015/16, which led to the development of the draft plan that is currently the focus of appraisal (see Part 2, below) and consultation.
- 5.1.2 Specifically, in-line with regulatory requirements, there is a need to explain how work was undertaken to develop and then appraise **reasonable alternatives**, and how the Council then took into account appraisal findings when finalising the draft plan.⁶
- 5.1.3 More specifically still, this part of the report sets out to present information regarding the consideration of reasonable **alternative spatial strategies**, i.e. alternative approaches to the allocation of land to meet housing (and economic) needs.

What about other plan issues?

- 5.1.4 The issue of allocating land for housing is the key matter being addressed through the plan, and hence it is reasonable that it should be a focus of alternatives appraisal. From the plan objectives (see Table 3.1, above), it is apparent that 'managing growth' is an overarching plan theme.⁷
- 5.1.5 The plan is set to address a range of other issues - i.e. area specific issues and district-wide thematic issues - through 'Core' and 'Development Management' policies,⁸ however, it is reasonable and proportionate (in the view of the Council and AECOM) that policy approaches for other issues should be developed without formal alternatives appraisal, i.e. developed on the basis of technical evidence and consultation/engagement only.
- 5.1.6 Having said this, consultees are welcome to suggest other policy issues that should reasonably be the focus of alternatives appraisal. Any suggestions will be taken into account when undertaking **further SA work** subsequent to the current consultation, i.e. when preparing the proposed submission version of the plan for publication.

What about site options?

- 5.1.7 The Council has led on work to explore site options - i.e. the pool of sites that are available, deliverable and potentially suitable for allocation through the plan - however, for completeness, site options have also been appraised against the SA framework - see **Appendix II**.
- 5.1.8 The site options appraisal work that has been completed to date is limited in its scope, but proportionate in the view of AECOM and the Council. The approach taken was to focus SA work on alternatives appraisal, more so than site options appraisal.⁹
- 5.1.9 Having said this, consultees are welcome to suggest ways to increase the robustness of site options appraisal (i.e. address data limitations discussed in Appendix II). Suggestions will be taken into account when undertaking **further SA work** subsequent to the current consultation.

⁶ In line with the Environmental Assessment of Plans and Programmes Regulations (2004), there is a need to present appraisal findings in relation to 'reasonable alternatives', as well as 'an outline of the reasons for selecting the alternatives dealt with'.

⁷ In line with the Environmental Assessment of Plans and Programmes Regulations (2004), a decision on what 'reasonably' should be the focus of alternatives appraisal should be made in-light of the plan objectives.

⁸ The emerging draft plan presents c.60 Core and DM policies under the headings of Managing Growth, Sustainable Communities, Economic Prosperity, Environmental Protection & Enhancement and Environmental Protection & Enhancement.

⁹ Site options are not 'alternatives' in the sense that there is no mutually exclusive choice to be made between them.

Structure of this part of the report

5.1.10 This part of the report is structured as follows:

Chapter 6 - explains reasons for selecting the alternatives dealt with

Chapter 7 - presents an appraisal of the reasonable alternatives

Chapter 8 - explains reasons for selecting the preferred option.

6 DEVELOPING THE REASONABLE ALTERNATIVES

6.1 Introduction

- 6.1.1 This chapter explains the work undertaken in late 2015 / early 2016 to develop ‘reasonable alternatives’. This chapter:
- explains the **context and background** to alternatives development; and then
 - **explains and introduces** the reasonable alternatives.

6.2 Context and background

6.2.1 Whilst all lessons learned over the course of the plan-making / SA process were a consideration when formulating alternatives in late 2015, key considerations were lessons learned from: 1) the 2015 ‘Strategic Growth Options’ consultation; and 2) the 2015 ‘Dunton Garden Suburb’ consultation.

The Strategic Growth Options consultation (2015)

6.2.2 The **consultation document**, which was published in January 2015 alongside an Interim SA Report, essentially presented all ‘site options’, i.e. sites known to be available, deliverable and *potentially* suitable for allocation through the plan.¹⁰

6.2.3 The consultation document asked the general question - *Do you have any comments on the appropriateness of particular sites?* - as well as the following more specific questions:

- *Given the greater capacity for growth along the A127 Corridor, which of the sites put forward do you think is the best location for growth?*
- *Should the A12 Corridor accommodate growth by releasing sites on the edge of urban areas?*
- *In order to provide for local need is it preferable for greenfield sites on the edge of villages to be released, or to develop brownfield sites (both within Green Belt)?*

6.2.4 These three specific questions were posed following a discussion of the ‘issues’ associated with three broad sub-areas (see Figure 6.1), which in turn reflected understanding developed through past work. N.B. Understanding of sub-areas was then amended in light of the consultation - see discussion below (para 6.2.11).

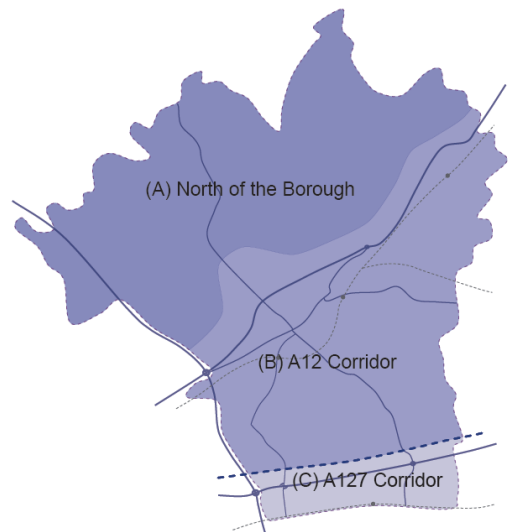


Figure 6.1: Broad sub-areas identified for the purposes of plan-making in 2015

6.2.5 The **Interim SA Report** published alongside the consultation document went a step further, in that it identified and appraised two sets of alternatives.

6.2.6 First and foremost, the report examined the following five broad spatial strategy options: 1) Dunton area focus; 2) West Horndon focus; 3) South-east of Brentwood/Shenfield focus; 4) Pilgrims Hatch focus; and 5) Numerous smaller urban extensions in the A12 corridor. The options were treated as mutually exclusive (i.e. alternatives) for the purposes of appraisal, albeit recognising that in practice a hybrid option is feasible.

¹⁰ The consultation document is available at: <http://www.brentwood.gov.uk/index.php?cid=1650>; whilst the Interim SA Report is available at: <http://www.brentwood.gov.uk/index.php?cid=1219>

6.2.7 The overall conclusion of the appraisal (after having examined the performance of each option in terms of topics/objectives that comprise the SA framework) was that:

“Overall, Options 4 and 5 perform relatively poorly in terms of a number of sustainability objectives. These options would likely lead to significant negative effects in terms of air quality (on the basis that car dependency would remain entrenched), and these two options also perform poorly in terms of objectives relating to climate change mitigation, economy and employment and housing.

Options 1, 2 and 3 perform better in comparison, most notably in terms of economy and employment objectives. Significant negative effects (at least under Options 1 and 3) would however be likely in terms of ‘landscape’ and ‘soil’ objectives.

Options 1 and 3 also perform well in terms of community and well-being considerations given relatively good accessibility to community infrastructure for residents of new communities and the potential for large scale growth to help with addressing ‘relative deprivation’ issues where they exist.”

6.2.8 Secondly, the report examined two approaches to development in the rural area - 1) Focus on greenfield sites; and 2) Focus on brownfield sites - again treating the options as alternatives, but recognising the possibility of a hybrid approach in practice. The overall conclusion reached by the appraisal was that:

“Overall across all topics, both options perform similarly. Option B, however, does perform better on some key topics such as biodiversity, cultural heritage, landscape, soil and contamination. The potential significant negative effects are the similar for both options. The dispersed nature of the proposed development means that accessibility to key community service is likely to be an issue (community and well-being). Both options are also likely to face constraints in terms of utilities, particularly waste water which has little additional capacity for growth in the north of the Borough (water quality and water resources).”

6.2.9 Initial **findings of the consultation** were published in March 2015, with a detailed consultation statement subsequently published in January 2016. The March 2015 report is particularly helpful in terms of highlighting strategic messages for consideration:¹¹

- Neighbouring authorities show widespread support for accommodating full housing need within the Borough, focusing growth along the A12 and A127 corridors and allocating new employment land close to the strategic highway network. LB Havering identified the importance of cooperation regarding employment sites at M25 junctions 28 and 29, whilst Basildon BC highlighted the importance of cooperation with regards to land at Dunton.
- Essex County Council (ECC) identified a number of locations on the strategic highway network requiring improvements; and emphasised the importance of full supporting evidence should the plan promote large scale development. Also, ECC Education & Schools highlighted lack of capacity at primary schools, particularly in the main urban area where schools tend to have limited scope to expand.
- Greater London Authority (GLA) suggested that the Council might wish to take into account uncertainty over future levels of out-migration from London; and consider scope to accommodate demand for logistics serving London and wider South East region.
- Six Parish Councils responded, with most comments relating to: suitability of specific sites, infrastructure (i.e. existing constraints and the importance of infrastructure delivery alongside future growth), and Green Belt protection.

¹¹ See <http://brentwood.moderngov.co.uk/documents/s7300/LDP%20-%20Strategic%20Growth%20Consultation%20-%20Initial%20Findings.pdf> and <http://brentwood.moderngov.co.uk/documents/s9112/Appendix%20C%20-%20Strategic%20Growth%20Options%20Consultation%20Statement.pdf> (and in particular Appendix 1).

- Highways England confirmed that whilst M25 J28 is congested, J29 is relatively underutilised; and identified that the A127 corridor represents a potential opportunity to realise transport synergy, in that a new community could be brought forward alongside existing and new employment (although any scheme at Dunton would necessitate various transport measures and strengthened transport links with the adjoining urban area).
- English Heritage (now Historic England) raised some concerns over the option of strategic growth at land east and south east of Hutton, and also the cumulative urbanisation effect on the A127 corridor if both Dunton and West Horndon were to be developed.
- Natural England encourage joint strategic planning between Brentwood and Basildon Councils, although emphasise that there are potential negative effects to consider.
- Environment Agency commented that there are opportunities associated with growth at Dunton, including as there would be opportunities to incorporate green technologies over and above opportunities at smaller sites.
- NHS England highlighted concerns about growth along the A12 corridor because of GP capacity issues, although noted that Brentwood Community Hospital has capacity. Also stated support for a strategic scale scheme as “[n]umerous smaller extensions could have impacts on existing infrastructure left unmitigated, or the level of contribution falling short of the requirements to provide adequate healthcare.”

6.2.10 Also, an outcome of the consultation was a decision to split the ‘A12 corridor’ planning area (see Figure 6.1, above) in two, in order to recognise the rural nature of the area between the A12 and A127 corridors. Figure 5.2 of the current plan consultation document explains this.

The Dunton Garden Suburb consultation¹²

6.2.11 On 4 November 2014, Brentwood and Basildon Borough Councils signed a Memorandum of Understanding setting-out the initial terms and conditions for joint project arrangements to explore a potential development opportunity on land to the east of West Horndon (in Brentwood Borough) and west of Laindon (in Basildon Borough). As part of this, the Councils agreed to prepare a joint consultation document, which was published in January 2015. An Interim SA Report was published alongside, authored by LUC (the Basildon Local Plan SA consultants), but with inputs from AECOM (the Brentwood Local Plan SA consultants).

6.2.12 At only ten pages in length, the consultation document presented only a ‘broad brush’ discussion of the issues and options. The document discussed issues arising from the strategic context of the site (e.g. 4.5 miles from the M25), the local context of the site (located between Laindon and West Horndon, with good potential for public transport links and access to services/facilities etc.) and site constraints (e.g. flood risk and biodiversity), before going on to present a broad, indicative masterplan and list potential ‘principles’. Principles included:

- 4,000- 6,000 homes
- New commercial /industrial land
- Integration with existing communities, investment in Laindon Town Centre, new community infrastructure, high quality green infrastructure and Gypsy and Traveller pitches.

6.2.13 The **SA ‘commentary’ report** presented an appraisal of the proposal under the SA framework developed for the Basildon Local Plan SA process, but with added consideration given to Brentwood specific issues/objectives. The report did not present an appraisal of alternatives, stating that: *“The proposal has been assessed on its own merits and does not consider its sustainability performance relative to other possible alternative developments. Should the Councils wish to take forward the... [proposal] it will need to be subject to further testing including the consideration of reasonable alternatives in order to decide whether it should be incorporated into their Local Plans.”*

¹² See <http://www.brentwood.gov.uk/index.php?cid=2607>

- 6.2.14 The appraisal concluded the likelihood of -
- ‘significant positive effects’ in terms of ‘Prosperity, economic growth and regeneration’ (given location and the potential to deliver employment land), ‘Town centres’ (given proximity to local centres at Laindon and Great Berry) and ‘Housing’ (given the potential for a good mix of housing, including affordable); and
 - ‘significant negative effects’ in terms of ‘Landscape’ (given the low capacity of the landscape to accommodate change), ‘Cultural heritage’ (given that the eastern part of the area sits within an area of sensitivity), ‘Biodiversity’ (given onsite and nearby habitats), ‘Efficiency of land use’ (given the greenfield nature of the site) and ‘Flood risk’ (given surface water flood risk and localised fluvial flood risk).
- 6.2.15 **Findings of the consultation** were published in December 2015, explaining that 84% of the 1,500 responses were objections to the proposals, with concerns primarily relating to: potential environmental damage and erosion of Green Belt protection; infrastructure provision not being able to cope with additional development; and delivery feasibility of the project.
- 6.2.16 The document summarises further headline concerns as relating to: development bringing a transient population and weakening the feel of local community; development not including enough jobs to support the increase in population; and flood risk. The document also explains a clear view that impacts would disproportionately be felt by communities in Basildon.
- 6.2.17 Appendix 1 then lists specific comments received, with notable concerns relating to: provision of a new railway station resulting in the closure of existing ones (e.g. Laindon and West Horndon); local school provision and GP capacity; a large Gypsy and Traveller site (as opposed to dispersed smaller sites); development having a negative impact on Thurrock; and new retail diverting shoppers from Basildon and Laindon town centres.

6.3 Developing the reasonable alternatives

- 6.3.1 In light of the context/background discussed above, the Council went through a step-wise process to develop a set of ‘reasonable’ alternative spatial strategies.
- Step 1: Establish how much land needs to be allocated**
- 6.3.2 In-line with the findings of Strategic Housing Market Assessment (SHMA),¹³ there is a need to ensure that **7,240 new homes** are delivered over the plan period (2013 - 2033) in order to meet ‘objectively assessed housing needs’ (OAHN).¹⁴ This equates to planning for delivery of 362 dwellings per annum (dpa).
- 6.3.3 **However**, there is not a need to *allocate land* for 7,240 new homes, on the basis that:
- A) Since 2013, 264 new homes have been completed in the Borough, and planning permissions are in place to deliver a further c.740 homes; and
 - B) The borough has traditionally had high levels of windfall development, and this trend can be anticipated to continue.
- 6.3.4 With regards to (B), the Council recognised that, with positive development management policies in place (e.g. policy supporting appropriate proposals within identified ‘key gateways’), it is fair to assume a large windfall allowance of c.1,000 homes, or more, over the plan period. However, the Council equally recognised that another approach could involve setting more restrictive development management policy, in which case the assumed windfall allowance reduces considerably (resulting in a need to allocate more sites).

¹³ See the report - ‘Objectively Assessed Housing Needs for Brentwood: Moving towards a Housing Target’ (PBA, 2014)

¹⁴ The National Planning Policy Framework (NPPF) emphasises the need for local authorities to plan for OAHN. There can be instances where it is appropriate to plan for a level of growth above or below that necessary to meet OAHN, but there is little reason to suggest that any such approach would be appropriate for Brentwood.

Step 2: Establish the 'givens'

- 6.3.5 Firstly, the Council recognised that all **brownfield** sites should be allocated, as far as possible, thereby minimising the need to allocate Green Belt sites. The Council's Strategic Housing Land Availability Assessment (SHLAA) has identified brownfield sites that are available, deliverable and broadly suitable; and further brownfield sites have been identified through a review of public (e.g. Council owned) assets. Ultimately, the Council identified 14 brownfield sites capable of delivering **1,267 homes** in total. This approach to brownfield development remains subject to change (e.g. on the basis of ongoing public asset review), but for the purposes of developing spatial strategy alternatives it was taken as a 'given'.
- 6.3.6 Secondly, the Council recognised that the **residual housing needs** (in the region of 4,000-5,000 homes) must be met through a combination of: A12 urban extension allocations - i.e. allocation of sites adjoining the urban area, within reach of services and infrastructure and with defensible boundaries (e.g. roads); and one or more strategic allocation - i.e. large scale development to provide new self-sustaining communities with new services, facilities and infrastructure. This principle was established on the basis of past work, e.g. on the basis of consultation responses from 2013 and 2015, which indicated a need to rule out the option of meeting all residual housing needs in the A127 corridor.
- 6.3.7 Thirdly, the Council determined preferred locations for **A12 urban extension allocations**. This decision was driven by the findings of landscape sensitivity analysis and review against Green Belt purposes (taking careful account of the presence of boundaries capable of guarding against 'sprawl' in the long term), as well as other considerations (e.g. the need to deliver housing - and potentially enable delivery of a 'park and walk' facility - in proximity to Shenfield Crossrail station). Again, it is important to be clear that the approach to A12 urban extension allocations remains subject to change, but for the purposes of developing spatial strategy alternatives the emerging preferred approach was taken as a 'given'.¹⁵

Step 3: Establish the 'variables'

- 6.3.8 On the basis of the discussion above, the Council recognised that there was a strategic choice to be made in relation to: 1) the approach to strategic allocation(s); and 3) the windfall assumption. These are the **two variables**.¹⁶
- 6.3.9 With regards to strategic allocation(s), the Council determined that: A) there are four sites still in contention; and B) there is limited potential to deliver more than one strategic site allocation (because most strategic site options are in relatively close proximity, leading to the potential for undesirable in-combination effects). On this basis, the Council identified **six options**:
- 1,420 homes at land to the north of Brentwood
 - N.B. This would encompass one of the preferred A12 urban extension allocations.
 - 2,500 homes at Dunton Hills Garden Village
 - 2,500 homes through an extension of West Horndon
 - 2,500 homes at land to the East of Running Waters, Hutton
 - 3,200 homes at Dunton Hills Garden Village and land north of Brentwood
 - 3,200 homes through an extension of West Horndon and at land north of Brentwood

¹⁵ The emerging preferred A12 urban extensions are: Officer's Meadow, Alexander Lane, Shenfield (600 homes); Land at Honeypot Lane, Brentwood (250 homes); Land off Doddinghurst Road, either side of A12, Brentwood (250 homes); Land east of Nags Head Lane, Brentwood (150 homes); Ingatestone Garden Centre, Roman Road, Ingatestone (60 homes); Land adjacent to Ingatestone by-pass, Ingatestone (42 homes); and Sow & Grow Nursery, Ongar Road, Pilgrims Hatch (37 homes).

¹⁶ The possibility of also defining the alternatives in terms of employment land was given some consideration, but ultimately dismissed. The allocation of six employment sites can be assumed regardless of the spatial strategy, and it is also known that any spatial strategy option involving allocation of Dunton Hills Garden Village or West Horndon Extension can be assumed to deliver an additional c.5ha of employment land (because mixed use schemes are proposed). There is less certainty regarding the potential to deliver employment land at North Brentwood (given the area of land available) and 'Land East of Running Waters, Hutton' (given location away from the strategic road network); however, ultimately the Council determined it best not to define the alternatives in terms of employment land.

6.3.10 With regards to the windfall assumption, the Council determined that there are **three options**: 1) Nil windfall assumption (restrictive development management policy); 1,076 windfall assumption; and 3) 2,406 (permissive development management policy).

Step 4: Establish the reasonable alternatives

6.3.11 Having given consideration to how much land needs to be allocated, and the givens / variables discussed above, the Council was in a position to establish reasonable alternative spatial strategies for appraisal - see **Table 6.1** and **Figure 6.2**.

N.B. These were determined to be the ‘reasonable’ alternatives on the basis that their appraisal would enable and facilitate discussion of numerous important issues. Whilst it was recognised that there are other spatial strategy options that could potentially feature, there is a need to limit the number of alternatives under consideration, with a view to facilitating meaningful community engagement.

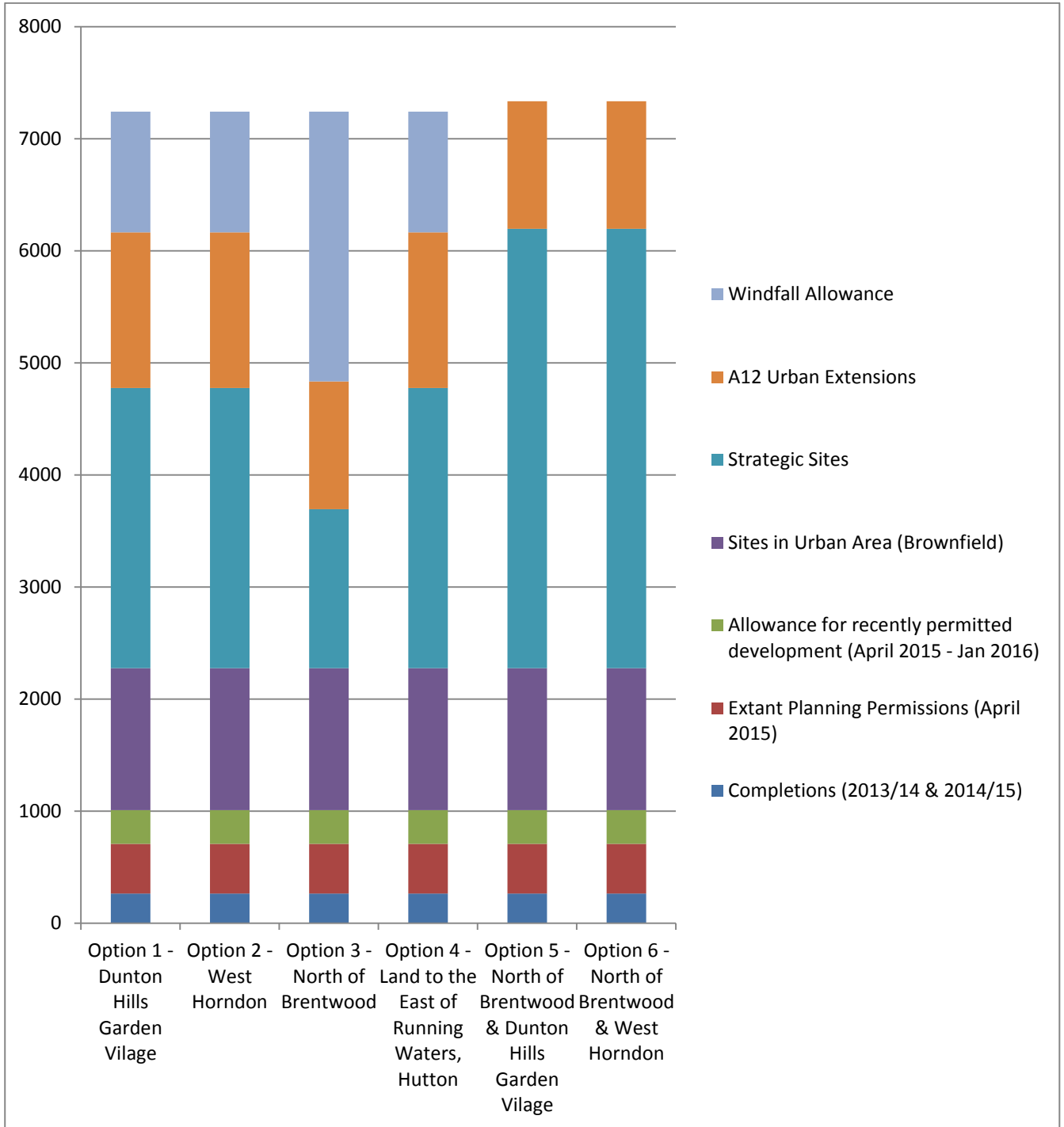
Table 6.1: The reasonable alternatives

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Completions and commitments	1,008					
Sites in urban area (brownfield)	1267					
A12 urban extensions	1389	1389	1139	1389	1139	1139
Strategic site(s)	2500 Dunton Hills Garden Village	2500 West Horndon	1420* North of Brentwood	2500 Land to the East of Running Waters, Hutton	3920 North of Brentwood & Dunton Hills Garden Village	3920 North of Brentwood & West Horndon
Windfall allowance	1076	1076	2406	1076	0**	0**
Total Dwellings	7240	7240	7240	7240	7334	7334

* An important point to note is that a strategic site at ‘North of Brentwood’ would be of a smaller scale than strategic sites elsewhere, plus it would encompass one of the preferred A12 urban extension allocations.

** The nil windfalls assumption is returned to below, in Chapter 7.

Figure 6.2: The reasonable alternatives



7 APPRAISING REASONABLE ALTERNATIVES

7.1 Introduction

7.1.1 The aim of this chapter is to present summary appraisal findings in relation to the reasonable alternatives introduced above. Detailed appraisal findings are presented in **Appendix III**.

7.1.2 The alternatives are presented in summary form in **Table 7.1**.

Table 7.1: The reasonable alternatives (summary)

Option	Strategic site(s)	Windfall allowance	Total homes
1	Dunton Hills Garden Village	Medium	OAN ¹⁷
2	West Horndon	Medium	OAN
3	North of Brentwood	Higher	OAN
4	Land to the East of Running Waters, Hutton	Medium	OAN
5	North of Brentwood & Dunton Hills Garden Village	Lower	OAN+ ¹⁸
6	North of Brentwood & West Horndon	Lower	OAN+

7.2 Summary alternatives appraisal findings

7.2.1 **Table 7.2** presents summary appraisal findings in relation to the six alternatives introduced above. Detailed appraisal methodology is explained in Appendix III, but in summary:

Within each row (i.e. for each of the topics that comprise the SA framework) the columns to the right hand side seek to both categorise the performance of each option in terms of ‘significant effects’ (using red / green) and also rank the alternatives in order of performance. Also, ‘ = ’ is used to denote instances where the alternatives perform on a par (i.e. it not possible to differentiate between them).

¹⁷ ‘Objectively Assessed Housing Need’, which for Brentwood is 362 dwellings per annum, or 7,240 over the plan period.

¹⁸ As explained in Table 6.1, Options 6 and 7 would involve delivering *marginally* (c.1%) above OAHN on the assumption that there is nil windfall development. However, in practice, there would inevitably be some windfall development, and hence it is fair to assume that either option would involve delivering *notably* above OAN. For example, 300 windfall homes would (if all other allocations are fully implemented within the plan period) mean delivering c.5% above OAHN.

Table 7.2: Summary spatial strategy alternatives appraisal findings

Topic	Rank of performance / categorisation of effects					
	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Garden Village	Option 6 North of Brentwood & West Horndon
Air quality	2	★1	5	6	4	3
Biodiversity	5	5	★1	★1	3	3
Climate change mitigation	4	3	5	5	2	★1
Community and well-being	3	4	5	5	★1	2
Cultural heritage	★1	5	★1	6	★1	4
Economy and employment	3	3	5	6	★1	★1
Flooding	=					
Housing	3	3	6	3	★1	★1
Landscape	4	★1	★1	5	4	★1
Soil and contamination	4	4	★1	4	2	2
Water quality / resources	=					

The primary **conclusion** to draw from the table is that, in terms of the majority of objectives, a strategic allocation at one or either of the A127 locations (West Horndon or Dunton Hills Garden Village) is to be supported. ‘Biodiversity’ objectives are a notable exception, although the appraisal is fairly marginal, i.e. it is not clear that there are major constraints to growth south of the A127.

With regards to other notable topics/objectives -

- Air quality - a (relatively) clear conclusion is reached that a focus of growth along the A127 corridor performs well, with options focusing growth instead along the A12 corridor / around the Brentwood Urban Area (and relying on windfall development) predicted to result in significant negative effects.
- Communities and wellbeing - there are notable opportunities associated with concentrating growth along the A127 corridor, although a North Brentwood scheme could also have some merit.
- Cultural heritage - appraisal findings reflect a view that West Horndon is constrained; however, in practice there may be the potential to avoid/mitigate effects.
- Economy and employment - particularly strong conclusions are reached, with the need to deliver new employment land along transport corridors being the primary consideration.
- Housing - Options 5 and 6 perform particularly well as planning for a level of growth slightly above the objectively assessed housing need (OAN) figure would provide some useful contingency / ‘headroom’.
- Landscape - appraisal findings reflect a view that a Dunton Hills Garden Village scheme would be significantly constrained; however, there is a need for much further work to investigate issues.

8 DEVELOPING THE PREFERRED APPROACH

8.1 Introduction

8.1.1 The aim of this Chapter is to present the Council's response to the alternatives appraisal / the Council's reasons for developing the preferred approach in-light of alternatives appraisal.

8.2 The Council's outline reasons

8.2.1 Following consideration of representations made in response to the Strategic Growth Options consultation it was evident that splitting the Borough into three areas did not sufficiently consider rural areas in the south of the Borough. The North of the Borough as set out in the Growth Options document is made up of villages set amongst rural surroundings. In the same way, the south of the Borough contains villages surrounded by countryside.

8.2.2 For the purpose of the Draft Plan and Local Development Plan going forward the Borough will be split into four areas. This is consistent with the emerging spatial strategy regarding the Borough's character and clearly defines the two transport corridors as separate areas.

8.2.3 Ultimately the spatial strategy aims to achieve the right balance between the retention of local character and meeting development needs. The development of the sequential land use for the borough considers that Green Belt land can only be considered after all suitable and available brownfield locations are brought forward first. A sequential list of sites and land types has been proposed to meet development needs for new homes and jobs - see Figure 8.1 (which is taken from the Draft Plan consultation document).

8.2.4 The preferred approach seeks to achieve balance between conserving the Borough's character and delivery of development which meets the needs of all those who live, work and visit. Key considerations are land availability, development needs, scale of growth proposed, the existing settlement pattern and hierarchy and capacity of places to accommodate growth in a sustainable manner. The Council has carefully considered evidence on all these matters from a variety of sources before reaching a view on the proposed spatial approach. Areas within the Borough's two key transport corridors create the focus for sustainable growth. This is achieved by considering suitable sites and land types sequentially.

8.2.5 Within the A12 Corridor, Brentwood and Shenfield are considered sustainable locations for growth, given excellent transport links, access to jobs and services and town centre facilities.

8.2.6 Developing in the wider Brentwood Urban Area supports redevelopment, underpinning the viability of the town centre, and provides opportunities for development where access to services and jobs is greatest. Ingatestone will help to support growth in sustainable locations although capacity constraints and land availability limit development potential. Mountnessing village will be retained as existing with recently permitted development nearby to the village making a significant contribution to the Borough's needs.

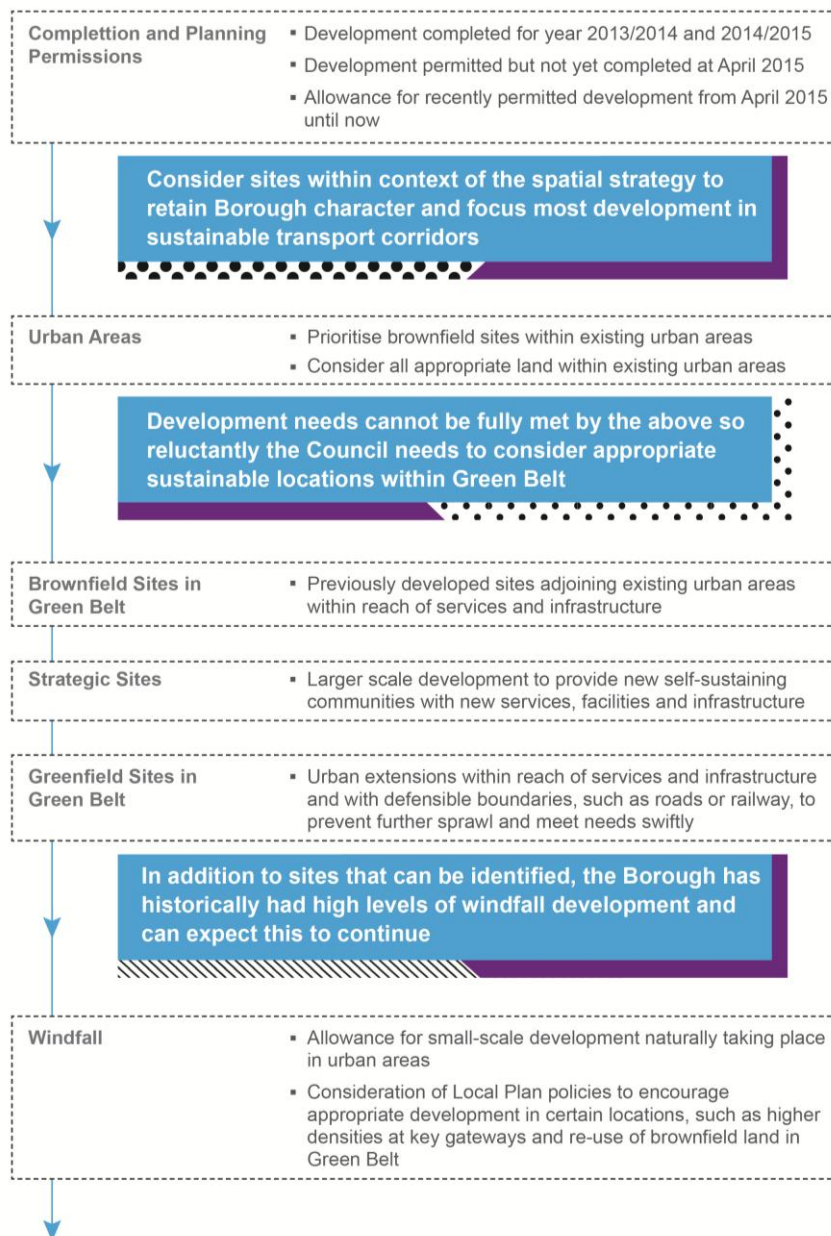
8.2.7 Within the A127 Corridor, a new strategic allocation at Dunton Hills Garden Village will provide a new mixed use self-sustaining community in the south-east of the Borough. A strategic allocation at M25 junction 29 (Brentwood Enterprise Park) will provide for the majority of new employment land needed, bringing forward a modern business park village in the south-west of the Borough with excellent access to the M25. This will also act as a focus for a M25/A127 employment cluster considering existing employment uses in the area.

8.2.8 Brownfield opportunities will be taken to effectively meet local needs, such as a residential-led mixed use redevelopment of existing industrial land in West Horndon. Growth in the Rural North and Rural South areas of the Borough will be limited to retain local character, although brownfield opportunities will be encouraged where appropriate schemes help meet local needs. Where appropriate this includes the redevelopment of previously developed sites in Green Belt and infill while improving links to nearby villages. A windfall allowance for small scale development is being considered further.

8.2.9 The process of the assessment of sites that are: suitable, available and deliverable for development within the Borough is on-going. The development of the Borough’s preferred approach has been informed by the SA, and in particular the consideration of alternatives. This has raised a range of important issues that need to be considered when deciding on the best spatial strategy, and the balance between the two transport corridors in particular. The balance that has been struck by the Council is considered appropriate, recognising that the Council’s priority is to deliver objectively assessed need whilst maintaining distinctive local character, but the Council remains open to considering matters further.

8.2.10 Brentwood Borough Council acknowledges the complexity and challenges raised by the Sustainability Appraisal, and anticipates further investigation of these matters including through the on-going commissioning and publication of evidence. The Draft Local Plan consultation will enable further comments on the development of the Plan and the identified sites, which will be used to inform the next iteration of the Plan.

Figure 8.1: The sequential approach to site selection



PART 2: WHAT ARE SA FINDINGS AT THIS CURRENT STAGE?

9 INTRODUCTION (TO PART 2)

9.1.1 The aim of this Chapter is to present an appraisal of the draft plan, as currently published for consultation.

9.2 Methodology

9.2.1 The appraisal identifies and evaluates ‘likely significant effects’ of the preferred approach on the baseline, drawing on the sustainability topics and objectives identified through scoping (see Table 4.1) as a methodological framework. To reiterate, the topics are:

- Air quality
- Biodiversity
- Climate change mitigation
- Community and well-being
- Cultural heritage
- Economy and employment
- Flooding
- Housing
- Landscape
- Soil and contamination
- Waste
- Water quality and water resources

9.2.2 Every effort is made to predict effects accurately; however, this is inherently challenging given the high level nature of the policy approaches under consideration, and understanding of the baseline (now and in the future under a ‘no plan’ scenario) that is inevitably limited. Given uncertainties there is a need to make assumptions, e.g. in relation to plan implementation and aspects of the baseline that might be impacted. Assumptions are made cautiously, and explained within the text. The aim is to strike a balance between comprehensiveness and conciseness/accessibility to the non-specialist. In many instances, given reasonable assumptions, it is not possible to predict ‘significant effects’, but it is possible to comment on merits (or otherwise) of the draft plan in more general terms. Finally, it is important to note that effects are predicted taking account of the criteria presented within Schedule 1 of the SEA Regulations.¹⁹ So, for example, account is taken of the probability, duration, frequency and reversibility of effects as far as possible. Cumulative effects are also considered, i.e. the potential for the draft plan to impact an aspect of the baseline when implemented alongside other plans, programmes and projects. These effect ‘characteristics’ are described within the appraisal as appropriate.

Adding structure to the appraisal

9.2.3 Whilst the aim is essentially to present an appraisal ‘of the draft plan’ under each of the SA topic headings, it is appropriate to also give stand-alone consideration to elements of the draft plan. As such, within the appraisal narratives below, sub-headings are used to ensure that stand-alone consideration is given to two elements of the draft plan, before the discussion under a third sub-heading concludes on the draft plan as a whole. Specifically, each narrative below is structured using the following headings:

- Commentary on the spatial strategy (as established by policies 5.1 – 5.4, 6.2, 6.5, or 6.6)
- Commentary on other (‘Core’ and ‘Development Management’) policies
- Appraisal of the draft plan

Further work?

9.2.4 The approach taken to the draft plan appraisal is considered appropriate and proportionate, recognising that the current consultation is being held under Regulation 18. It is anticipated that it will be possible to add some detail to the appraisal prior to preparing the SA Report for publication (Regulation 19). Stakeholders are welcome to comment on the approach to appraisal at the current time. Any suggestions will be taken into account when undertaking **further SA work** subsequent to the current consultation.

¹⁹ Environmental Assessment of Plans and Programmes Regulations 2004

10 AIR QUALITY

Commentary on the spatial strategy

- 10.1.1 Air quality in Brentwood is generally good; with the number of designated Air Quality Management Areas (AQMAs) soon to be reduced from seven to three. Two of the AQMAs that will remain are along the A12 (one at the M25 junction, and the other at North Brentwood / Pilgrim's Hatch), and the other is within Brentwood town centre at the A128/A1023 junction.
- 10.1.2 Policies set out to achieve the objective: *"Direct development growth to the Borough's transport corridors and urban areas in locations well served by existing and proposed local services and facilities."* As such, policies aim to reduce car travel and resulting air pollution.
- 10.1.3 **Policy 5.1:** Spatial Strategy sets out to ensure a focus of housing and employment growth along the A127 corridor, which is to be supported from an air quality perspective (also recognising that there are no designated AQMAs in Basildon Borough). There would be a need to resolve a range of transport infrastructure issues along this corridor, but early indications are that there is good feasibility.
- 10.1.4 However, the A12 corridor is also a focus for growth, through a number of smaller urban extensions. A number of these are well located - e.g. Officer's Meadow, Shenfield (easily the largest, at 600 homes) is within walking distance of the future Crossrail station - however, traffic congestion and resulting air pollution (given existing hotspots) is a concern.

Commentary on other policies

- 10.1.5 Air quality within the Borough is addressed through Policies: **6.3** (General Development Criteria (points b. and d.)); **10.1** (Sustainable Transport); **10.3** (Sustainable Construction and Energy); **10.4** (Design); **10.6** (High Quality Design Principles); and **10.11** (Air Quality).
- 10.1.6 The principle policy for Air Quality within the Local Plan is Policy **10.11:** Air Quality, which states that any development within an Air Quality Management Area (AQMA) will require a detailed air quality assessment. The policy also states that any development which is determined to have a significantly adverse impact on air quality will be rejected. The policy does not however make explicit reference to traffic congestion, which is often the leading contributor to local air pollution. Therefore, it is **recommended** that reference is made to Policy 10.1: Sustainable Transport, to encourage this link.
- 10.1.7 Also of importance is Policy **10.1:** Sustainable Transport, which seeks to reduce air pollution through promoting development in accessible locations which will reduce the need to travel; and where travelling is required, sustainable modes of transport (i.e. walking, cycling, or public transport) are to be promoted. The Council will also require developers to provide charging points for electric vehicles in major developments, which will further reduce air pollution as electric vehicles become more prevalent.

Appraisal of the draft plan as a whole

- 10.1.8 The spatial strategy performs well, given a focus of housing and employment growth along the A127 corridor, i.e. away from the designated Air Quality Management Areas (AQMAs). A degree of growth directed towards the A12 / around the main urban area gives some cause for concern, although it is noted that the largest allocation (Officer's Meadow, Shenfield) is well located, i.e. should enable good potential for 'modal shift' away from the private car. Other policies also perform well, although there is the potential to establish more detailed policies to guide development schemes, with a view to ensuring that 'sustainable transport' opportunities are fully realised. Overall, **no significant effects** are predicted.

11 BIODIVERSITY

Commentary on the spatial strategy

- 11.1.1 There is a large corridor of Biodiversity Action Plan (BAP) habitat to the south of Brentwood, running almost as far as the A127, much of which is publically accessible as Thorndon Country Park. Habitats comprise 'Deciduous Woodland' and/or 'Wood Pasture and Parkland', with three patches designated as nationally important SSSI²⁰ and other patches designated as Local Wildlife Sites. This whole area is identified by Essex Wildlife Trust as the Thorndon Woods 'Living Landscape' (one of 80 across the County), which does not indicate that human activity should be minimised, but does give pause for thought when considering strategic allocation options. This is particularly the case given that Natural England responded to the Growth Options consultation, stating that: "SA also needs to consider in more detail the recreational impacts upon the local SSSI network."²⁰
- 11.1.2 **Policy 5.1:** Spatial Strategy proposes a strategic allocation to the south of the A127, in the form of Dunton Hills Garden Village. The scheme would be in fairly close proximity to the Thorndon Park Living Landscape (with component important habitat patches), although the potential for impacts is potentially less than would be the case were the strategic allocation to be directed instead to West Horndon (see discussion of reasonable alternatives in Appendix III). Whilst the precise development footprint is yet to be determined, it seems likely that it would include (or at least adjoin) a narrow strip of ancient woodland, which follows the path of a stream (Eastlands Spring) and links to two small patches of ancient woodland to the north. These woodlands fall outside of the Thorndon Woods Living Landscape; however, the Brentwood Borough Green Infrastructure (GI) Strategy (2015) does propose this corridor as a 'Greenway'.²¹ Also, it is noted that Natural England has raised some concerns regarding this as a growth location, commenting in response to Growth Options (2015) that: "Given the scale and proximity of possible development to the Thorndon Park SSSI... and Basildon Meadows SSSI [further to the southeast], further assessment of the recreational impacts... is necessary. Both [sites] located within Country Parks with existing high-levels of public recreation. Disturbance, trampling of sensitive vegetation and nutrient enrichment from dog-fouling represent some of the issues that already pose a challenge to conserving notified special interest features"²² It may transpire that there are opportunities to 'design-in' green infrastructure, such that the role of existing habitat patches within the landscape is enhanced; however there can be little certainty. It might be suggested that strategic GI associated with Dunton Hills Garden Village (recognising that a West Basildon urban extension is also proposed) could help to functionally link Thorndon Woods to the Langdon Hills and/or the Bulphan Fen Living Landscapes to the south; however, the Council's Green Infrastructure Strategy does not highlight this possibility.²³
- 11.1.3 With regards to other locations set to be a focus of growth through **Policy 5.1** - and most notably the A12 urban extension allocations - there is a need for further work to consider in-combination effects. At the current time, it is noted that the effect will be to maintain three 'green wedges' linking Brentwood to the surrounding countryside (although the western green wedge will be narrowed as a result of an urban extension), but not to support any green wedges at Shenfield. Also, it is noted that the Officer's Meadow urban extension will impact on one area that might currently function as a green wedge (given that there are Local Wildlife Sites in the vicinity, along the train lines).

²⁰ A number of the 'units' that comprise the Thorndon Park SSSI are judged to be in 'unfavourable' condition; however, Natural England's condition report does not make reference to recreational pressures, instead primarily highlighting issues around management (e.g. the need to maintain open glades, sparse tree cover and structural diversity) and invasive species. See <https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1004248&ReportTitle=THORNDON%20PARK>

²¹ See <http://www.brentwood.gov.uk/index.php?cid=966>

²² Natural England's concerns may be allayed by the current (i.e. since 2015) scaling back of proposals for the Dunton area.

²³ This strategic linking role was, however, highlighted by Essex Wildlife Trust, through the 2015 Growth Options consultation.

Commentary on other policies

- 11.1.4 Biodiversity is addressed through Policies: **6.3** (General Development Criteria (point f.)); **9.1** (Historic and Natural Environment Landscape Character); **9.2** (Wildlife and Nature Conservation); **9.3** (Landscape Protection and Woodland Management); **9.4** (Thames Chase Community Forest); **9.8** (Green Belt); **10.6** (High Quality Design Principles); **10.10** (Green Infrastructure); **10.12** (Floodlighting and Illumination); and **10.14** (Sustainable Drainage).
- 11.1.5 Of particular relevance to protecting the Borough's existing natural assets is **Policy 9.2**: Wildlife and Nature Conservation, which outlines the legal protection for habitat sites, including Sites of Special Scientific Interest (SSSI) both within the Borough and on its periphery, Local Nature Reserves (LNRs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar Sites. Reference is also made to the requirement for mitigation measures when protected species are discovered on a development site. However, no reference is made to non-protected habitats or wildlife, which are also important for biodiversity and the health of the natural landscape and environment. It is therefore **recommended** that non-protected habitats and species, especially those that are in decline (such as bees), should be offered some level of protection through the policy, recognising the NPPF's intention to achieve biodiversity net gains. It is also important to note that reference is not made within Policy 9.2 to Green Infrastructure, as this is considered under Policy 10.10 Green Infrastructure. However, it is **recommended** that reference is made here, as Green Infrastructure is an important component in the health and viability of the natural environment.

Appraisal of the draft plan as a whole

- 11.1.6 The spatial strategy generally directs growth away from the most sensitive areas, including the extensive Thorndon Park 'Living Landscape' to the south of Brentwood. Growth to the south of the A127 is unlikely to impact directly on important habitat patches within this landscape, although recreational pressure is another consideration. A Dunton Hills Garden Village scheme will need to address some notable on-site constraints, and also ensure that Green Infrastructure opportunities are fully realised. Finally, it is noted that some question marks do remain regarding the impact of the A12 urban extension allocations on existing 'green wedges' that extend into the urban area. Proposed development management policy will help to ensure that negative effects are avoided/mitigated, and opportunities realised; however, there may be the potential to 'go further' (i.e. generate the evidence to inform detailed policy). Overall, **no significant effects** are predicted.

N.B. A separate process of Habitats Regulations Assessment (HRA) will consider the possibility of impacts to European designated habitats. Natural England, through the 2015 Growth Options consultation, stated that: *"Increased development could also lead to increased transport and road usage, especially with regards to the M25. This in turn could impact on Epping Forest Special Area of Conservation (SAC)... Brentwood is advised to consider air pollution in respect of Epping Forest SAC, to liaise with neighbouring authorities."*

12 CLIMATE CHANGE MITIGATION

Commentary on the spatial strategy

- 12.1.1 There is a need to consider the performance of the draft plan both in terms of minimising both per capita greenhouse gas (GHG) emissions from transport, and also per capita GHG emissions from the built environment.
- 12.1.2 With regards to emissions from transport, **Policy 5.1: Spatial Strategy** performs well. Work undertaken to date has established that there are considerable opportunities associated with a concentration of growth in the A127 corridor. In particular, there is the potential to achieve new homes and jobs in close proximity, deliver a new bus route linking the A127 corridor to Brentwood Town Centre, enhance walking/cycling infrastructure between key destinations (including train stations) and also increase the offer at West Horndon (and Laindon) centres. As for A12 urban extension allocations, there would be good potential to walk/cycle to Brentwood Town Centre or other local centres; however, traffic congestion would be an issue and residents might tend to see longer journeys by car (along the A12) as an attractive option.
- 12.1.3 With regards to emissions from the built environment, **Policy 5.1: Spatial Strategy** also performs well. There is support for at least one scheme (Dunton Hills Garden Village) of a large scale such that ambitious decentralised low/renewable heat and/or power generation will become viable (e.g. a biomass fuelled heating or Combined Heat and Power (CHP) system) Also, larger schemes are more likely to deliver ambitious sustainable design/construction measures at the level of individual buildings.

Commentary on other policies

- 12.1.4 Climate change mitigation is addressed through Policies: **6.3** (General Development Criteria (points b. and d.)); **10.1** (Sustainable Transport); **10.3** (Sustainable Construction and Energy); **10.6** (High Quality Design Principles); **10.10** (Green Infrastructure); and **10.14** (Drainage).
- 12.1.5 **Policy 10.1: Sustainable Transport** seeks to support a transition towards low carbon forms of transport, through setting up a Green Travel Route, linking Brentwood Town Centre with strategic allocations in the A127 Corridor. The policy also requires developers to support improvements to transport infrastructure, including provision of electric vehicle charging points.
- 12.1.6 One of the primary policies for addressing Climate Change Mitigation is **Policy 10.3: Sustainable Construction and Energy**, which through points a., e., g., and h., outlines the requirements for developments to be energy efficient, be climate resilient and utilise renewable energy sources and limit carbon dioxide (CO₂) emissions. In particular, Policy 10.3 seeks to address the regionally high greenhouse gas emissions within the Borough.
- 12.1.7 Whilst the Local Plan seeks to address Climate Change Mitigation for the design of developments once complete, it is **recommended** that due consideration is also given to the impact of activities related to refurbishment, demolition, excavation and construction. For example, it is recommended that provision is made to require developers to reduce, or reuse as much waste material as possible within new developments. This could be achieved through logistical measures, such as 'just in time' deliveries, or through reusing aggregate or other materials, such as off-cuts in landscaping or alternate development schemes.

Appraisal of the draft plan as a whole

- 12.1.8 The draft plan performs fairly well in terms of minimising per capita greenhouse gas emissions from both transport and the built environment. Importantly, the plan is to concentrate growth to a significant extent (i.e. support larger development schemes), which leads to certain opportunities in terms of minimising emissions from the built environment; and direct growth to locations where there are opportunities to support use of public transport and walking/cycling. Overall, **no significant effects** are predicted.

13 COMMUNITY AND WELL-BEING²⁴

Commentary on the spatial strategy

- 13.1.1 Brentwood is one of the most affluent areas in England, within the least deprived 10% of the country, but there remains a need to plan carefully to ensure the wellbeing of existing residents and residents of new communities. A primary consideration is sustainable access to community infrastructure (with capacity). In this respect, the following comment made by NHS England, through the Growth Options consultation (2015) is of considerable note:
- “It is important to acknowledge that, dependent upon the location of the growth, existing GP practices do not have capacity to accommodate significant growth... Delivery of essential infrastructure via developer funded projects would be the most effective scenario for meeting the intended growth... It is suggested that a single large site necessitating the need for new facilities specific to that development would be more sustainable than dispersing growth in many settlements. Numerous smaller extensions could have impacts on existing infrastructure left unmitigated, or the level of contribution falling short of the requirements to provide adequate healthcare.”²⁵*
- 13.1.2 Access to healthcare services is not the sole consideration, but it is an important consideration and one that is potentially a differentiating factor. Other considerations relate to access to town and local centres, access to education and access to open space and sport/leisure facilities. With regards to education facilities, secondary schools locally have capacity locally; however, primary schools are generally at capacity with relatively limited opportunities for expansion (particularly within the Brentwood urban area). With regards to access to open space and sport/leisure facilities, this is generally very good across the Borough, with the needs for upgrades at the Brentwood Centre being perhaps the most pressing issue.²⁶
- 13.1.3 **Policy 5.1:** Spatial Strategy proposes a large strategic allocation in the A127 corridor, an area where there are identified opportunities to enhance local centres / community infrastructure, and ensure new communities are able to access key destinations via public transport and walking/cycling infrastructure. Residents of a Dunton Hills Garden Village scheme would have access to a ‘Category 2’ local centre on site (to include ‘schools alongside retail and health facilities’); an improved West Horndon village centre (set to become category 2); a new local centre delivered as part of the proposed West Basildon Urban Extension (to include a GP surgery and with land reserved for the possible future delivery of a secondary school);²⁷ an improved Laindon Town Centre c.4-5km to the east;²⁸ and Brentwood Town Centre, via a new bus route. The decision to deliver a strategic allocation at Dunton Hills Garden Village rather than West Horndon, performs well from a ‘communities’ perspective given that consultation (since 2013, when the Preferred Option was to develop West Horndon as a strategic growth location) has highlighted the importance of maintaining West Horndon’s ‘village’ status and not ‘over-developing’ (see further discussion of spatial strategy alternatives in Appendix III).
- 13.1.4 However, the A12 corridor is also a focus for growth, through a number of smaller urban extensions. A number of these are well located - e.g. Officer's Meadow, Shenfield (easily the largest, at 600 homes) is within walking distance of the future Crossrail station; and Land off Doddinghurst Road, either side of A12, Brentwood (250 homes) is in close proximity to Brentwood Community Hospital, which does have capacity - however, capacity of community infrastructure is a concern.

²⁴ Issues relating to the Gypsy and Traveller community are considered under the ‘Housing’ topic heading.

²⁵ Comments regarding delivery of infrastructure through developer contributions are made in light of an understanding that Brentwood does not have an adopted Community Infrastructure Levy (CIL) - see <http://www.brentwood.gov.uk/index.php?cid=2457>

²⁶ A Sport, Leisure & Open Space Assessment is emerging and soon to be published. A headline preliminary finding is that levels of provision of green spaces and playing pitches in Brentwood currently equate to 12.64 hectares per 1,000 population, which is good.

²⁷ See Policy 10 ‘West Basildon Urban Extension’ within the draft Basildon Borough Local Plan (January 2016)

²⁸ See Policy R3 ‘Laindon Town Centre Regeneration’ within the draft Basildon Borough Local Plan (January 2016)

- 13.1.5 Another consideration is that limited development will take place in villages (with the exception of West Horndon, where enhancements will result in this becoming a 'category 2' centre, on a par with Shenfield Hutton Road, Ingatestone High Street and Brentwood Station Warley Hill). Public transport, bus services in particular, are centred on Brentwood Town Centre, making accessibility an issue for villages with infrequent services and lack of evening running.
- [Commentary on other policies](#)
- 13.1.6 Community and wellbeing is considered through Policies: **6.3** (General Development Criteria (point i.)); **7.1** (Dunton Hills Garden Village); **7.6** (Affordable Housing in Green Belt); **7.7** (Specialist Housing); **9.8** (Green Belt); **9.9** (New Development, Extension and Replacement of Buildings in Green Belt); **9.11** (Previously Developed Land in Green Belt); **9.12** (Site Allocations in Green Belt); **10.1** (Sustainable Transport); **10.2** (Parking); **10.5** (Public Realm); **10.7** (Infrastructure and Community Facilities) **10.8** (Open Space in New Development); **10.9** (Open Space, Community, Sport and Recreational Facilities); **10.10** (Green Infrastructure); and **10.16** (Buildings for Institutional Purposes).
- 13.1.7 Although the need to provide healthcare facilities, and the desire to promote health and wellbeing is stated throughout the Local Plan, there is no Policy dedicated to health and wellbeing. It is **recommended** that as there is a need to reduce health inequalities within the Borough, especially to provide suitable facilities for older people and to provide better access to services in rural areas, a dedicated policy is developed which addresses levels of health and health inequalities within the Borough.
- 13.1.8 A principle policy for Community and Wellbeing is **Policy 10.7: Infrastructure and Community Facilities**, which outlines how through Section 106 agreements, necessary related infrastructure, including access, open space and transport connections will be managed. However, the policy does not make reference to the Council's opposition to the loss or degradation of community facilities, which it is **recommended** is included.
- 13.1.9 Whilst the text supporting **Policy 10.16: Buildings for Institutional Purposes** states that institutional buildings (i.e. schools, medical facilities, places of worship etc.) are an important element of sustainable communities, Policy 10.16 does not offer much support for their development. Rather the focus is on outlining the conditions that must be met in order for institutional buildings to be permitted. It is therefore **recommended** that Policy 10.16 makes reference to when institutional buildings will be encouraged, e.g. when the development site exceeds a certain number of homes. This will be particularly relevant in order to address issues of health inequalities and to provide sufficient educational facilities.
- 13.1.10 **Policy 10.1: Sustainable Transport** outlines the requirement for new development to be located in areas that reduce the need to travel or are either connected, or easily connectable to existing transport links. This approach will support access for residents to reach existing and new leisure and community facilities.
- 13.1.11 A further policy of note is **Policy 10.9: Open Space, Community, Sport and Recreational Facilities**, which sets out the Council's opposition to the loss of open space and community facilities within the Borough. However, the policy also states that if it can be demonstrated that there is an excess of provision of open space, community, sport or recreational facilities, development that results in their loss may be supported. It is **recommended** that this proviso is removed, as levels of demand can change due to predictable (i.e. demographic) and unpredictable (e.g. cultural or societal interests) factors. For example, demand for allotments increased fourteen-fold between 1996 and 2011²⁹, which demonstrates how significantly public demand for local services and facilities can change.

²⁹ Campbell, M., and Campbell, I. (2013); Allotment Waiting Lists in England 2013.

Appraisal of the draft plan as a whole

- 13.1.12 The spatial strategy performs well, although much work remains to be completed (working with partner organisations including Essex County Council, NHS England and Basildon and Brentwood Clinical Commissioning Group) to ensure adequate access to community infrastructure for new and existing residents. It is expected that further work will lead to the refinement of development management policy. **No significant effects** are predicted.

14 CULTURAL HERITAGE

Commentary on the spatial strategy

- 14.1.1 Historic England - the Government's advisor on the historic environment - made a detailed response to the Growth Options consultation (2015), although it is apparent that most concerns were raised in relation to sites that are not proposed as allocations under the preferred spatial strategy (**Policy 5.1**). With regards to development in the A127 corridor a concern is that development at both West Horndon and Dunton would lead to cumulative effects ('urbanisation') and harm to 'various heritage assets'; however, Historic England did not suggest outright objection to growth in this area ("an adequate buffer between West Horndon and Dunton would be expected") and concerns from 2015 may now be somewhat allayed, given that a comprehensive Dunton Garden *Suburb* scheme is no longer being actively considered as an option. A Dunton Hills Garden Village scheme might well impact on the setting of Dunton Hills farmhouse (grade II listed), however.
- 14.1.2 As for the A12 urban extension allocations, these do not raise major concerns from a heritage perspective, although it is noted that: the proposed extension at 'Land east of Nags Head Lane, Brentwood' is in close proximity to several listed buildings at Brook Street; and also that the large Officers Meadow site at Shenfield will have implications for the Chelmsford Road, along which there are a number of listed buildings. Another consideration will be the potential for indirect impacts on the Brentwood Town Centre Conservation Area (recognising that in the Shenfield area the only Conservation Area is at Hutton).
- 14.1.3 Finally, it is important to recognise that growth in the Rural North and Rural South areas of the Borough (N.B. this does not include the area south of the A127) will be limited to retain local character, with no amendments proposed to Green Belt boundaries. Brownfield opportunities will be encouraged to help ensure villages remain thriving communities, which is important from a heritage perspective.

Commentary on other policies

- 14.1.4 Cultural heritage is addressed through Policies: **6.3** (General Development Criteria (points a. and g.)); **6.4** (Effective Site Planning (point d.)); **7.6** (Affordable Housing in Green Belt); **7.10** (Gypsy and Traveller Provision); **8.8** (New Retail and Commercial Leisure Development); **9.1** (Historic and Natural Environment Landscape Character); **9.5** (Listed Buildings); **9.6** (Conservation Areas); **9.7** (Ancient Monuments and Archaeological Remains); **10.4** (Design); **10.5** (Public Realm); **10.6** (High Quality Design Principles) and **10.17** (Communications Infrastructure).
- 14.1.5 In particular, **Policy 6.3**: General Development Criteria, point a., states that "proposals for development will be expected to... have no unacceptable effect on visual amenity, the character or appearance of the surrounding area". Furthermore point g. states that "*when considering the impact of development on the significance of a heritage asset, greater weight should be given to the assets conservation and enhancement*". This is supported by Policy 9.1: Historic and Natural Environment Landscape Character, which states that it will be important to protect, conserve and where appropriate, enhance heritage assets and their setting in order to conserve their significance.

14.1.6 **Policy 9.5:** Listed Buildings sets out the criteria under which partial or full demolition of a Listed Building may be granted, as well as a requirement for development to be sympathetic to a listed buildings character and setting. Reference is not made within the policy to buildings that are considered locally important and therefore may not be Listed. However, it is mentioned within the supporting text that a list of locally important heritage assets will be compiled, and that identified local assets will be awarded the same protection as nationally Listed elements. It is therefore **recommended** that provision is made for heritage assets that are of local importance, whether for historic, cultural or other reasons within Policy 9.5.

14.1.7 **Policy 9.7:** Ancient Monuments and Archaeological Remains does not make reference to Archaeological Priority Areas. It is **recommended** that the Council determine whether there are any Archaeological Priority Areas within the Borough and if so, these are referenced within Policy 9.7 to guide developers as to where particular archaeological concerns may exist. Albeit this approach should not lead to the detriment or neglect of other archaeological assets within the Borough that do not fall within any identified Archaeological Priority Areas.

Appraisal of the draft plan as a whole

14.1.8 The spatial strategy generally directs growth away from the most sensitive areas/assets, and where there is the potential for impacts to the setting of assets there will be good potential to avoid/mitigate impacts through careful siting, masterplanning and landscaping/design. **No significant effects** are predicted.

15 ECONOMY AND EMPLOYMENT

Commentary on the spatial strategy

15.1.1 The borough has low unemployment and has recorded strong levels of job growth over the last 17 years (30%; with the number of B-Class jobs having increased by 40%). However, there is currently an imbalance between skills and jobs because of the population working in London, which indicates a need to support further employment growth. Also, there are clear indications that delivery of new employment land in Brentwood would support the regional economy, including that of Greater London (where employment land is increasingly being lost to housing).

15.1.2 In the past employment growth in Brentwood has been driven by consumption sectors including residential care and social work, business services, education, healthcare and construction. However, there is now a need to focus on 'B-class' jobs growth, that is growth at dedicated employment sites. Having said this, there is also a need to take a 'discerning' approach, e.g. recognising that a strategy of simply responding to market demand for distribution warehousing would not be appropriate.

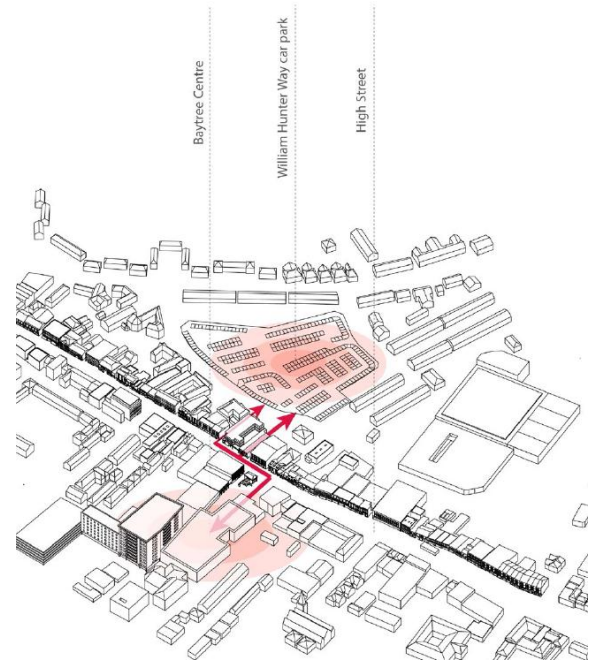
15.1.3 A plan objective is to: "*Foster a prosperous, vibrant and diverse local economy by attracting new commercial investment in order to maintain high and stable levels of economic and employment growth.*" Also, three further plan objectives relate to the need to support Brentwood Town Centre, support other centres and capitalise on the opportunities that Crossrail will bring.

15.1.4 **Policy 5.3:** Job Growth And Employment Land makes provision for 5,000 additional jobs over the Plan period, achieved primarily through new employment (B-use) allocations totalling 32.8 hectares, but supported by existing employment sites and appropriate redevelopment where appropriate. This quantity of new employment land will enable some older employment premises in central areas (i.e. Wates Way Industrial Estate, Brentwood; Council Depot, Warley; and West Horndon Industrial Estates) to be redeveloped for housing.³⁰

³⁰ Redeveloping existing employment land in central or residential locations for new homes, means the loss of almost 19 hectares of employment land that will need to be re-provided. However, it may not be necessary to fully replace these losses due to changing business needs and efficiency gains associated from replacing older stock with modern space. It is also not clear if employment needs will be lost entirely on these sites as part of redevelopment.

15.1.5 The A127 Corridor will see significant economic growth, mainly because of the opportunity to redevelop brownfield land at M25 junction 29, a project known as Brentwood Enterprise Park (**Policy 8.2**). This location provides excellent access onto the strategic highway network, making it a very desirable place for businesses. Also, a small extension is also proposed to existing nearby employment land at Childerditch Industrial Estate, and there will be provision of new employment land at the eastern end of the A127 as part of the Dunton Hills Garden Village proposal and the opportunity will be taken to formally designate existing employment land around the A127, specifically those close to M25 junction 29. The combined effect should be to strengthen the A127 corridor employment cluster, also recognising that the A127 corridor in Basildon Borough is already seen as an ‘Enterprise Corridor’, and that the Basildon Borough Local Plan is set to retain, diversify and expand employment here.³¹

Figure 15.1: Brentwood Town Centre



15.1.6 **Policy 8.6:** Brentwood Town Centre is another important policy. The policy seeks to ensure an integrated approach to the redevelopment of William Hunter Way Car Park and the Baytree Centre, through a ‘design-led’ Town Centre Masterplan. See **Figure 15.1**.

[Commentary on other policies](#)

15.1.7 Economy and employment is addressed through Policies: **7.1** (Dunton Hills Garden Village); **7.9** (Mixed Use Development); **8.1** (Strong and Competitive Economy); **8.2** (Brentwood Enterprise Park); **8.3** (Employment Development Criteria); **8.5** (Supporting the Rural Economy); **8.6** (Brentwood Town Centre); **8.7** (Local Centres); **8.8** (New Retail and Commercial Leisure Development); **8.9** (Non-Retail Uses); **9.11** (Previously Developed Land in Green Belt); **9.14** (Re-Use and Residential Conversion of Rural Buildings); and **10.6** (High Quality Design Principles).

³¹ Within the Draft Basildon Borough Local Plan (2016) Policy E1 ‘Economic Growth Strategy’ requires: “The allocation of around 11ha of new employment land suitable for B1, B2 and B8 uses, in eastern and western extensions to the A127 Enterprise Corridor.” The plan also states that the Ford Technical Centre and adjacent land at Dunton Fields will be retained, with land surplus to Fords operations restricted to R&D (as opposed to automotive industry R&D only). The supporting text explains that: “The A127 Enterprise Corridor is a large employment location that has enabled clusters of industries to form. It is widely acknowledged that business clusters are important to the ongoing success and growth of the economy, and consequently, it is expected that any new employment provision to the west of Basildon is well related to the existing A127 Enterprise Corridor. It is also expected that the employment provision is also well located in relation to the strategic road network in order to provide ease of access for HGVs, whilst reducing the impact of such movements on residential amenity.”

- 15.1.8 Chapter 08: Economic Prosperity of the Local Plan details the primary policies pertaining to Economy and Employment. In particular, **Policy 8.1: Strong and Competitive Economy** sets out the intention “...to maintain high and stable levels of local economic growth, enabling the Borough’s economy to diversify and modernise through the growth of existing business and the creation of new enterprises.” This is to be secured by the initiatives in points a. – i., primarily through capitalising on the economic benefits that arise from the Shenfield and Brentwood Crossrail Link (point a.); directing major new retail, office and leisure investment to the Borough’s Town Centres (point e.); the intensification of vacant and underutilised sites, the regeneration of previously developed land, and the allocation of new sites (point c.); and supporting the Borough’s rural economy and growing agricultural enterprises (point i.). However, the policy does not outline ways in which the Council will support applications for knowledge-based employment developments. It is **recommended** that this is done through support of measures such as requiring high-speed Broadband for key areas, such as Warley Business Park, the proposed Brentwood Enterprise Park (detailed in Policy 8.2 Brentwood Enterprise Park), or Brentwood Town Centre.
- 15.1.9 The Local Plan outlines policies for new key employment areas on brownfield land, such as **Policy 8.2: Brentwood Enterprise Park**, which details the criteria in points a. – d. that need to be met. These include the requirement that employment uses and the jobs created are consistent with the wider economic strategy of the Local Plan (point a.); landscaping and planting is used to minimise visual impacts (point c.); and the sustainable transport options are provided, in line with Policy 10.3: Sustainable Transport (point d.). These measures will be crucial in order to maximise the efficiency of development on the available brownfield land within the Borough.
- 15.1.10 Under **Policy 8.7: Local Centres** the Local Plan identifies a vital opportunity to invest in improving Shenfield’s retail offer as Shenfield is a terminus for Crossrail. However, the Local Plan also identifies the need for new retail and commercial leisure development to be fully integrated with the existing shopping area and to not result in the subdivision of an existing large retail unit (**Policy 8.8**, points e. and h. respectively). However, it is **recommended** that flexibility is allowed for concerning point h. (subdivision of large retail units), in case it is found at a later date that Crossrail leads to a number of consumers travelling elsewhere due to the range of services available.
- 15.1.11 Elsewhere within the plan, **Policy 7.9: Mixed Use Development** supports the Borough’s intention to maintain a mixture of employment and residential areas, to provide residential development within close proximity to services and transport links, and to provide community safety and activity in commercial areas after businesses close. Of particular note in Policy 7.9 is the requirement to contain an appropriate mix of uses, including A1-A5 (e.g. retail, restaurants, cafés etc.) land use classes with active street frontages, that are complemented by B1 (office) and D1 (leisure facilities) land use classes where appropriate. Policy 7.9 (points d., e., and f.) also sets out the criteria whereby mixed use development will not be sought, for example, where access to more than one use is physically impossible, or the balance of uses within an areas is considered sufficient to provide economic variety and diversity.
- 15.1.12 The Council are keen to support a strong local rural economy and **Policy 9.14: Re-Use and Residential Conversion of Rural Buildings** is intended to support this through outlining the criteria that should be met for the conversion of residential rural buildings for employment, tourism, leisure or community or residential use. Through the criteria applied, the policy supports the Green Belt, and seeks to support other policies outlined within the Local Plan, such as outlining conditions for retaining and conserving the rural heritage and landscape of the development area.

Appraisal of the draft plan as a whole

- 15.1.13 The spatial strategy includes a focus on maximising opportunities along the A127 corridor, which has the potential to become an employment cluster of regional significance, and on this basis **significant positive effects** are predicted. However, it is recognised that there is some uncertainty given the need for more work to consider transport capacity/impacts. With regards to the A12 corridor, the preferred strategy reflects a balance of evidence that points to road capacity constraints (at least in the short to medium term) and Crossrail related opportunities that, whilst significant, are not ‘game changing’. It will be important to ensure that the Council continues to monitor Crossrail related interest from business.

N.B. Another consideration is that there could be additional issues (potentially both opportunities and constraints) for the A127 corridor should it transpire that Highways England favours the ‘northern route’ option for a road linking a new Lower Thames Crossing to the M25. However, at the current time this option is not preferred, and so this matter has not factored into the appraisal.

16 FLOODING

Commentary on the spatial strategy

- 16.1.1 Flood risk in Brentwood Borough is not extensive and largely limited to areas in very close proximity to local watercourses. This is evidenced by the mapped outputs of the Brentwood Strategic Flood Risk Assessment (2010) and the more recent Surface Water Management Plan (SWMP).³² This SWMP concludes that flooding hotspots (taking into account where existing properties are at risk) are at: West Horndon, Ingatestone and Brentwood Town Centre.
- 16.1.2 A strategic allocation at Dunton Hills Garden Village (under **Policy 5.1: Spatial Strategy**) would need to address flood risk issues, given the stream that runs through the site (which notably leads to an area to the south of the site, adjacent to the railway, as being ‘more’ susceptible to flooding, according to SWMP modelling). Whilst the Dunton Garden Suburb consultation document (January 2015) suggested that the area in question would be left as open space, there is currently less certainty regarding precisely where built development (and in particular housing) would occur. Also, it is noted that a large portion of the area under consideration for Dunton Hills Garden Village is identified by the SWMP as having limited potential to deliver ‘infiltration’ measures as part of sustainable drainage strategy.³³

Commentary on other policies

- 16.1.3 Flooding is considered through Policies: **10.3** (Sustainable Construction and Energy); **10.10** (Green Infrastructure); **10.13** (Flood Risk); and **10.14** (Sustainable Drainage).
- 16.1.4 The principle Policy for Flooding is **Policy 10.13: Flood Risk**, which outlines the requirement for any development at risk of flooding to submit a Flood Risk Assessment (FRA) and refers the reader to Policy 10.14: Sustainable Drainage. The policy also makes reference to the need to consider the impacts of climate change, and outlines the conditions upon which development within the floodplain will be considered. These points therefore address the need to consider the increased risk of flooding as a result of climate change and will seek to reduce the risk of flooding for new development. Whilst Policy 10.13 includes a provision to safeguard land used for current and future flood management, it is **recommended** that provision is made within Policy 10.13 for the enhancement of current flood management systems, i.e. drainage ditch clearance, or tree or hedgerow planting so as to reduce surface water run-off.

³² The SWMP (2015) is available at: <http://www.brentwood.gov.uk/index.php?cid=966>. The map within Appendix D (available at: <http://www.brentwood.gov.uk/pdf/22062015120706u.pdf>) is particularly useful.

³³ See Appendix K of the SWMP at: <http://www.brentwood.gov.uk/pdf/22062015121842u.pdf>

- 16.1.5 Also of importance, **Policy 10.3: Sustainable Construction and Energy** requires developments to incorporate include Sustainable Urban Drainage Systems (SuDS) (point c.). However, whilst the policy states that these measures apply to all development proposals, it is **recommended** that developments above a certain size, e.g. 20 dwellings, are expected to provide more substantial rainwater attenuation measures, such as a minimum surface area of green walls or roofs. Also, it is **recommended** that reference is made within Policy 10.6 High Quality Design Principles to Policy 10.3 so that the role of SUDs is reiterated, lending further support to measures to reduce the risk of flooding, and slow the rate of surface water runoff.

[Commentary on the draft plan as a whole](#)

- 16.1.6 The spatial strategy generally avoids areas of flood risk, although flood risk is a constraint to growth at Dunton Hills Garden Village. **No significant effects** are predicted, given that there will be good potential to address flood risk through careful siting, masterplanning and (if necessary) design. This will include the adoption of Sustainable Drainage Systems (SuDS), although it is noted that the Dunton area is potentially not ideal for delivering effective SuDS.

17 HOUSING

[Commentary on the spatial strategy](#)

- 17.1.1 **Policy 5.2: Housing Growth** seeks to deliver a level of housing sufficient to meet objectively assessed housing needs (OAN) over the plan period, which means delivering 362 dwelling per annum (dpa).³⁴ There is no reason to suggest that OAN is any higher or lower, although it is recognised that the figure was reached on the basis of some evidence-base limitations (notably up-to-date forecasts of household formation³⁵ and London outmigration³⁶). Also, whilst 'objective' the analysis leading to the establishment of an OAN figure is inevitably open to question in certain respects. Notably, the analysis takes Brentwood Borough to be a self-contained Housing Market Area (HMA), meaning that Brentwood Borough will not be the first port of call when looking to meet housing need arising from towns outside the Borough (e.g. Romford, Basildon, Billericay, Chelmsford). Also, through analysis it is determined that, whilst it is appropriate to 'uplift' the OAN figure by c.30dpa (i.e. deliver c.30 dpa over and above the c.330 dpa needed to meet demographic needs) in order to reflect jobs growth potential (i.e. ensure that houses are aligned with jobs, thereby avoiding either constrained jobs growth or unsustainable in-commuting), there is not a need to uplift OAN to address poor affordability in the Borough. The decision not to uplift OAN to address affordability is made on the basis that affordability has been consistently poor over time (i.e. has tracked regional trends), despite housing delivery in the Borough having varied.
- 17.1.2 **Policy 5.1: Spatial Strategy** also has some implications for housing objectives, as the decision to focus growth somewhat (i.e. support larger sites) has positive implications for development viability and hence the potential to fund affordable (and potentially specialist) housing provision (albeit it is recognised that viability calculations will always be influenced by numerous site specific factors, e.g. the need to deliver other infrastructure). Other considerations are: addressing variations in housing needs across the Borough; and meeting housing needs in the rural villages. In terms of the former, there is no evidence available to inform a discussion, but it seems likely that this is not a major factor given that the main urban area is central within the Borough. It should be the case that housing delivered in the A127 corridor helps to meet the needs arising from Brentwood/Shenfield and (perhaps to a lesser extent) Ingatestone. In terms of the latter, there are perhaps some concerns relating to the limitation of growth at villages in the Rural North and Rural South areas, although it is noted that opportunities to develop brownfield sites in the Green Belt have been explored.

³⁴ See the report - 'Objectively Assessed Housing Needs for Brentwood: Moving towards a Housing Target' (PBA, 2014)

³⁵ The PBA Report states that: "[M]ore work will be needed to confirm the final OAN once the 2012 CLG projections have been released and Essex Planning Officers Association (EPOA) have completed the final round of Essex wide analysis."

³⁶ The PBA Report states that: "The most significant 'next step' relates to London. We have not considered London in this report; the revised London Plan is still not finalised and surrounding Boroughs / Districts are not yet able to consider the full implication of potentially higher outward migration flows from the capital."

- 17.1.3 Finally, it is important to note that **Policy 7.10: Gypsy and Traveller** identifies Dunton Hills as a broad location for future provision of 20 Gypsy & Traveller pitches, to be planned in an integrated and sensitive way as part of a mixed use development (in line with Policy 7.1).

Commentary on other policies

- 17.1.4 Housing is addressed through Policies: **7.1** (Dunton Hills Garden Village); **7.2** (Housing Mix, Types and Tenures); **7.3** (Housing Density); **7.4** (Housing Land Allocations); **7.5** (Affordable Housing); **7.6** (Affordable Housing in Green Belt); **7.7** (Specialist Housing); **7.8** (Housing Space Standards); **7.9** (Mixed Use Development); **7.10** (Gypsy and Traveller Provision); **9.8** (Green Belt); **9.9** (New Development, Extension and Replacement of Buildings in Green Belt); **9.10** (Established Areas of Development in the Green Belt); **9.11** (Previously Developed Land in Green Belt); **9.12** (Site Allocations in Green Belt); **9.13** (Agricultural Workers Dwellings); **9.14** (Re-Use and Residential Conversion of Rural Buildings); **10.4** (Design); **10.5** (Public Realm); **10.6** (High Quality Design Principles); and **10.12** (Floodlighting and Illumination).
- 17.1.5 Principle policies for housing across the Borough include **Policy 7.2** Housing Mix, Types and Tenures which outlines the thresholds at which: a mix of dwelling types, sizes, tenures and specialist accommodation (six or more dwellings or 0.2 hectares or more); easily adaptable for the elderly or people with disabilities (20 or more dwellings); or self-build (100 or more dwellings) are required. **Policy 7.5: Affordable Housing** states that on sites of 11 or more dwellings, or sites of 1,000 square metres gross residential floorspace, irrespective of the number of dwellings, at least 35% affordable housing is required. However, whilst consideration is given to phases of development of a site to meeting the criteria set out in these policies, it is **recommended** that provision is also made within the policy to prevent the “salami-slicing” of developments, which may be done to avoid the above criteria, For example, should a developer purchase an adjacent area of land to a new development after planning permission has been granted, or construction has begun on the original scheme, consideration should be given to the above criteria and the applicability of this Policy on the combined site. This should be considered on a case-by-case basis.
- 17.1.6 Finally, **Policy 7.10: Gypsy and Traveller Provision** sets out the requirement to meet the identified needs of Gypsy and Traveller communities, and the necessary provision of a minimum of 84 pitches between 2013 and 2033. In particular, point b. outlines the requirement for sites to be well related to existing communities and accessible local services and facilities, such as shops, primary and secondary schools, healthcare and public transport. This is supported by points a. – f., which outline the other requirements for Gypsy and Traveller sites.

Appraisal of the draft plan as a whole

- 17.1.7 The plan performs well on the basis that objectively assessed housing needs are set to be met. There should be good potential to deliver a range of types and tenures of housing at larger sites, and it is also noted that a strategy is in place for meeting the needs of Gypsies and Travellers. **Significant positive effects** are predicted.

18 LANDSCAPE

Commentary on the spatial strategy

- 18.1.1 There are no nationally important designated landscapes within the Borough; however, around 89% of the Borough is designated Green Belt, which is designated in order to perform a number of 'purposes'.³⁷
- 18.1.2 **Policy 5.1:** Spatial Strategy proposes a strategic allocation within the Green Belt to the south of the A127, in the form of Dunton Hills Garden Village, as well as several urban extensions into the Green Belt along the A12. These greenfield allocations are necessary, given limited available/deliverable brownfield sites. Evidence of the Council's commitment to maximising brownfield opportunities can be seen in the proposal to bring forward a major Enterprise Park (Policy 8.2 Brentwood Enterprise Park) on brownfield land at M25/A127 junction.
- 18.1.3 With regards to Dunton Hills Garden Village, there are clearly landscape sensitivities, with consultees (notably Thurrock Council) suggesting the potential for impacts to valued landscapes, and loss of Green Belt that serves a clear purpose (particularly in the sense of preventing coalescence and/or sprawl). It is anticipated that there will be good potential to avoid/mitigate effects; however, there is some uncertainty and a need for further work to examine options. It is noted that, whilst there is the potential to make use of some clearly defined physical features (A127, A128, railway line), it may be a challenge to ensure a defensible long term boundary separating the Garden Village from west Basildon (where there is a planned urban extension).
- 18.1.4 With regards to the A12 urban extensions, there are perhaps fewer concerns. This is on the basis that the landscape and Green Belt were primary considerations when selecting the preferred sites. All sites have strong boundaries, which should result in little or no risk of further sprawl in the future. Also, it is noted that two of seven A12 urban extension allocations (albeit two of the smaller ones) are brownfield sites.

Commentary on other policies

- 18.1.5 Landscape is considered through Policies: **7.1** (Dunton Hills Garden Village); **7.6** (Affordable Housing in Green Belt); **7.10** (Gypsy and Traveller Provision); **9.1** (Historic and Natural Environment Landscape Character); **9.3** (Landscape Protection and Woodland Management); **9.4** (Thames Chase Community Forest); **9.6** (Conservation Areas); **9.8** (Green Belt); **9.9** (New Development, Extension and Replacement of Buildings in Green Belt); **9.10** (Established Areas of Development in the Green Belt); **9.11** (Previously Developed Land in Green Belt); **9.13** (Agricultural Workers Dwellings); **10.4** (Design); **10.5** (Public Realm); **10.6** (High Quality Design Principles); **10.10** (Green Infrastructure); **10.14** (Sustainable Drainage); and **10.17** (Communications Infrastructure).
- 18.1.6 The need to protect the Borough's highly valued rural landscape is a focus of **Policy 9.1:** Historic and Natural Environment Landscape Character, which sets out the Council's commitment to safeguard the Borough's varied landscapes, heritage, biodiversity and habitats. Additionally, **Policy 9.3:** Landscape Protection and Woodland Management sets out the protection afforded to the rural landscape and features of ecological importance, including trees, woodlands or hedgerows. Policy 9.3, in conjunction **Policy 10.10**, also supports the Essex Wildlife Trust's Living Landscapes vision to "restore, recreate and connect wildlife habitats". This approach will help to protect and enhance the Borough's rural landscapes and their distinctiveness.

³⁷ Green Belt purposes are: to check the unrestricted sprawl of large built-up areas; to prevent neighbouring towns merging into one another; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns; and to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

Appraisal of the draft plan as a whole

- 18.1.7 Brentwood Borough is heavily constrained from a landscape perspective, and in this context it is likely that the preferred strategy goes as far as it can to minimise impacts. It is noted that the preferred strategy has evolved over time in response to concerns (in particular in relation to growth at West Horndon) and that detailed work has been completed to enable the identification of A12 urban extension sites that are best performing from a landscape / Green Belt perspective. However, at the current time it remains appropriate to 'flag' the potential for **significant negative effects** given the uncertainty that remains regarding Dunton Hills Garden Village.

19 SOIL AND CONTAMINATION

Commentary on the spatial strategy

- 19.1.1 As discussed above, **Policy 5.1: Spatial Strategy** proposes a strategic allocation within the Green Belt to the south of the A127, in the form of Dunton Hills Garden Village, as well as several urban extensions into the Green Belt along the A12. These greenfield allocations are necessary, given limited available/deliverable brownfield sites. Evidence of the Council's commitment to maximising brownfield opportunities can be seen in the proposals to bring forward a major Enterprise Park (Policy 8.2 Brentwood Enterprise Park) on brownfield land near to the M25/A127 junction.

Commentary on other policies

- 19.1.2 Soil and contamination is considered through **Policy 10.15: Contaminated Land and Hazardous Substances**. The policy takes a precautionary approach towards contaminated land, and outlines what is required of developers who wish to develop these areas of land. However, as the Borough is predominately dominated by Green Belt, it is **recommended** that it is stated within Policy 10.15 that support will be given to any development proposals that seek to remediate and bring back into a usable standard, areas of contaminated land.

Appraisal of the draft plan as a whole

- 19.1.3 The plan seeks to make best use of brownfield sites, recognising that not all available brownfield sites are deliverable or suitable for allocation. The agricultural land set to be lost is Grade 3, i.e. of relatively low quality in the national context, and hence **no significant effects** are predicted.

20 WASTE

Commentary on the spatial strategy

- 20.1.1 The broad spatial distribution of growth is not likely to have a bearing on waste management related objectives. It is assumed that there is sufficient capacity at waste management processing facilities in Essex to handle waste, and all new development, regardless of location and scale, has the potential to design-in waste management facilities.

Commentary on other policies

- 20.1.2 Waste is addressed through Policies: **10.3** (Sustainable Construction and Energy); **10.6** (High Quality Design Principles); and **10.15** (Contaminated Land and Hazardous Substances).

- 20.1.3 It is important to note that whilst the NPPF does not include any policies relevant to waste management within new developments, recommendations, guidance and requirements are set out in the Planning Practice Guidance, Waste Management Plan for England (2013) and the National Planning Policy for Waste (2014). Therefore, as **Policy 10.6: High Quality Design Principles** does not include any provision for on-site waste management, or the promotion of moving up the waste hierarchy, it is **recommended** that a requirement is placed upon developers to provide sufficient space for waste storage and waste arisings in all developments. It should also be required that developers are encouraged to move up the waste hierarchy (from the preferred reduce → reuse → recycle → recover → disposal (the least preferable option)) wherever possible. In particular, provision should be given for adequate recycling facilities, and where appropriate i.e. on larger developments, or residential developments with a garden, space is allocated for on-site composting of food waste arisings. This could be supported by the requirement of a stand-alone operational waste management strategy to support all planning applications for developments exceeding a certain size (either number of residential units or area of commercial floorspace) as either a pre- or post-planning condition.
- 20.1.4 Furthermore, it is **recommended** that a standalone policy is developed which outlines the requirement for sustainable waste management and the need for developers to move up the waste hierarchy, during refurbishment, demolition, excavation and construction activities and once the development is complete and operational, with a focus on reducing waste wherever possible. This policy should also support any recommendations that are added to Policy 10.6, so as to support the appropriate and sustainable management of waste within new developments.

Appraisal of the draft plan as a whole

- 20.1.5 Development management has some, albeit limited, potential to support good waste management practices. Recommendations are made for strengthening the policy approach. **No significant effects** are predicted.

21 WATER QUALITY AND WATER RESOURCES

Commentary on the spatial strategy

- 21.1.1 The Water Cycle Study highlights waste water capacity as an issue. Waste water treatment infrastructure in the north of the Borough (treatment works at Doddinghurst and Ingatestone) is operating at capacity and cannot accommodate any further development; whereas in the south of the Borough there is capacity. On this basis, **Policy 5.1: Spatial Strategy** performs well, with low growth directed to the Rural North and relatively low growth directed to Ingatestone.
- 21.1.2 In terms of water efficiency, larger scale developments may enable higher standards of water efficiency; however, this is uncertain. In terms of water quality, the SFRA indicates that although the Pilgrims Hatch area is underlain by a minor aquifer (as is most of the Borough) this area does have high potential for groundwater leaching. While this is not considered to be an insurmountable constraint, it is noted at this stage.

Commentary on other policies

- 21.1.3 Water quality and water resources are addressed through Policies: **6.3** (General Development Criteria (point d.)); **10.3** (Sustainable Construction and Energy); **10.10** (Green Infrastructure); **10.13** (Flood Risk); and **10.14** (Sustainable Drainage).

- 21.1.4 In particular, **Policy 10.3: Sustainable Construction and Energy** requires developments to incorporate water conservation measure (point b.), include Sustainable Urban Drainage Systems (SuDS) (point c.), and submit a Water Sustainability Assessment (point d.). However, whilst the policy states that these measures apply to all development proposals, it is **recommended** that developments above a certain size, e.g. 20 dwellings, are expected to provide more substantial water management measures, such as grey water harvesting than smaller developments. Although, reference is made to **Policy 10.14: Sustainable Drainage**, which contains guidelines on what is expected of developers with regards to SuDS, a similar approach should be taken towards water conservation measures. Also, it is **recommended** that reference is made within **Policy 10.6: High Quality Design Principles** to Policy 10.3 so that measures to conserve water, such as grey water harvesting, are seen as elements of high quality design.
- 1.1.1 Whilst the Local Plan addresses drainage requirements and water consumption targets, there is no reference to preserving, or enhancing the ecological status of waterways. It is **recommended** that a new stand-alone policy is developed that addresses the requirement for the preservation and where possible, enhancement of the ecological and chemical status of waterbodies in line with the Water Framework Directive.

Appraisal of the draft plan as a whole

- 21.1.5 Few strategic issues/considerations emerge from a review of the available evidence-base, but the proposed spatial strategy performs well in terms of those that are known of (specifically the matter of restricted waste water capacity in the Rural North area). Development management policy should be put in place to ensure that water quality and water resource considerations are taken fully into account at the planning application stage, recognising that the East of England is a water stressed region and that good development viability in Brentwood should mean that it is sometimes possible to achieve standards over and above national requirements. **No significant effects** are predicted.

22 CONCLUSIONS AT THIS CURRENT STAGE

- 22.1.1 In conclusion, the appraisal finds that the draft plan is set to result in significant positive effects in terms of 'housing' and 'economy/employment' objectives, but significant negative effects in terms of 'landscape' objectives. This trade-off between socio-economic and environmental objectives may be to some extent inevitable (given that national policy dictates that local authorities meet objectively assessed needs); however, there is good potential to add further policy in order to reduce tensions. Plan-making work to date has already managed to address a number of tensions (including in respect of landscape, to some extent).
- 22.1.2 Also, there may be potential to 'go further' through policy in order to enhance the predicted positive effects of the plan - e.g. through ensuring that policy is in place to maximise opportunities ('economy', 'communities', 'green infrastructure' etc) along the A127 corridor. Similarly, the policy approach to growth along the A12 corridor will require further careful consideration, in order to ensure that the best balance is struck between planning in line with known constraints and known opportunities.
- 22.1.3 The following policy specific recommendations are made, which should be taken into account by the Council when finalising the proposed submission plan for publication:
- Reference should be made within Policy 10.11 to Policy 10.1, in order to reinforce the link between sustainable transport and air quality.
 - Non-protected species, particularly those in decline (such as bees), and their habitats should be offered some level of protection through Policy 9.2, recognising the NPPF's intention to achieve biodiversity net gains.
 - Reference should be made in Policy 9.2 to Policy 10.10, as Green Infrastructure is an important component in the health and viability of the natural environment.

- Reference should be made within the Local Plan to the impact of refurbishment, demolition, excavation and construction activities on climate change and steps for mitigation, such as requiring 'just in time' deliveries, or reusing aggregate material and cut-offs where possible.
- Clarification should be added to Policy 10.7 that sets out the Council's opposition to the loss or degradation of community facilities.
- Policy 10.16 should make reference to when institutional buildings will be encouraged, e.g. when the development site exceeds a certain number of homes.
- The proviso within Policy 10.9 that development resulting in the loss open space may be supported if it can be demonstrated that there is an excess of provision should be removed. This is because demand for open space and community facilities can change and once lost, it will be difficult to replace these facilities if demand for them increases.
- Provision for heritage assets of local importance should be made within Policy 9.5.
- The Council should determine whether there are any Archaeological Priority Areas within the Borough, and if so, these should be referred to within Policy 9.7.
- The Council should require developers to support measures such as high-speed broadband within key employment areas so as to develop a knowledge-based economy.
- Flexibility should be allowed in Policy 8.7 to allow for some large retail units to be subdivided if it is found that consumers are travelling elsewhere for a wider range of options and large retail units are not in demand.
- Provision should be made within Policy 10.13 to allow for the enhancement of current flood management systems.
- There should be clarification added to Policy 10.3 regarding the level of SuDS that are required for developments of various sizes.
- Policy 10.3 should be referenced within Policy 10.6.
- Provision should be made within Policy 7.2 to address potential 'salami-slicing' of developments, whereby developers buy adjacent plots of land once an initial development is consented to expand the original scheme.
- Development within the Green Belt that is on the edge of an urban area should be required to develop the Borough's urban fringe, as well as maintaining the openness of the Green Belt.
- Support should be outlined within Policy 10.15 for any development proposals that seek to remediate and bring back to a usable standard any development proposed for contaminated land.
- A standalone Policy should be developed that addresses the requirement or the preservation and where possible enhancement of the ecological and chemical status of waterbodies in line with the Water Framework Directive.
- A requirement should be placed on developers to provide sufficient space for waste storage and waste arisings in all developments. Developers should also be encouraged to allow for waste to move up the waste hierarchy (from disposal to reduction). This could be supported by the requirement of a stand-alone operational waste management strategy to support all planning applications for developments exceeding a certain size (either number of residential units or area of commercial floorspace) as either a pre- or post-planning condition. A standalone Policy should be developed that outlines the requirement for sustainable waste management and the need for developers to move up the waste hierarchy, both during refurbishment, demolition, excavation and construction activities and once the development is complete and operational. Also, developments above a certain size, e.g. 20 dwellings, could be expected to provide more substantial water management measures, such as grey water harvesting than smaller developments; and reference should be made within Policy 10.6 to Policy 10.3 so that measures to conserve water, such as grey water harvesting, are seen as elements of high quality design.

PART 3: WHAT HAPPENS NEXT?

23 INTRODUCTION (TO PART 3)

23.1.1 The aim of this Chapter is to explain next steps in the plan-making / SA process.

24 PLAN FINALISATION

24.1 Preparation of the Proposed Submission Plan / SA Report for publication

24.1.1 Subsequent to the current consultation it is the intention to prepare the proposed submission version of the plan for publication in-line with Regulation 19 of the Local Planning Regulations 2012.³⁸ The proposed submission plan will be that which the Council believes is 'sound' and intends to submit for Examination. Preparation of the Proposed Submission Plan will be informed by the findings of this Interim SA Report, responses to the current consultation and potentially further appraisal work (potentially to include further appraisal of alternatives and/or site options - see references to possible 'further work' in Chapters 4, 6 and 9 above).

24.1.2 The SA Report (as opposed to an Interim SA Report) will be published alongside the Proposed Submission Plan. It will provide all of the information required by the SEA Regulations 2004.

24.1.3 Once the period for representations on the Proposed Submission Plan / SA Report has finished the main issues raised will be identified and summarised by the Council, who will then consider whether in-light of representations received the plan can still be deemed 'sound'. If this is the case, the Plan will be submitted for Examination, alongside a statement setting out the main issues raised during the consultation. The Council will also submit the SA Report.

24.1.4 At Examination the Inspector will consider representations (alongside the SA Report) before then either reporting back on the Plan's soundness or identifying the need for modifications. If the Inspector identifies the need for modifications to the Plan these will be prepared (alongside SA) and then subjected to consultation (with an SA Report Addendum published alongside).

24.1.5 Once found to be 'sound' the Plan will be formally adopted by the Council. At the time of Adoption a 'Statement' must be published that sets out (amongst other things) 'the measures decided concerning monitoring'.

25 MONITORING

25.1.1 The SA Report must present 'measures envisaged concerning monitoring'. As such, AECOM will work with the Council ahead of preparing the Draft Plan / SA Report, examining the Council's existing monitoring framework and considering its suitability in light of draft plan appraisal findings.

25.1.2 At the current time, in-light of the initial draft plan appraisal findings (i.e. predicted effects and uncertainties) presented in Part 2 above, it is suggested that monitoring efforts might focus on:

- The distribution of windfall development
- Traffic congestion at key junctions
- The effectiveness of landscaping / landscape mitigation measures.
- Access to services/facilities, retail and employment for residents of new communities
- Biodiversity enhancement measures implemented as part of Green Infrastructure strategy
- The number and nature of businesses with an interest in locating within the urban area or at the new dedicated employment sites.

³⁸ It is unlikely that further consultation will be necessary prior to preparing the Proposed Submission Plan; however, the possibility cannot be ruled-out. The Council will decide a course of action subsequent to the current consultation, and then will have to be prepared to adapt to an evolving situation.

APPENDIX I - CONTEXT AND BASELINE REVIEW

Introduction

As discussed in Chapter 4 ('What's the scope of the SA?') the SA scope is primarily reflected in a list of topics and objectives ('the SA framework'), which was established subsequent to a review of the sustainability 'context' / 'baseline' and consultation. The aim of this appendix is to present summary outcomes from the context / baseline review, as the detailed issues discussed helpfully supplement the SA framework, i.e. serve to identify specific issues that should be a focus of appraisal under the SA framework.

What's the sustainability context?

Below is a summary context review. A more comprehensive (and fully referenced) review is presented in the Scoping Report (2013).

Air quality

The EU Thematic Strategy on Air Pollution aims to cut the annual number of premature deaths from air pollution-related diseases by almost 40% by 2020 (using 2000 as the base year), as well as substantially reducing the area of forests and other ecosystems suffering damage from airborne pollutants.

The NPPF makes clear that planning policies should be compliant with and contribute towards EU limit values and national objectives for pollutants; and states that new and existing developments should be prevented from contributing to, or being put at unacceptable risk from, or being adversely affected by unacceptable levels of air pollution. This includes taking into account Air Quality Management Areas (AQMAs) and cumulative impacts on air quality.

Biodiversity

The NPPF and other national policy documents emphasise the need to protect important sites, plan for green infrastructure and plan for ecological networks at 'landscape scales' taking account the anticipated effects of climate change. National policy reflects the commitment to 'halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020'.

Positive planning for 'green infrastructure' is recognised as part of planning for 'ecological networks'. New development should incorporate green space consisting of a 'network of well-managed, high-quality green/open spaces linked to the wider countryside'. These spaces should be of a range of types (e.g. community forests, wetland areas and parks) and be multifunctional, for instance as areas that can be used for walking and cycling, recreation and play, supporting of wildlife, or forming an element of an urban cooling and flood management.

A number of local policy documents also highlight the need to preserve and enhance biodiversity features. The Brentwood Borough Council Green Infrastructure Strategy (2015) provides a set of principles; aims; improvement possibilities and key recommendations. These highlight and prioritise the most needed improvements to local green spaces; and encourage cross collaboration between stakeholders to support networks of multi-functional green infrastructure.

The Brentwood Borough Assessment of Needs and Audit of Open Space, Sport and Recreation Facilities highlights the need to develop 'strategic green linkages' by growing the existing network of public footpaths, exploring opportunities to develop pathways along main waterways and developing existing Public Rights of Way into key cycle routes.

Also, the Council has completed a Review of Local Wildlife Sites (2012) aims to describe wildlife resources in order to help landowners retain and enhance these biodiversity sites for the future.

Climate change mitigation

In its 2007 strategy on climate change, the European Commission recommended a package of measures to limit global warming to 2° Celsius. On energy, the Commission recommended that the share of renewable energy grows to 20% by 2020 against the 1990 baseline. In the UK the Climate Change Act 2008 has set legally binding targets on reducing greenhouse gas emissions in the UK by at least 80% by 2050 and 34% by 2020.

The NPPF emphasises the key role for planning in securing radical reductions in greenhouse gas emissions, including in terms of meeting the targets set out in the Climate Change Act 2008. Plan-making should, for example, support efforts to:

- Reduce transport emissions, by concentrating new developments in existing cities and large towns and/or ensuring they are well served by public transport;
- Deliver infrastructure such as low-carbon district heating networks; and
- Increase energy efficiency in the built environment.

The Brentwood Declaration on Climate Change acknowledges the increasing impact that climate change will have on the community during the 21st century and commits to tackling the causes and effects of a changing climate. The declaration commits to developing plans with partners and local communities to progressively address the causes and the impacts of climate change.

Community and well-being

A core planning principle is to 'take account of and support local strategies to improve health, social and cultural well-being for all'. The NPPF also emphasises the need to: facilitate social interaction and create healthy, inclusive communities; promote retention and development of community services / facilities; ensure access to high quality open spaces and opportunities for sport and recreation; and promote vibrant town centres.

Planning for good health is high on the agenda, in light of the 'Marmot Review' of health inequalities in England, which concluded that there is 'overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities'. Planning for good health can complement planning for biodiversity (green infrastructure) climate change mitigation (walking/cycling).

As highlighted by the NPPF, a key driver of health outcomes is access to open space / and sport and recreation. In this respect, the Brentwood Borough Sport, Leisure and Open Space Assessment 2015 (working draft) highlights that there are relatively good levels of access to green space and sport provision in Brentwood, although that there are areas of concern about quality. It states that: "*Local community surveys show that green spaces and sport facilities are valued highly by Brentwood residents and that they add significantly to the quality of life in the Borough*".

Cultural heritage

There is a need to set out a 'positive strategy' for the 'conservation and enjoyment of the historic environment', including those heritage assets that are most at risk. Heritage assets should be recognised as an 'irreplaceable resource' that should be conserved in a 'manner appropriate to their significance', taking account of 'the wider social, cultural, economic and environmental benefits' of conservation, whilst also recognising the positive contribution new development can make to local character and distinctiveness.

In the context of the Brentwood evidence base; the Brentwood Town Centre Regeneration Strategy Final Report (2010) highlights that as part of the regeneration strategy a key objective is: "*Protecting and enhancing the town's heritage and many listed buildings*". The Strategy document also notes that a review of conservation policy and applying the findings of the Conservation Area Appraisal would help achieve some key aims in addressing and conserving Brentwood's heritage.

Economy and employment

The planning system can make a contribution to building a strong, responsive economy by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including infrastructure provision. The NPPF also emphasises the need to: Capitalise on 'inherent strengths', and meet the 'twin challenges of global competition and of a low carbon future'; Support new and emerging business sectors, including positively planning for 'clusters or networks of knowledge driven, creative or high technology industries'; and Support competitive town centre environments, and only consider edge of town developments in certain circumstances.

Brentwood is part of the South East Local Enterprise Partnership (LEP) which contains the three counties of Essex, Kent and East Sussex. The LEP aims to 'create the most enterprising economy in England' and key to achieving this is addressing three 'barriers to growth': tackling congestion on the transport network, improving skills and reducing deprivation. Other objectives of the LEP are to strengthen the rural economy through opportunities in the food sector, tourism and universal super-fast broadband.

The Heart of Essex: Economic Futures Study (2012) identifies land, transport, storage and professional services; administrative and support services; and education as particular areas for growth. The study notes that 'supporting local businesses and attracting inward investment by creating the right conditions for growth will be critical to achieving the service-led growth that is forecast'; and strategic transport and communications infrastructure will be crucial to creating the right conditions for growth.

Following on from the Earlier Heart of Essex: Economic Futures Study, The Brentwood Economic Futures 2015-2030 document (2014) was produced in order to update the economic evidence base for the Brentwood LDP. Brentwood has recorded strong levels of job growth over the last 17 years (30%) and this document forecasted three different scenarios for future job growth in Brentwood.

The overall job growth associated with these scenarios range from 5,750 jobs to 7,440 jobs, over the period 2015/16 to 2029/30. Each of the scenarios indicates a lower level of future job growth in Brentwood than has been achieved in the recent past. The majority of job growth under each scenario is expected to be for office-based jobs, with some additional distribution jobs; and an anticipated decline in manufacturing jobs.

The Brentwood retail and commercial leisure study (2014) provides a qualitative analysis of the existing retail and leisure facilities within the Borough, and an assessment of the need for new retail, leisure and other main town centre uses. The study notes that: "*The short to medium term capacity figures up to 2020 suggest surplus of available convenience goods expenditure could support an additional 2,151 sq.m net (3,074 sq.m gross), primarily concentrated in Brentwood town centre*".

Flooding

The NPPF calls for development to be directed away from areas highest at risk, with development 'not to be allocated if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding'. Where development is necessary, it should be made safe without increasing levels of flood risk elsewhere. The NPPF also states that local planning authorities should avoid 'inappropriate development in vulnerable areas or adding to the impacts of physical changes to the coast' in order to reduce the risk from coastal change.

The Flood and Water Management Act highlights that alternatives to traditional engineering approaches to flood risk management include: Incorporating greater resilience measures into the design of new buildings, and retro-fitting at risk properties (including historic buildings); Sustainable drainage systems (SuDS); Utilising the environment, such as management of the land to reduce runoff and harnessing the ability of wetlands to store water; Identifying areas suitable for inundation and water storage to reduce the risk of flooding elsewhere; and planning to roll back development in coastal areas.

The Brentwood Strategic Flood Risk Assessment (SFRA) (2011) characterised flood risk throughout the Borough of Brentwood based on a range of sources. It highlighted that surface water flooding, resulting from surface water run off exceeding road drains and sewer capacity was the most significant cause of flooding in the Borough. The SFRA recommends that:

"As a minimum, all new development over 0.25 hectares in size (and all development in Flood Zones 2 and 3) should employ Sustainable Drainage Systems (SuDS) with the aim of reducing runoff"; and that:

"for much of the urban area of Brentwood the infiltration potential of soils is high, meaning that infiltration SuDS are likely to be suitable. Infiltration options control runoff at source and are high up in the SuDS hierarchy. The feasibility of infiltration on site will need to be determined through a site specific flood risk assessment, however."

Additionally, in response to the Flood Risk Regulations (2009), the Flood and Water Management Act (2010); and in light of the SFRA findings and the need to develop a strategy for flood risk management; Essex County Council commissioned JBVA Consulting to complete a Surface Water Management Plan (SWMP). A SWMP is a plan which enables local communities and different organisations to better understand flood risk and outlines the preference surface water management strategy which should be implemented at the given location. Based on the key areas identified by the SFRA and Essex County Council a number of options and measures were determined which could be implemented to reduce flood risk. Some of these options / measures were specific to a site, with some to be considered on a Borough-scale

Housing

Local planning authorities should significantly boost the supply of housing and seek to ensure that 'full, objectively assessed needs for market and affordable housing' are met. With a view to creating 'sustainable, inclusive and mixed communities' authorities should ensure provision of affordable housing onsite or externally where robustly justified. Plans for housing mix should be based upon 'current and future demographic trends, market trends and the needs of different groups in the community'. Larger developments are suggested as sometimes being the best means of achieving a supply of new homes.

The housing market is delivering much less specialist housing for older people than is needed. Central and local government, housing associations and house builders need urgently to plan how to ensure that the housing needs of the older population are better addressed and to give as much priority to promoting an adequate market and social housing for older people as is given to housing for younger people.³⁹

Planning policy for traveller sites (2012) sets out the Government's planning policy for traveller sites and should be used in conjunction with the NPPF. It aims to ensure travellers are treated in a fair and equal manner that facilitates their traditional and nomadic way of life, whilst also respecting the interest of the settled community. Local authorities are called upon to make their own assessment of need for traveller sites - using a robust evidence base and effective engagement with stakeholder groups and other local authorities – and to allocate sites accordingly.

The Brentwood Replacement Local Plan (2005) which this plan will supersede sought to negotiate 35% affordable housing (30% social rented, 5% other affordable housing) on all suitable sites above the thresholds of 20 units and above or on suitable residential sites of 0.66 hectares or more within the Brentwood Urban Area, and on sites of 5 units and above or on suitable sites of 0.16 hectares or more within defined settlements elsewhere in the Borough.

In line with Government guidance requiring 'objectively assessed needs for market and affordable housing'; The Strategic Housing Market Assessment (SHMA) Final Report (2014) highlights the characteristics of current housing stock in the Borough as well as forecasts of future population and housing requirements.

Landscape

The European Landscape Convention (ELC) came into force in the UK in March 2007. The ELC defines landscape as: "An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors." It recognises that the quality of all landscapes matters – not just those designated as 'best' or 'most valued'. The NPPF refers to the need to protect and enhance valued landscapes and identifies that major development should be avoided in designated areas, unless in the public interest.

Local authorities with green belts in their area should establish green belt boundaries in their local plans which set the framework for green belt and settlement policy. Once established, green belt boundaries should only be altered in exceptional circumstances, through the preparation or review of the local plan. At that time, authorities should consider the green belt boundaries having regard to their intended permanence in the long term, so that they should be capable of enduring beyond the plan period. Once Green Belts have been defined, local planning authorities should plan positively to enhance the beneficial use of the Green Belt, notably to 'retain and enhance landscapes, visual amenity and biodiversity.

³⁹ Select Committee on Public Service and Demographic Change (2013) Ready for Ageing? [online] available at: <http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing/> [accessed 12/2014]

During previous consultation on the SA Scoping Report, one parish council and seven residents commented, on the importance of maintaining the Green Belt in the Borough to the same level of protection as set out in the previous (2005) Local Plan.

Soil and contamination

There is a need to encourage the effective use of land through the reuse of land which has been previously developed, provided that this is not of high environmental value. The NPPF requires an approach to housing density that reflects local circumstances.

The NPPF calls upon the planning system to protect and enhance soils. It expects local planning authorities 'to take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development on agricultural land is necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.

New or existing development should also be prevented from being 'adversely affected' by the presence of 'unacceptable levels' of soil pollution or land instability and be willing to remediate and mitigate 'despoiled, degraded, derelict, contaminated and unstable land, where appropriate'.

Waste

National Planning Policy for Waste was recently published, and it is the intention that it should be read in conjunction with the NPPF, the National Waste Management Plan for England and national policy statements for waste water and hazardous waste. All local planning authorities should have regard to its policies when discharging their responsibilities to the extent that they are appropriate to waste management. The National Policy emphasises: by driving waste management up the waste hierarchy; ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport; providing a framework in which communities and businesses are engaged with and take more responsibility for their own waste; helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment; and ensuring the design and layout of new residential and commercial development and other infrastructure complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.

Water quality and water resources

The EU's *Blueprint to Safeguard Europe's Water Resources* highlights the need for Member States to reduce pressure on water resources, for instance by using green infrastructure such as wetlands, floodplains and buffer strips along water courses. This would also reduce the EU's vulnerability to floods and droughts. It also emphasises the role water efficiency can play in reducing scarcity and water stress.

The NPPF states that local authorities should produce strategic policies to deliver the provision of a variety of infrastructure, including that necessary for water supply and should encourage and incentivise water efficiency measures at the demand side⁴⁰.

In this regard, Brentwood Borough Council commissioned Entec UK Limited to produce a water cycle study (2011). This Water Cycle Study assesses the capacities of water bodies and water related infrastructure to accommodate future development and growth in Brentwood Borough and it forms part of the evidence base for the local development plan.

In line with environment agency guidelines the study sets the context of the study area and assesses environmental and infrastructure capacity to identify the most suitable locations for growth. Where constraints occur, the Outline phase recommends further work as part of a Detailed Phase Water Cycle Study.

⁴⁰ Defra (2011) Water for life (The Water White Paper) [online] available at: <http://www.official-documents.gov.uk/document/cm82/8230/8230.pdf> (accessed 12/2014)

What's the sustainability baseline?

An in-depth review of the sustainability baseline is presented within the Scoping Report. The aim of the discussion here is to present a summary review, and also to present some updates.

Air quality

Transport is a principle matter of concern in terms of the Borough's air quality. The main source of traffic emissions are the Borough's major roads, with these being the M25, A12, A128, A1023, A129 and A127.⁴¹ Air quality in Essex as a whole is generally considered to be good; however, the Borough features a high proportion of air quality management areas (AQMAS) when compared to the rest of the county⁴².

In total there are seven AQMAS located in the Borough; however, three are now set to be de-designated on the basis that NO₂ concentrations have not exceeded the annual mean objective value for the past four years.⁴³ The AQMAS designated in the Borough are predominantly located on the main transport route, the A12. The one exception to this is the AQMA located within Brentwood Town Centre at the A128/A1023 junction.

Biodiversity

The Essex Biodiversity Action Plan (BAP) sets out those species and habitats that should be protected and enhanced within the Borough. Priority habitats include woodlands, grasslands, hedgerows and ponds. Priority species include dormice, great crested newts and bats.

There are three Sites of Special Scientific Interest (SSSI) within the Borough. These are located at Coppice, Kelvedon Hatch; Curtis Mill Green; and Thorndon Park. All of these SSSIs are classified as being in 'unfavourable' condition, but remedial work is being undertaken. Of the sites, two are located within the north-west area of the Borough, whilst one is located to the south.

Other sites of biodiversity interest in the Borough include:⁴⁴

- a statutory Local Nature Reserve (Hutton Country Park), and Warley Place which is managed by Essex Wildlife Trust as a Local Nature Reserve.
- the Thames Chase Community Forest and Red House Lake are both highlighted as sites for protection.
- 147 Local Wildlife Sites (LoWS) and areas of woodland. One of the most noticeable features of the current LoWS network is the relative lack of high quality grasslands.⁴⁵
- 11 parks in the Borough and four country parks. The country parks are regarded as being of biodiversity importance; for instance, Thorndon Country Park hosts an ancient deer park area which has been designated as a SSSI.

Brentwood's country parks are based in the west, east and south of the Borough. With the exception of Tipps Cross ward in the north of the Borough, all residential areas are within the recommended accessible drive time catchment⁴⁶ of one of the four country parks. Brentwood currently has no recognised formal green corridors. *The built-up area of Brentwood features a number of important 'green wedges', two of which extend into the centre of the town (Hartswood/Shenfield Common and Brentwood School/Merrymeade Park).*

⁴¹ Brentwood Borough Council (2012) Air Quality Updating and Screening Assessment for Brentwood Borough Council

⁴² Brentwood Borough Council (2009) Pathway to a sustainable Brentwood: Issues and Options Consultation [online] available at: <http://www.brentwood.gov.uk/pdf/10112009103817u.pdf> (accessed 12/2014)

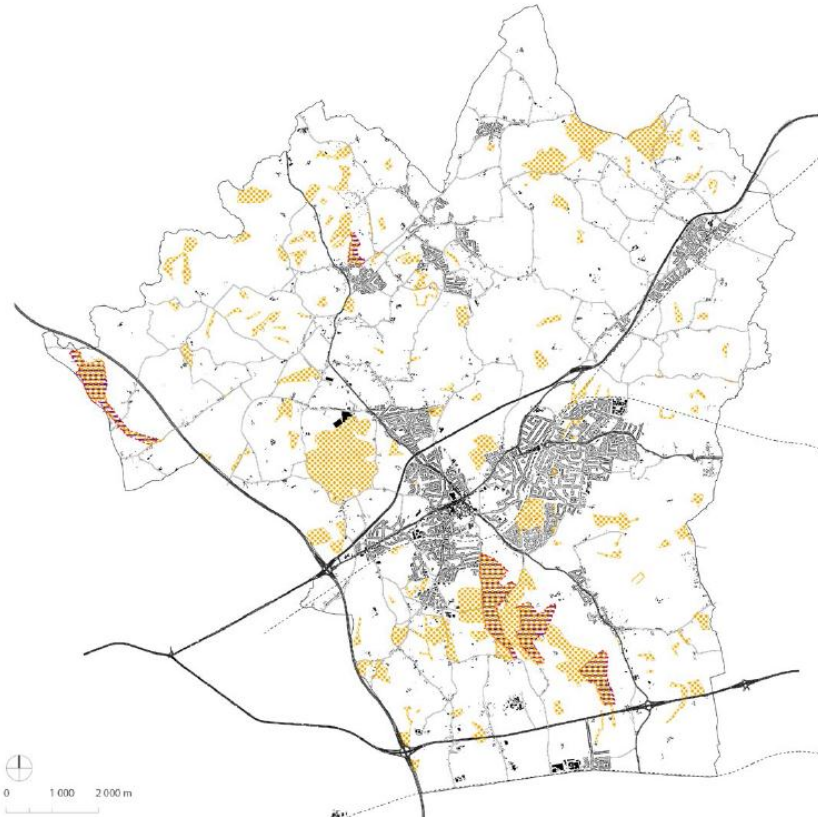
⁴³ Defra: AQMA Maps [online] available at: http://aqma.defra.gov.uk/maps.php?map_name=kent&la_id=33 (accessed 12/2014)

⁴⁴ PMP (2007) Survey and assessment of needs and audit of open space, sport and recreation facilities in Brentwood Borough [online] available at: <http://www.brentwood.gov.uk/pdf/19032008093745u.pdf> (accessed 12/2014)

⁴⁵ EECOS (2012) Brentwood Borough Local Wildlife Site Review

⁴⁶ A drive-time accessibility standard of 10 minutes (4km) was deemed appropriate for country parks given their role as a destination venue

Designated SSSIs (dark brown) and Local Wildlife Sites (light brown) in Brentwood



Climate change mitigation

Total domestic and commercial energy consumption in the Borough was below the average for Essex as a whole in 2005⁴⁷. With the possible exception of some small scale domestic solar panels, the Borough had no renewable energy schemes in place in 2009, and no planning applications were received regarding renewable energy schemes over the course of 2010/11. There may, however, have been the installation of solar panels on individual residential properties in the Borough, for which planning permission is not required.⁴⁸

Per capita emissions of CO₂ in the Borough have been falling in recent years. Total emissions per capita have fallen from 8.3 tonnes in 2005 to 7.2 tonnes in 2012 with a decline in transport emissions (0.5 tonnes), domestic emissions (0.3 tonnes) and industrial emissions (0.4 tonnes) over the same period. Emissions per capita still remain above the 2012 Essex (5.9 tonnes), East of England (6.4 tonnes) and national (6.2 tonnes) averages.⁴⁹

In 2001, 57% of the Borough's population travelled to work by car (below the national average); a higher than average number of people commuted by train (20%); and 1% of residents cycled to work (below the regional and national average). Approximately 20% of residents travel greater than 20km to work; however the number of borough residents working from home is slightly higher than average.⁴⁷

⁴⁷ Brentwood Borough Council (2009) Pathway to a sustainable Brentwood: Issues and Options Consultation [online] available at: <http://www.brentwood.gov.uk/pdf/10112009103817u.pdf> (accessed 12/2014)

⁴⁸ Brentwood Borough Council (2012) Annual Monitoring Report 2010/11 [online] available at: <http://www.brentwood.gov.uk/pdf/18012012112208u.pdf> (accessed 12/2014)

⁴⁹ DECC (2014) Local Authority Carbon Dioxide Figures [online] available at: <https://www.gov.uk/government/statistics/local-authority-emissions-estimates> (accessed 12/2014)

Community and well-being

According to census data over the period 1971 to 2001, the population of the Borough has been subject to a declining trend, with the population falling by 3.2% between 1991 and 2001 to stand at 68,456. The 2011 Census meanwhile records a 7% rise to 73,600. Around 70% of the Borough's population live in Brentwood urban area.⁴⁸ Almost all of the population change in the Borough of Brentwood between 2001 and 2008 was through migration from the EU and UK.⁵⁰ Those aged over 60 make up 23.9% of the population of Brentwood Borough, which is above the average for England (20.9%)⁴⁸ and an increasingly ageing population is predicted.

In the Borough, there is a higher proportion of the population classed as having 'good' health than in England as a whole.⁵⁰ Life expectancy is higher than the national average. Over the period 2008-10 this stood at 81.1 for men and 84.3 for women in comparison to 78.2 and 82.3 respectively in England.⁵⁰ In the Borough's most deprived areas life expectancy is 9.4 years lower for men and 6.4 years lower for women than in the least deprived areas (See Figure 5.2).⁵¹

In a survey of borough households, parks and gardens, and natural open spaces were considered to be the most important open spaces in the Borough. In terms of open spaces, urban parks and gardens, there are a number of areas outside of an accessible catchment – these areas include central Brentwood, Warley, Brook Street, Pilgrims Hatch, Shenfield and Hutton Mount.⁴⁴

The borough's allotment sites accommodate 596 plots. According to a 2007 audit, there were waiting lists at some of these allotment sites and demand for plots was continuing to rise.^{Error! Bookmark not defined.} A more recent 2012 assessment of the sites found that in total 139 people were on waiting lists for plots in the Borough, so indicating that demand has continued to outstrip supply.⁵²

There are 24 primary schools and six secondary schools within the Borough; and no higher education facilities. Primary schools in the Borough are regarded as being at capacity, particularly in the Brentwood urban area.⁵³ Levels of attainment in education are considered to be relatively high, with a slightly higher than average proportion of 15 year old pupils achieving GCSEs or equivalent in 2007. The average number of people achieving no qualifications was also slightly lower than average.⁴⁷ 23% of the Borough's population have no qualifications, compared to 29.1% in England.⁴⁸

The borough is home to a number of community facilities, providing both social and cultural services. Examples include the Brentwood Centre's International Hall, Brentwood Theatre, Merrymeade House, and a number of Parish and Village halls. The Borough has three libraries. These are located in Ingatestone, Shenfield and Brentwood. In terms of sports and recreation, a number of large facilities are available.

There was a rise in unauthorised caravans from January 2007, to January 2009, after which there was a sharp decline due to a number of temporary permissions being granted. However, the number of unauthorised sites has again increased. In July 2012 there were 36 caravans on unauthorised sites and 60 on authorised private sites.

Whilst the Borough can on the whole be considered to be relatively affluent, there are some areas of relative deprivation, particularly to the south-east on the outskirts of the town of Brentwood.⁵⁴ Rural deprivation is an issue in some areas of the Borough, with particular pockets of deprivation found to the south and east of the Brentwood urban area.

'Multiple deprivation', as measured by the Index of Multiple Deprivation 2010 dataset, varies across Brentwood. The unit of measurement is the Super Output Area (SOA). The figure below shows the output of the IMD 2015 dataset. The most deprived SOA (highlighted in the figure below) ranks 9,687 nationally (where 1 is most deprived), whilst the least deprived ranks 32,726th (out of 32,844 nationally).

⁵⁰ Roger Tym & Partners / Edge Analytics (2012) Heart of Essex Housing Growth Scenarios [online] available at: <http://www.brentwood.gov.uk/pdf/06082012102027u.pdf> (accessed 12/2014)

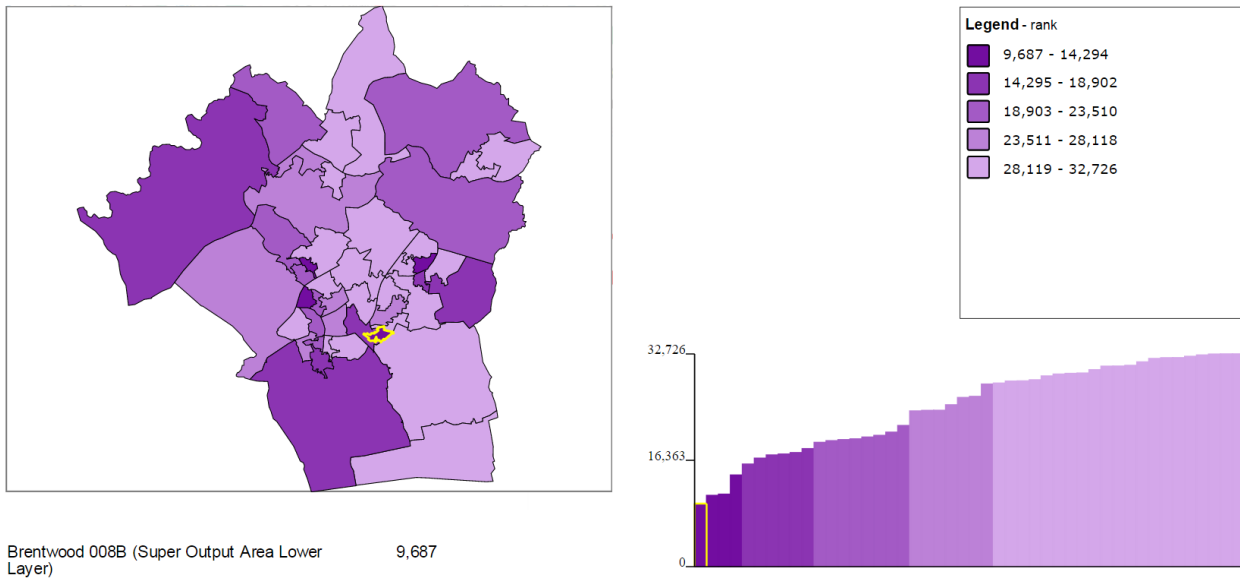
⁵¹ DoH (2012) Health Profile: Brentwood [online] available at www.apho.org.uk/resource/view.aspx?RID=117177 (accessed 12/2014)

⁵² Brentwood Borough Council – Personal communication (09/05/2013)

⁵³ Brentwood Borough Council (2013) Personal communication.

⁵⁴ ONS – Neighbourhood Statistics [online] available at <http://www.neighbourhood.statistics.gov.uk/dissemination> (accessed 12/2014)

IMD 2015 (with most deprived SOA highlighted)



Cultural heritage

Altogether there are 13 conservation areas, 518 listed buildings and 12 scheduled monuments to be found spread across the Borough. In addition, there are three historic parks and gardens, with these being: Thorndon Park, Weald Park and Warley Place.⁴⁷

There are two listed buildings in the Borough which are listed on English Heritage’s Heritage at Risk Register.⁵⁵ These are: Chantry Chapel and Mausoleum (Grade II* listed building; poor condition) and Thoby Priory ruins (Grade II listed building / Scheduled Monument; very bad condition).

Economy and employment

The borough is closely connected to London’s economy and in 2011 contributed £1.5 billion to the UK economy and despite the local economy shrinking by 4.6% in 2007/08 and a further 3.1% in 2009 due to the global economic crisis, overall the Borough’s gross value added (GVA) has been on the rise with its contribution expected to exceed 2006 levels by 2014.⁵⁶

Average incomes in the Borough stand at £708 per week which is higher than both the regional averages (£529) and national averages (£503). This is indicative of the high rates of out-commuting to high skilled, well-paid jobs in London (amounting to 55% of the Borough’s resident workforce). In contrast, the average weekly income of those residents working in Brentwood is £564 per week which is still above the national and regional average.⁵⁶

In 2010, employment in R&D, finance and business services made up the highest proportion of the Borough’s economy. Another significant sector within the Borough is construction in which there is a higher proportion of the local population employed than elsewhere in the UK. Accommodation and food services are also significant sectors. The unemployment rate for the Borough rose to 4.6% in 2011, which was lower than the regional average (6.7%) and the national average (7.7%).

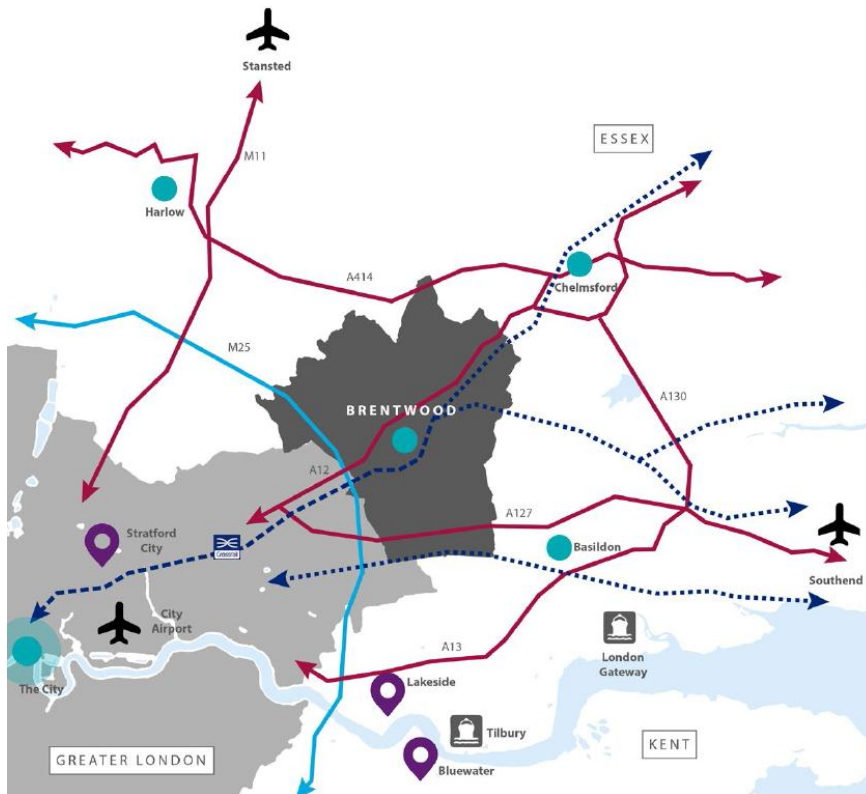
⁵⁵ English Heritage, Brentwood Heritage Risk Register [online] available at: <http://risk.english-heritage.org.uk/register.aspx?rs=1&rt=0&pn=1&st=a&di=Brentwood&ctype=all&crit=> (accessed 12/2014)

⁵⁶ Nathaniel Lichfield & Partners / Experian (2012) The Heart of Essex: Economic Futures Study [online] available at: <http://www.brentwood.gov.uk/pdf/06082012104212u.PDF> (accessed 12/2014)

Professional, scientific and technical and the construction sectors make up just under a third of Brentwood’s businesses (31% of the total business base) which is a larger share than the regional average for these sectors. However between 2009 and 2011 the professional, scientific and technical sectors have grown by 5% year on year whilst the construction sector has declined by 1%. The third largest sector is retail (9%) which is 1% lower than the regional average. It is recommended that Brentwood Town Centre retail strengths should be built on and its retail and commercial offering grown.

The main employment centres in the Borough are located in the central part of the Borough (Brentwood Town Centre and Shenfield) and the north-east of the Borough in Ingatestone.

Brentwood’s location on the regional transport network



Flooding

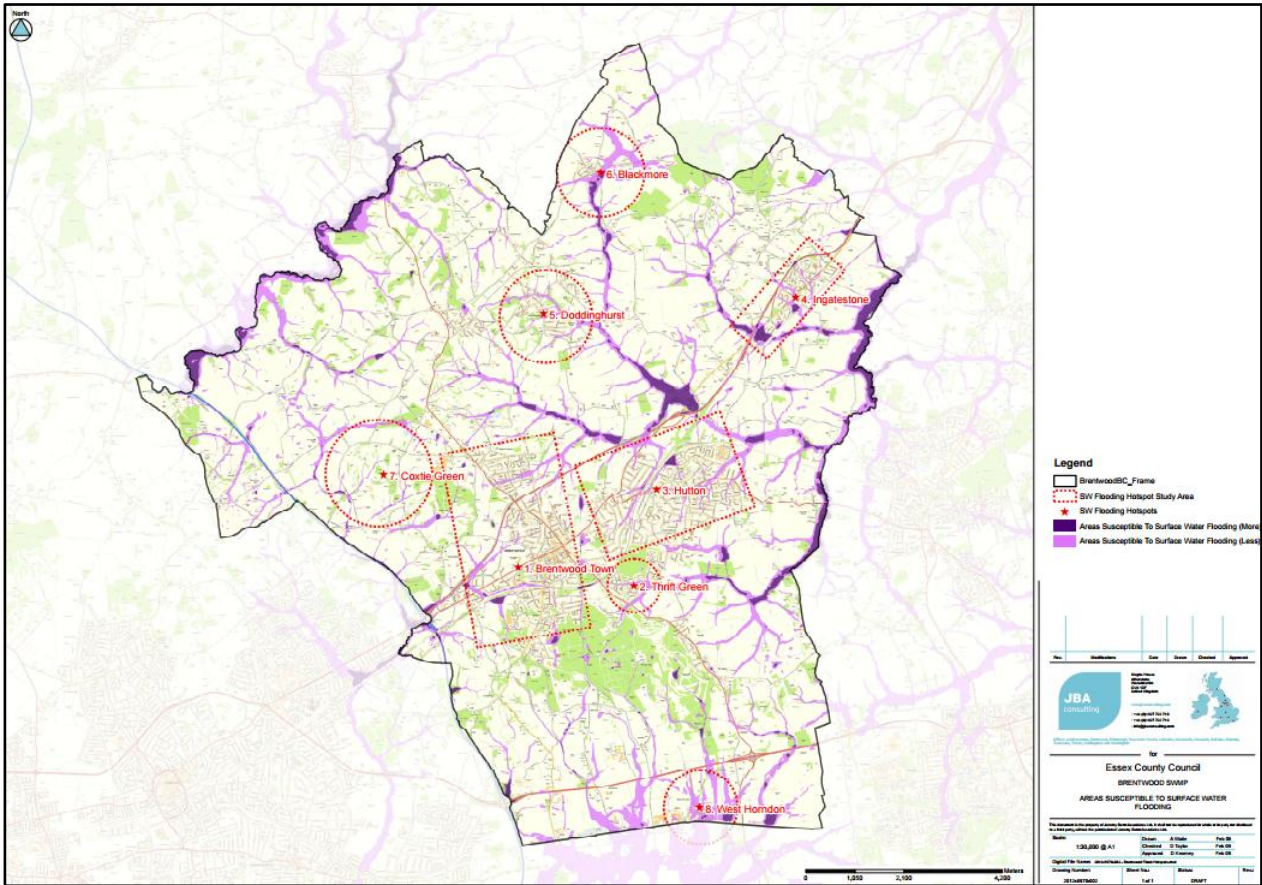
The extent of fluvial flood risk is limited with the majority of areas categorised as Flood Zones 2 and 3 found in rural areas; although Heybridge and Ingatestone and areas to the west and east of the Brentwood urban area are most at risk of flooding. The most significant area of fluvial flood risk is in the north-west of the Borough in the vicinity of the River Roding.⁴⁷

Surface water flooding is associated with drains and sewers becoming overwhelmed during intense rainfall events; and is likely to be the most significant cause of flooding in the Borough⁵⁷. Surface water flood risk is higher in urban areas.⁵⁷ Surface water flooding is likely to continue to be the primary source of flood damage in Brentwood. Such occurrences may become more serious as a result of climate change, which may lead to increasingly intense rainfall events.

The figure below shows the areas within Brentwood which have been identified by the recent Surface Water Management Plan as susceptible to flooding.

⁵⁷ Entec (2011) Brentwood Level 1 Strategic Flood Risk Assessment [online] available at: <http://www.brentwood.gov.uk/pdf/21032011162645u.pdf> (accessed 12/2014)

Areas susceptible to surface water flooding within Brentwood



Housing

Nationally, the number of households in England is projected to grow to 24.3 million in 2021, an increase of 2.2 million (10%) over 2011, or 221,000 households per year⁵⁸. Changes in population will account for about 98 per cent of the household formation between 2011 and 2021. In ten years, the number of households is projected to grow between 5 and 10 per cent in nearly half (46%) of all local authority districts in England. In Brentwood Borough, the number of households is projected to grow by between 5% and 7.5% over this period.

Housing affordability is a major issue in Brentwood. Whilst local income levels are higher than the UK average, house prices too are significantly higher than the average prices for England. As a result, for many households, property costs and rental levels are unaffordable.

In terms of the type of housing that is required, the Brentwood Borough Strategic Housing Market Assessment (SHMA) 2013⁵⁹ found that of a total demand of 2,743 market housing is needed within the Borough in the next five years. The SHMA recommends that 35% of new homes are affordable housing (approximately 960 houses).

⁵⁸ DCLG (2013) Household Interim Projections, 2011 to 2021, England [online] accessed: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182412/Stats_Release_2011FINALDRAFT.pdf (accessed 12/2014)

⁵⁹ DCA (2013) Brentwood Borough Strategic Housing Market Assessment 2013 [online] available at: <http://www.brentwood.gov.uk/pdf/18082014110455u.pdf> (accessed 01/2015).

One and two bedroom properties make up a relatively small proportion of the total of the existing housing stock in Brentwood. In the context of longer life expectancy, more household break ups and a growing proportion of young people choosing to live alone, the lack of one and two bedroom properties affects affordability and choice of housing. This can result in the loss of young, economically active, elements of the population and an imbalance in the population structure over the long term. The SHMA recommends that 70% of social rented housing should be one and two bedroom properties, while for intermediate market housing 95% should be one and two bedroom properties.⁵⁹

Landscape

The majority of the Borough is of a rural character, with built up areas making up less than 20% of the Borough. The borough's rural areas comprise villages set in a largely attractive rolling landscape, which comprises a mix of agricultural land, woodland, and parks. Three distinct landscape types have been identified within the Borough all of which are regarded as having a relatively high sensitivity to change. These are: River Valley (to the north-west), Wooded Farmland (the majority of the Borough) and Fenland (to the south).⁴⁷

Soil and contamination

The entire borough is located within the London Metropolitan Green Belt, with around 80% of the Borough classified as rural. Since 2001, Brentwood has achieved a consistently high proportion of residential developments on previously developed land (PDL)⁶⁰ averaging 99% over the 11 years to 2012.⁶¹ The borough has continuously maintained high levels of density for new homes. The majority of agricultural land is classed as being of Grade 3 quality. There are some areas of higher quality (Grade 2) land, mainly located in the north-east of the Borough. **Error! Bookmark not defined.** There are currently no entries on the Council's Contaminated Land Register.⁶²

Water quality and water resources

Essex is in an area of serious water stress and so options to develop new resources are considered to be limited. However, based on water company plans,⁶³ water supply is not seen as being a constraint to potential growth in the Borough.

The Wastewater Treatment Works at Doddinghurst and Ingatestone are currently at capacity and unable to receive any additional flow. This lack of capacity may affect growth in Tipps Cross, Ingatestone Fryerning and Mountnessing Wards, plus the eastern half of Brizes and Doddinghurst Ward (including Kelvedon Hatch and Doddinghurst). The Water Cycle Study recommended that growth in these areas be avoided; however subsequently Anglian Water has stated that they would take the necessary steps to accommodate further growth in these catchments should it come forward.

In terms of water quality, the water quality of rivers in the Borough is generally 'Moderate' status. The Rivers Ingrebourne, Mardyke and Wid each classed as having 'Poor' status. The chemical status of groundwater bodies in the Borough is classified as 'Poor'.⁶⁴ Climate change projections for Essex⁶⁵ also list the risk of decreased water (particularly in summer) as an issue reduced water as a sustainability issue, exacerbated by a potential increase in demand.

⁶⁰ NB In June 2010 the definition of PDL was changed by government. Residential gardens are now to be classified as Greenfield land in residential use. Garden land or land adjoining residential properties makes up a significant amount of the Boroughs housing supply.

⁶¹ Brentwood Borough Council -Annual Monitoring Reports (2004-2012) [online] available at <http://www.brentwood.gov.uk/index.php?cid=880> (accessed 12/2014)

⁶² Contaminated Land Study [online] available at: <http://www.brentwood.gov.uk/index.php?cid=718> (accessed 12/2014)

⁶³ These plans involve demand management measures together with increased capacity at Abberton reservoir.

⁶⁴ Entec (2011) Brentwood Scoping and Outline Water Cycle Study [online] available at: <http://www.brentwood.gov.uk/pdf/21032011165157u.pdf> (accessed 12/2014)

⁶⁵ Thurrock Council (2008) Thurrock Climate Change Evidence Base [online] available at http://www.thurrock.gov.uk/planning/strategic/pdf/ldf_tech_climate_2008.pdf (accessed 12/2014)

APPENDIX II - SITE OPTIONS APPRAISAL

Introduction

As explained within Chapter 5 above, site options - i.e. the pool of housing sites that are available, deliverable and potentially suitable for allocation through the plan - have been appraised for completeness.

The aim of this appendix is to

- 1) explain the site options appraisal methodology; and then
- 2) present the outcomes of site options appraisal.

N.B. Employment site options have not been appraised.

Developing the site options appraisal methodology

It was not possible to simply apply the SA framework (i.e. the list of SA topics/objectives presented in Table 4.1, above) given the number of site options and limited data availability. As such, work was undertaken to develop a criteria-based methodology suited to site options appraisal.

The broad scope of the site options appraisal criteria are introduced in **Table A**, below. The table aims to demonstrate that the criteria reflect the SA framework as closely as possible, recognising data limitations (and given that there is a need to appraise site options ‘on a level playing field’).

Table A explains that it has not been possible to draw on qualitative analysis, e.g. taking into account what will or will not be delivered on each site. Rather, there is a need to rely solely on quantitative analysis, i.e. location / distance analysis utilising Geographical Information Systems (GIS) software.

Table B then lists the criteria concisely alongside the rules that have been applied to categorise the performance of sites. Specifically, Table B explains how, for each of the 24 criteria employed, the performance of sites is categorised on the following scale - ⁶⁶

Dark green	Site performs particularly well
Light green	Site performs well
No shading	No issue in terms of this criterion
Amber	Site performs poorly
Red	Site performs particularly poorly

N.B. Whilst that methodology has not been the subject of consultation to date, stakeholders are welcome to comment at the current time. Any suggestions will be taken into account when undertaking **further SA work** subsequent to the current consultation.⁶⁷

⁶⁶ It is important to be clear that the aim of categorising the performance of site options is to aid differentiation, i.e. to highlight instances of site options performing relatively well / poorly. The intention is not to indicate whether a ‘significant effect’ is predicted.

⁶⁷ It is recognised that the current methodology differs to that applied in 2013 (and reported in the August 2013 Interim SA Report). There is the potential to revisit site options appraisal subsequent to the current consultation, and merge the two approaches.

Table A: Scope of the site options appraisal methodology

Topic	Relevant criteria (Location in relation to...)	Notes
Air quality	<ul style="list-style-type: none"> • Air Quality Management Area (AQMAs) 	<p>Good data exists to inform the appraisal, as AQMAs are designated where air quality is problematic. However, there is only the potential to measure proximity to an AQMA (i.e. there is not potential to model traffic flows between sites and AQMAs).</p>
Biodiversity	<ul style="list-style-type: none"> • Site of Scientific Interest (SSSI) • Locally designated wildlife sites • Ancient Semi Natural Woodland • Local Nature Reserves • Other woodland 	<p>Good data is available to inform the appraisal. It is fair to assume that sites in close proximity are sensitive, including because development can lead to recreational impacts.</p> <p>However, it has not been possible to draw on any locally commissioned work to identify further areas of constraint/opportunity (e.g. particularly sensitive locally designated wildlife sites or other areas contributing to 'green infrastructure').</p>
Climate change mitigation		<p>No data is available to inform the appraisal. Whilst some site options may well have greater potential to incorporate on-site low carbon and renewable energy technologies (including on account of the scale and density of development or the terrain and aspect of the site), or link to a decentralised source of low carbon / renewable energy, there is insufficient evidence to enable robust analysis.</p>
Community and well-being	<ul style="list-style-type: none"> • Bus stops • GP surgery / medical centre • Educational establishment • Community facilities • Protected Urban Open Space⁶⁸ • Area of overall deprivation 	<p>Limited data is availability of data to inform the appraisal.</p> <p>Proximity to community infrastructure is important, particularly for residents who are less mobile (e.g. the elderly). However, there are few available borough-wide datasets. Also, data is not available to show the location of facilities outside the Borough, which could prejudice against sites near to the Borough boundary. Also, a limitation relates to there being no ability to take into account the potential for development at a particular site to put additional pressures on community infrastructure locally, or for the analysis to evaluate the potential for development to fund new community infrastructure.</p> <p>Development in an area of relative deprivation is assumed to be a positive step given that it can lead to developer funding being made available for targeted local schemes/initiatives. It is however difficult to draw strong conclusions as viability considerations will come into play and/or because the full impacts can only be examined in the context of a detailed scheme.</p>

⁶⁸ Protected Urban Open Space was designated in the Brentwood Replacement Local Plan under Policy LT2.

Topic	Relevant criteria (Location in relation to...)	Notes
Cultural heritage	<ul style="list-style-type: none"> • Conservation area • Registered park or garden • Scheduled monument • Listed building 	<p>Limited data is available to inform the appraisal. Whilst there is good potential to highlight where development in proximity to a heritage asset might impact negatively on that asset, or its setting, a limitation relates to the fact that it has not been possible to gather views from heritage specialists on sensitivity of assets / capacity to develop sites. This is a notable limitation as potential for development to conflict with the setting of historic assets / local historic character can only really be considered on a case-by-case basis rather than through a distance based criteria. It will also sometimes be the case that development can enhance heritage assets.</p>
Economy and employment	<ul style="list-style-type: none"> • Employment areas 	<p>Poor data exists to inform the appraisal. It is possible to identify instances where development would lead to the loss of an employment site (i.e. the employment use would be lost to another use); however, it is difficult to draw strong conclusions as underlying factors may be in play (e.g. because employment site may be vacant or underperforming). It is also possible to consider the implications of development (whether housing or employment) in proximity to existing employment locations. However, again it is difficult to draw strong conclusions.</p>
Flooding	<ul style="list-style-type: none"> • Flood risk zone 	<p>Good data exists to inform the appraisal in terms of flood risk, although the available data relates to fluvial (river) flood risk only. Data on surface water flood risk is now available, and will be drawn upon in the future.</p>
Housing		<p>No data exists to inform the appraisal. It would not be appropriate to suggest that a large site performs better than a small site simply because there is the potential to deliver more homes. Housing objectives could be met through the delivery of numerous small sites, or through delivery of a smaller number of large sites (albeit it is recognised that financial viability, and hence the potential to deliver affordable housing alongside market housing, is higher at large sites).</p>
Landscape	<ul style="list-style-type: none"> • Special Landscape Area (SLA) • Landscape Improvement Area • Green Belt 	<p>Limited data is available to inform the appraisal. Work is ongoing to ensure that all site options are categorised in terms of potential for landscape impacts and also the potential to result in loss of functioning Green Belt (i.e. Green Belt that meets the established purposes). This work will be drawn upon in the future.</p>
Soil and contamination	<ul style="list-style-type: none"> • High quality agricultural land⁶⁹ • Agricultural land under Environmental Stewardship⁷⁰ 	<p>Good data is available to inform the appraisal. A key consideration is the need to maintain the resource of higher quality agricultural land. The other criterion is cross cutting, rather than relating solely to 'soil'. Another locational issue is the presence of contaminated land; however, data is not available.</p>

⁶⁹ Agricultural land is classified into five grades, with grade one being of the best quality. High quality agricultural land is a finite resource, in that it is difficult if not impossible to replace it.

⁷⁰ Environmental Stewardship is an agri-environment scheme which provides funding to farmers who deliver effective environmental management on their land. ES land is likely to be of relatively high biodiversity value and potentially 'well farmed' in general terms.

Topic	Relevant criteria (Location in relation to...)	Notes
Waste		It is not possible to appraise site options in terms of the potential to support sustainable waste management. In this context it is not appropriate to assume that larger schemes, or residential development in close proximity to recycling centres, will necessarily lead to better waste management.
Water quality and water resources		No data is available to inform appraisal in terms of water quality; however, this is not a major issue for the appraisal. ⁷¹ Whilst water pollution sensitivity may vary spatially (including relating to issues associated with the capacity of Waste Water Treatment Works), in the absence of a detailed Water Cycle Study there is no mapped data. It is also the case that issues can often be appropriately addressed through masterplanning/ design measures, and so are appropriately considered at the planning application stage. The same can be said for drainage issues. In terms of water resource availability, this does not vary significantly within the Borough, and hence need not be a consideration here. It is also not possible to appraise site options in terms of the potential to support water efficiency. Whilst it might be suggested that larger development schemes might be more able to deliver higher standards of sustainable design (including water efficiency measures) this assumption will not always hold true.

Table B: Site appraisal criteria with performance categories

Criteria (Location in relation to...)	Performance categories	Notes
1 Air Quality Management Area (AQMA)	R = AQMA covering or adjacent to the site A = <1,000m	Impact thresholds are unknown, and so the RAG thresholds reflect the spread of the data. N.B. There is no potential to take into account the size of the site option involved, i.e. make the assumption that large sites are problematic. This rule also applies to other criteria below. If small sites were shown to perform relatively well, despite being in close proximity to a sensitive location, there would be a risk that numerous small sites would come forward in close proximity leading to negative effects. It is appropriate to 'flag' sites as potentially problematic, even where they are small and in practice not likely to result in negative effects.
2 Site of Scientific Interest (SSSI)	R = <800m of SSSI A = <2,000m	Natural England has defined SSSI Impact Risk Zones for the three SSSIs present in the Borough. Impact Risk Zones relating to residential developments of 100 residential units or more tend to extend to 2km from the SSSIs' boundaries. However a further criterion of 800m has been included to reflect the number of sites within this Impact Risk Zone.
3 Local Nature Reserve	G = <2,000m R = Intersect	People are unlikely to travel far to access a LNR, and so it is only appropriate to flag sites green where they are within 2km. Given LNRs' biodiversity sensitivity, it is also appropriate to flag as red those sites which intersect with an LNR.

⁷¹ It is unnecessary to appraise site options in terms of groundwater 'source protection zones' and 'primary aquifers'. The presence of a groundwater source protection zone or aquifer does not represent a major constraint for most (non-polluting) types of development.

4	Ancient Semi Natural Woodland	R = Intersect A = <400m	The thresholds reflect an understanding that County Wildlife Sites and ASNWs have relatively low sensitivity. 400m is a walkable distance.
5	County Wildlife Site	R = Intersect A = <400m	
6	Woodland	A = Intersect	The threshold reflects an understanding that non-designated woodland tends to have lower sensitivity.
7	Bus stop	R = >800m A = 400m-800m G = <400m G = <110m	400m is an walkable distance for most. However as there are a large number of sites within this distance it is appropriate to also flag half (i.e. the 50% closest) as performing particularly well.
8	GP surgery / medical centre	R = >1.5km A = 800m-1.5km G = <800m	Department for Transport guidance ⁷² suggests 800m as a walkable distance for those accessing a primary school or GP surgery.
9	Educational establishment	R = >1.5km A = 800m-1.5km G = <800m	
10	Community facilities	R = >800m A = 400m-800m G = <400m	400m is an walkable distance for most.
11	Protected Urban Open Space	R = >800m or intersects with A = 400m-800m G = <400m	
12	Area of overall deprivation	G = Site intersects with an 'output area' that is relatively deprived (i.e. in the 0-20% (1 st quintile) most deprived in the Borough G = second quintile	Development in an area of relative deprivation (as measured by the Index of Multiple Deprivation) may support regeneration.
13	Listed building	R = <5m A = <50m	It is appropriate to 'flag' a red where a site intersects, is adjacent or within 5m of a listed structure. It is also appropriate to flag sites that might more widely impact directly on the setting of a listed structure. A 50m threshold is assumed.
14	Registered Park or Garden	R = <100m A = <400m	It is appropriate to 'flag' a red where a site intersects, is adjacent or within 100m of a Registered Park or Garden. It is also appropriate to flag sites that might more widely impact on the setting of a Registered Park or Garden. A 400m threshold is assumed.
15	Scheduled Monument	R = <100m	It is appropriate to 'flag' a red where a site intersects, is adjacent or within 200m of a Scheduled Monument.

⁷² WebTag (January 2014) Unit A4.2 paragraph 6.4.5, Department for Transport

16	Conservation Area	R = Intersect A = <400m	It is appropriate to ‘flag’ a red where a site is within, intersects or is adjacent to a Conservation Area. It is also appropriate to flag sites that might more widely impact on the setting of a Conservation Area. A 400m threshold is assumed.
17	Employment areas	R = >2,400m A = <2,400m G = <1,383m G = <589m	There is no clear guidance on distance thresholds, and it is recognised that these facilities will often be reached by car or public transport. The thresholds therefore reflect the spread of the data.
18	Flood risk zone	R = > 10% of site intersects a flood risk zone A = 1 - 10% of site intersects a flood risk zone	The extent of flood risk zone 2 does not extend far beyond the extent of flood risk zone 3. As such, it is appropriate to consider the two together. The thresholds also reflect the fact that small areas of flood risk can be left undeveloped. The 10% threshold is fairly arbitrary.
19	Special Landscape Area	R = Intersect A = <400m	The criteria reflect potential effects on landscape character in these areas.
20	Landscape Improvement Area	R = Intersect A = <400m	
21	Green Belt	R = Site is within Green Belt	The Green Belt is not specifically a landscape designation. As such potential effects on the setting of the Green Belt has not been appraised.
22	Agricultural land under Environmental Stewardship	A = Intersect	This is not a major issue, and so it would not be appropriate to ‘flag’ sites red.
23 and 24	High quality agricultural land	R = Grade 2 A = Grade 3	<p>Agricultural land is classified into a number of grades, with grade 1, 2 and 3a classified as the ‘best and most versatile’ agricultural land. However, detailed agricultural land classification differentiating between Grade 3a and 3b land has not been undertaken across the Borough. As such it is not possible to evaluate which sites are covered by land specifically classified as Grade 3a or Grade 3b land.</p> <p>No sites are covered by land classified as Grade 1 agricultural land. Therefore the sites that intersect Grade 2 land are been up.</p> <p>N.B. The agricultural land dataset is of a poor resolution, so much so that it shows entire settlements to be comprised of agricultural land. As such, the GIS analysis has been supplemented by knowledge of whether sites are ‘greenfield’ or ‘brownfield’. In instances where the GIS indicates loss of agricultural land, but the site is known to be brownfield, the site has not been flagged as constrained.</p>

Site options appraisal findings

Table C presents an appraisal of all site options in terms of all the appraisal criteria introduced above.

To reiterate, this table is presented for completeness. It is recognised that only limited understanding can be gained from strict GIS analysis; and equally it is recognised that presenting appraisal findings for all site options in tabular format is in practice of limited assistance to those interested in the spatial strategy.

N.B. The spreadsheet containing the underlying data is available upon request. The spreadsheet allows for more effective interrogation of the data as it is possible to compare and contrast particular sites (that might be alternatives) and examine sub-sets (e.g. sites around a particular settlement, or sites above a certain size).

Table C: Site options appraisal findings

Site ID	Name / address	1. AQMA	2. SSSI	3. Local Nature Reserve	4. Ancient Woodland	5. County Wildlife Site	6. Woodland	7. Bus Stop	8. Health facility	9. Education	10. Community	11. Prot Urban Open Space	12. Overall deprivation	13. Listed Buildings	14. Reg Park / Garden	15. Scheduled Monument	16. Conservation Area	17. Employment	18. Flood Zone	19. SLA	20. Landscape Imp Area	21. Green Belt	22. Env Stewardship	23. ALC Grade 2	24. ALC Grade 3	Preferred site?
001A	Land north of Highwood Close, Brentwood	Red			Yellow	Yellow	Yellow	Green	Yellow	Green	Red	Green					Yellow	Green							Yellow	Y
001B	St Georges Court Highwood Close	Red			Yellow	Yellow	Yellow	Green	Yellow	Green	Red	Green					Yellow	Green		Yellow					Yellow	Y
002	Brentwood railway station car park	Yellow	Yellow					Green	Yellow	Green	Green	Green						Green								
003	Wates Way Industrial Estate, Ongar Road, Brentwood	Red	Yellow					Green	Yellow	Green	Green	Green		Yellow			Yellow	Green								Y
004	Land rear of The Bull Public House, Brook Street, Brentwood	Yellow		Green	Yellow	Yellow		Green	Red	Yellow	Red	Green		Yellow				Green		Yellow						
005	Essex County Fire Brigade HQ, Rayleigh Road, Brentwood			Green		Yellow		Green	Red	Green	Green	Green	Green					Green								Y
006	Land adjacent Adult Education Centre, Rayleigh Road, Hutton			Green		Red	Yellow	Green	Red	Green	Green	Green	Green					Green								
007	Land between Tendring Court and Tillingham Bold, Woodland Avenue, Hutton			Green		Yellow		Green	Red	Green	Red	Green						Green								
008	Woodlands, School Road, Kelvedon Hatch			Green				Green	Red	Yellow	Red	Yellow		Red			Red	Green				Red			Yellow	
008B	Woodlands School, Rayleigh Road, Hutton			Green				Green	Red	Yellow	Red	Yellow		Yellow			Red	Green				Red	Yellow		Yellow	
008C	Land adjacent Woodlands School, Rayleigh Road, Hutton			Green				Green	Red	Yellow	Red	Yellow		Red			Red	Green				Red	Yellow		Yellow	

Site ID	Name / address	1. AQMA	2. SSSI	3. Local Nature Reserve	4. Ancient Woodland	5. County Wildlife Site	6. Woodland	7. Bus Stop	8. Health facility	9. Education	10. Community	11. Prot Urban Open Space	12. Overall deprivation	13. Listed Buildings	14. Reg Park / Garden	15. Scheduled Monument	16. Conservation Area	17. Employment	18. Flood Zone	19. SLA	20. Landscape Imp Area	21. Green Belt	22. Env Stewardship	23. ALC Grade 2	24. ALC Grade 3	Preferred site?
009	Woodlands, School Road, Kelvedon Hatch																									
010	Sow & Grow Nursery, Ongar Road, Pilgrims Hatch																									Y
011	Land rear of 10-20 Orchard Lane, Pilgrims Hatch																									
011B & 011C	Land to the North of Ongar Road, Pilgrims Hatch																									
012	Garage courts adjacent 49 Lavender Avenue, Pilgrims Hatch																									
013A	Land rear of Warley County Infants School, Evelyn Walk, Warley																									
013B	Warley Training Centre, Essex Way, Warley																									Y
014	The Gables, Essex Way, Warley																									
015	Former Mascalls Hospital, Mascalls Park, Mascalls Lane, Warley																									
016A	Woodlands School, Warley Street, Warley																									
016B	Woodlands School, Warley Street, Warley																									
017	Telephone Exchange, Ongar Road, Brentwood																									
018	Thoby Priory, Thoby Lane, Mountnessing																									
019	Land at the Rectory, Church Lane, Doddinghurst																									
020	West Horndon Industrial Estate, Childerditch Lane, West Horndon																									Y
021	Horndon Industrial Site, Station Road, West Horndon																									Y
022	Land at Honeypot Lane, Brentwood																									Y

Site ID	Name / address	1. AQMA	2. SSSI	3. Local Nature Reserve	4. Ancient Woodland	5. County Wildlife Site	6. Woodland	7. Bus Stop	8. Health facility	9. Education	10. Community	11. Prot Urban Open Space	12. Overall deprivation	13. Listed Buildings	14. Reg Park / Garden	15. Scheduled Monument	16. Conservation Area	17. Employment	18. Flood Zone	19. SLA	20. Landscape Imp Area	21. Green Belt	22. Env Stewardship	23. ALC Grade 2	24. ALC Grade 3	Preferred site?
023	Land off Doddinghurst Road, either side of A12, Brentwood	Red			Yellow	Yellow	Yellow	Green	Yellow	Green	Red	Green					Yellow	Green				Red				Y
024A	Sawyers Hall Farm, Sawyers Hall Lane, Brentwood	Yellow					Green	Yellow	Green	Green	Red	Yellow	Green					Green				Red				
024B	Sawyers Hall Farm, Sawyers Hall Lane, Brentwood	Yellow			Yellow	Yellow	Green	Yellow	Green	Green	Red	Yellow	Green					Green				Red			Yellow	
025	Land at Ingrave Road (198, 198a, 198b & 176), Brentwood		Red		Yellow	Yellow	Yellow	Green	Red	Green	Red	Green			Red		Yellow	Green		Yellow		Red				
026	End of Hove Close, off Hanging Hill Lane, Brentwood			Green	Yellow	Yellow	Green	Green	Red	Green	Red	Yellow	Green					Green		Yellow		Red				
027	Land adjacent to Carmel, Mascalls Lane, Warley		Yellow		Yellow	Yellow	Yellow	Green	Red	Green	Red	Yellow						Green		Yellow		Red			Yellow	
028A	Land east of Running Waters, Brentwood		Red		Yellow	Yellow	Green	Red	Green	Green	Red	Yellow		Yellow	Red		Yellow	Green		Yellow		Red			Yellow	
028B	Land east of Running Waters, Brentwood		Red		Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green		Red		Yellow	Green	Yellow	Yellow		Red			Yellow	
028C	Land east of Running Waters, Brentwood		Yellow	Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow		Yellow			Red	Green	Yellow	Yellow		Red	Yellow		Yellow	
029	Three Oaks Meadow, Hanging Hill Lane, Hutton		Yellow		Yellow	Yellow	Yellow	Green	Red	Green	Red	Yellow	Green					Green		Yellow		Red			Yellow	
030	Land at Bayleys Mead, off Hanging Hill Lane, Hutton			Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green		Yellow		Red			Yellow	
031	Home Meadow, land adjacent to 12 Tyburns, Hutton				Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green		Yellow		Red			Yellow	
032	Land east of Nags Head Lane, Brentwood	Yellow		Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green		Yellow		Red			Yellow	Y
033	Land to the south of Lodge Close, east of Hutton			Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green				Red	Green	Yellow	Yellow		Red			Yellow	
034	Officers Meadow, land off Alexander Lane, Shenfield			Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green	Yellow	Yellow		Red			Yellow	Y
035A	Land adjacent 50 Spital Lane, Brentwood	Yellow		Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green	Yellow	Yellow		Red			Yellow	
035B	Land at Spital Lane, Brentwood	Yellow		Green	Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green	Yellow	Yellow		Red			Yellow	
036	Land opposite Button Common, Herongate		Red		Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green		Red		Red	Green	Yellow	Yellow		Red			Yellow	
037A	Land West of Thorndon Avenue, West Horndon		Yellow		Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green					Green		Yellow		Red			Yellow	
037B	Land West of Thorndon Avenue, West Horndon		Red		Yellow	Yellow	Green	Red	Green	Green	Red	Yellow	Green				Red	Green	Yellow	Yellow		Red			Yellow	

Site ID	Name / address	1. AQMA	2. SSSI	3. Local Nature Reserve	4. Ancient Woodland	5. County Wildlife Site	6. Woodland	7. Bus Stop	8. Health facility	9. Education	10. Community	11. Prot Urban Open Space	12. Overall deprivation	13. Listed Buildings	14. Reg Park / Garden	15. Scheduled Monument	16. Conservation Area	17. Employment	18. Flood Zone	19. SLA	20. Landscape Imp Area	21. Green Belt	22. Env Stewardship	23. ALC Grade 2	24. ALC Grade 3	Preferred site?
037C	Land West of Thorndon Avenue, West Horndon		Yellow			Red		Yellow	Red	Green	Red	Green					Yellow	Green		Red	Red	Red	Yellow		Yellow	
038A	Land East of Thorndon Avenue, West Horndon		Yellow		Yellow	Yellow		Green	Red	Green	Red	Yellow	Green					Green		Red	Red	Red			Yellow	
038B	Land East of Thorndon Avenue, West Horndon		Red		Red	Red	Yellow	Green	Red	Green	Red	Green	Green		Red		Red	Green		Yellow	Red	Red			Yellow	
039	Westbury Road Car Park, Westbury Road, Brentwood	Yellow	Yellow					Green	Green	Green	Green	Green		Yellow			Red	Green								Y
040	Chatham Way/ Crown Street Car Park, Brentwood	Yellow	Yellow					Green	Green	Green	Green	Green	Green	Yellow		Red	Red	Green								Y
041	Land at Hunter House, Western Road, Brentwood	Yellow	Yellow					Green	Green	Green	Green	Green		Yellow			Yellow	Green								Y
042	Land at Bell Mead, Ingatestone	Yellow						Green	Red	Green	Green	Green	Green				Red	Green		Red		Red			Yellow	Y
043	Former Landings Surgery, Outings Lane, Doddinghurst		Yellow		Yellow	Yellow		Green	Red	Red	Red	Red	Green	Yellow				Red							Yellow	
044	Land at Priests Lane, Brentwood	Yellow	Yellow		Yellow	Yellow	Green	Green	Yellow	Green	Yellow	Red	Green					Green							Yellow	Y
046	Site on corner of High Street/ Western Road, Brentwood, Former Napier Arms Site	Yellow	Yellow					Green	Green	Green	Green	Green		Yellow			Red	Green								
047	Hutton Village Hall, Rayleigh Road, Hutton			Green				Green	Red	Green	Yellow	Green						Green								
048	Former Elliot's Night Club, West Horndon		Red		Yellow	Yellow	Green	Green	Yellow	Red	Red	Red	Green		Yellow		Yellow	Green		Yellow	Red	Red			Yellow	
049	Land between 12-13 Magdalen Gardens, Hutton			Green				Green	Red	Green	Red	Green					Yellow	Green								
050	Land between 31-45 Goodwood Avenue, Hutton			Green			Green	Red	Green	Red	Red	Green	Green				Yellow	Green				Red				
051	Long Ridings, Roundwood Avenue, Hutton			Green		Yellow	Yellow	Red	Green	Green	Yellow	Green						Yellow								
052	Land rear of Little Jericho, Church Street, Blackmore				Yellow	Yellow	Green	Red	Green	Red	Red	Green	Green	Yellow			Red	Red	Red						Yellow	
053A	Land rear of 146-148 Hatch Road, Pilgrims Hatch	Yellow			Yellow	Yellow	Green	Red	Green	Red	Red	Green	Green					Yellow								
053B	Land rear of 146-148 Hatch Road, Pilgrims Hatch	Yellow			Yellow	Yellow	Green	Red	Green	Red	Red	Green	Green					Yellow				Red				
054	Garages adjacent 25 Kings George's Road, Pilgrims Hatch	Yellow			Yellow	Yellow	Green	Red	Green	Red	Red	Green	Green					Yellow								

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055	Rear of garage and adjacent to 126 Brentwood Road, Ingrave		Yellow					Green	Red	Red	Red	Green	Green		Yellow		Yellow	Red		Red					Yellow	
056A	Land at Hayden and Ardslia, Wyatts Green Road, Wyatts Green					Yellow	Yellow	Green	Red	Red	Red	Red	Green					Red		Yellow		Red			Yellow	
056B	Land at Hayden and Ardslia, Wyatts Green Road, Wyatts Green					Red	Yellow	Green	Red	Red	Red	Red	Green	Yellow				Red				Red			Yellow	
057A	Meadowside, Swallows Cross Road, Mountnessing							Red	Red	Red	Red	Red						Red		Yellow		Red			Yellow	
057B	Meadowside, Swallows Cross Road, Mountnessing							Red	Red	Red	Red	Red						Red		Yellow		Red			Yellow	
058A	Hall Lane Farm, Little Warley	Yellow	Yellow			Yellow	Yellow	Red	Red	Red	Red	Red	Green					Green		Yellow	Red	Red			Yellow	
058B	Hall Lane Farm, Little Warley	Yellow	Yellow			Yellow	Yellow	Red	Red	Red	Red	Red	Green					Green		Yellow	Red	Red			Yellow	
059	Rear of 83-93 Park Road, Brentwood	Yellow	Yellow			Yellow	Yellow	Green	Yellow	Green	Green	Green	Green				Yellow	Green								
060	Land adjacent and rear of 207-217 Crescent Road, Brentwood		Yellow			Yellow	Yellow	Green	Yellow	Green	Yellow	Green	Green					Green		Yellow						
061	18 Westbury Drive, Brentwood	Yellow	Yellow			Yellow	Yellow	Green	Yellow	Green	Green	Green	Green				Yellow	Green								
062	Land adjacent to 110 Priests Lane, Brentwood	Yellow	Yellow		Yellow	Yellow	Yellow	Green	Yellow	Green	Red	Green	Green					Green								
063	Land adjacent to Gayland, Thorndon Approach, Herongate		Yellow				Green	Red	Red	Red	Red	Green	Green		Red		Yellow	Green		Red		Red				
064	Land adjacent Everglades, Avenue Road, Ingatestone	Yellow					Green	Red	Green	Green	Green	Green	Green				Yellow	Green		Yellow					Yellow	
065	Land adjacent to 1-3 Orchard Piece, Blackmore						Green	Red	Green	Red	Red	Green	Green	Yellow			Yellow	Red							Yellow	
066	Greenways, School Road, Kelvedon Hatch		Red		Yellow	Yellow	Green	Red	Green	Red	Red	Green	Green				Yellow	Red		Yellow		Red			Yellow	
067A	Salmonds Farm, Salmonds Grove, Ingrave		Yellow				Green	Red	Red	Red	Red	Green	Green	Yellow			Yellow	Red		Red					Yellow	
067B	Salmonds Farm, Salmonds Grove, Ingrave		Yellow				Green	Red	Red	Red	Red	Green	Green	Yellow			Yellow	Red		Red		Yellow			Yellow	
068	Land off Penny Pots Barn, Ongar Road, Stondon Massey		Yellow				Green	Red	Red	Red	Red	Red	Red					Red				Yellow			Yellow	

Site ID	Name / address	1. AQMA	2. SSSI	3. Local Nature Reserve	4. Ancient Woodland	5. County Wildlife Site	6. Woodland	7. Bus Stop	8. Health facility	9. Education	10. Community	11. Prot Urban Open Space	12. Overall deprivation	13. Listed Buildings	14. Reg Park / Garden	15. Scheduled Monument	16. Conservation Area	17. Employment	18. Flood Zone	19. SLA	20. Landscape Imp Area	21. Green Belt	22. Env Stewardship	23. ALC Grade 2	24. ALC Grade 3	Preferred site?
069	Land west of Nine Ashes Road, Stondon Massey		Yellow			Yellow		Green	Red	Red	Red	Red						Yellow		Red		Red	Yellow			
070	Land adjacent to St. Margaret's Church, Doddinghurst		Yellow		Yellow	Yellow		Green	Red	Red	Red	Yellow						Red				Red			Yellow	
071	Wyatts Field, Wyatts Green						Green	Green	Red	Red	Red	Green						Red		Yellow						
072	Land adjacent to Whitelands, Wyatts Green						Green	Green	Red	Red	Red	Green						Red				Red			Yellow	
073	Land adjacent to Mountnessing Primary School	Yellow		Green			Green	Green	Red	Red	Red	Red						Green			Red					
074	Land at Church Road, Kelvedon Hatch		Red		Yellow	Yellow		Green	Green	Red	Red	Green		Yellow				Red				Red			Yellow	
075	Swedish Field, Stocks Lane, Kelvedon Hatch		Red					Green	Red	Yellow	Red	Green					Yellow	Red					Yellow			
076	Land south of Redrose Lane, backing onto Orchard Piece, Blackmore						Green	Green	Red	Green	Red	Green	Green	Yellow			Yellow	Red				Red			Yellow	
077	Land south of Redrose Lane, backing onto Woollard Way, Blackmore						Green	Green	Red	Green	Red	Green	Green	Yellow			Yellow	Red						Red	Yellow	
078	Land at Parklands, High Street, Ingatestone	Yellow					Green	Green	Red	Green	Red	Green	Green	Yellow			Yellow	Green			Red		Yellow			
079A	Land adjacent to Ingatestone by-pass (part bounded by Roman Road)	Yellow					Green	Green	Red	Green	Red	Green	Green				Yellow	Green			Red				Yellow	Y
079B	Land adjacent to Ingatestone by-pass (part bounded by Roman Road)	Yellow					Green	Green	Red	Yellow	Red	Green	Green				Yellow	Green			Red				Yellow	
080	Land adjoining 'The Surgery' Outings Lane, Doddinghurst		Yellow		Yellow	Yellow		Green	Red	Red	Red	Red	Green	Yellow				Red				Red			Yellow	
081	Council Depot, The Drive, Warley		Red		Red	Red	Green	Green	Red	Green	Red	Green						Green		Yellow						Y
082	Land fronting Warley Street, near Great Warley		Yellow		Yellow	Red	Green	Green	Red	Red	Red	Red						Green				Red			Yellow	
083	Land west of Warley Hill, Pastoral Way, Warley		Yellow		Yellow	Yellow	Green	Green	Red	Green	Yellow	Green		Red				Green		Yellow		Red				
084	Land at Crescent Road, Brentwood		Yellow				Green	Yellow	Green	Yellow	Red	Red						Green								
085	Land adj Tipps Cross Community Hall, Blackmore Road,		Yellow				Green	Red	Red	Red	Red	Red						Red				Red			Yellow	

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	Tipps Cross		Yellow					Green	Red	Red	Red	Red						Red						Yellow		
086	Land at Sandringham Road, Pilgrims Hatch	Yellow				Yellow		Green	Red	Green	Red	Green						Green								
087	Land at Alexander Lane, Shenfield			Green	Yellow			Light Green	Red	Green	Yellow	Green	Green					Green				Red			Yellow	Y
088	Bishops Hall Community Centre and Land	Yellow				Red		Green	Yellow	Green	Red	Yellow	Light Green					Green								
089	Brentwood Centre and land	Yellow			Yellow			Green	Yellow	Green	Red	Yellow	Light Green					Green				Yellow			Yellow	
090	Land rear of St. Thomas of Canterbury School, Sawyers Hall Lane, Brentwood	Yellow	Yellow		Yellow	Red	Yellow	Light Green	Green	Green	Green	Yellow						Green				Red				
091	Land at end of Greenshaw, Brentwood	Yellow					Yellow	Green	Yellow	Green	Red	Green						Light Green		Yellow		Red			Yellow	
092	Land at Kelvedon Green, Kelvedon Hatch		Red		Yellow	Yellow		Light Green	Red	Green	Red	Green						Red		Yellow					Yellow	
093	Land at Fielding Way, Hutton (rear of Rayleigh Road shopping parade)			Green		Yellow		Light Green	Red	Green	Green	Green						Light Green								
094	Land between 375 and 361 Roman Road, Mountnessing							Light Green	Red	Red	Red	Red						Light Green		Red		Red			Yellow	
095A	The Water Meadows Mountnessing	Yellow		Green			Yellow	Light Green	Red	Red	Red	Red						Yellow		Red		Red			Yellow	
095B	The Water Meadows Mountnessing	Yellow		Green			Yellow	Light Green	Red	Red	Red	Yellow						Yellow		Red		Red			Yellow	
096	Hutton Village Dental Practice, 217 Rayleigh Road, Hutton			Green				Green	Red	Green	Yellow	Green	Green	Yellow				Green								
097	Harewood Road Bungalows, Pilgrims Hatch	Yellow				Yellow		Green	Red	Green	Red	Green						Yellow								
098	Ingleton House, Stock Lane, Ingatestone	Yellow						Light Green	Red	Green	Green	Green	Light Green				Yellow	Green		Yellow					Yellow	Y
099	Victoria Court, Victoria Road, Brentwood	Yellow	Yellow					Light Green	Yellow	Green	Yellow	Green						Green								Y
100	Baytree Centre, Brentwood	Yellow	Yellow					Green	Green	Green	Green	Green	Light Green	Red		Red	Red	Green								Y
102	William Hunter Way Car Park, Brentwood	Yellow	Yellow					Green	Green	Green	Green	Green				Red	Yellow	Green								
103	The Old Barn, Woodside, North Drive, Hutton			Green				Light Green	Red	Red	Red	Red						Yellow				Red			Yellow	

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103B	Land to east and west of North Drive, Hutton			Green				Green	Red	Red	Red	Red						Yellow				Red			Yellow	
103C	Land to east and west of North Drive, Hutton			Green				Green	Red	Red	Red	Red						Yellow				Red			Yellow	
103D	Land to east and west of North Drive, Hutton			Green				Green	Red	Red	Red	Red						Yellow				Red			Yellow	
104	Land at Stondon Massey Scrapyard, Claggate, Chivers Road, Stondon Massey		Red	White	Red	Red	Yellow	Yellow	Red	Yellow	Red	Red						Yellow		Red		Red			Yellow	
105	Land between 339 and 361 Roman Road, Mountnessing,(North of No. 361)		White	Green			Green	Red	Red	Red	Red	Red		Yellow				Green		Red		Red			Yellow	
126	Land east of West Horndon, south of Station Road		Yellow	White			Yellow	Green	Red	Green	Red	Yellow	Green					Green			Red	Red			Yellow	
128	Ingatestone Garden Centre, Roman Road, Ingatestone	Red	White	Green			Yellow	Green	Red	Yellow	Red	Green						Yellow		Red	White	Red			Yellow	Y
129	Friars Avenue Car park, Shenfield			White				Green	Red	Green	Green	Green						Yellow								
130	Hunter Avenue Car Park, Shenfield.			Green				Green	Red	Green	Green	Green						Yellow								
131B	Land at Brookfield Close			Green		Yellow		Green	Red	Green	Green	Green						Green								
132A	Albany Road Garages, Pilgrims Hatch	Yellow				Yellow		Green	Red	Green	Red	Yellow						Green								
132B	Albany Road Garages, Pilgrims Hatch	Yellow				Yellow		Green	Red	Green	Red	Yellow						Green								
133	Land at Maple Cross, Hutton, Brentwood		Red		Yellow	Yellow		Green	Red	Yellow	Red	Green						Yellow								
134	Land at Gloucester Road, Pilgrims Hatch, Brentwood	Yellow						Green	Red	Green	Red	Green						Yellow								
135	Land at Hutton Drive, rear of Tower House, Hutton			Green		Yellow		Green	Red	Green	Green	Green						Green								
136	Land at Church Crescent, Mountnessing	Yellow		Green				Green	Red	Red	Red	Red						Yellow		Yellow					Yellow	
137A	Land at Broomwood Gardens and Dounsell Court, Ongar Road, Pilgrims Hatch	Yellow			Yellow	Yellow		Green	Red	Green	Red	Green						Yellow							Yellow	
137B	Land at Broomwood Gardens and Dounsell Court, Ongar Road, Pilgrims Hatch	Yellow			Yellow	Yellow		Green	Red	Green	Red	Green						Yellow							Yellow	

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138	Land rear of Fawtens Close, off Wainwright Avenue, Brentwood			Green				Green	Red	Green	Yellow	Green						Green								
139	Land rear of The Spinney, School Road, Kelvedon Hatch		Red		Yellow	Yellow		Green	Red	Green	Red	Green						Red		Yellow		Red			Yellow	
140	Land at Birley Grange, Hall Lane, Shenfield				Yellow	Red	Yellow	Green	Yellow	Green	Yellow	Yellow	Green	Yellow				Green							Yellow	
141	Brentwood Leisure Park at Warley Gap		Yellow		Red		Yellow	Green	Red	Green	Green	Green			Yellow		Yellow	Green		Red		Red				
142	Land North-East of Thoby Farm, St Anne's Road, Mounnessing, Brentwood			Green		Yellow		Yellow	Red	Red	Red	Red						Yellow		Red		Red			Yellow	
143	Land East of Peartree Lane and North of Peartree Close, Doddinghurst				Yellow			Green	Red	Red	Red	Green	Green					Red		Yellow		Red	Yellow		Yellow	
144	Area east of A128 towards 'Timmerman's Garden Centre' and 'Dunton Hill Golf Course'		Yellow		Yellow	Yellow	Yellow	Red	Red	Red	Red	Red	Green					Yellow	Yellow		Red	Red			Yellow	
146	Land adjacent Hillcrest Nursery, Herongate/Ingrave		Yellow				Yellow	Green	Red	Red	Red	Green	Green		Red		Yellow	Red		Red		Red			Yellow	
147	Land at Joy Fook restaurant, adjacent Bentley Golf Club, Ongar Road		Yellow					Green	Red	Yellow	Red	Red						Red				Red			Yellow	
148	Land at Moat Farm, 48 Crow Green Road, Pilgrims Hatch							Green	Red	Green	Red	Yellow						Yellow				Red			Yellow	
149	Land at Thriftwood Scout Campsite adjoining Beech Ave, Cherry Ave & Knights Way		Red		Red	Red	Yellow	Green	Yellow	Green	Red	Red						Yellow				Red				
150	Land East of A128, south of A127		Yellow		Yellow		Yellow	Red	Red	Red	Red	Red	Green					Yellow		Yellow	Red	Red			Yellow	
151	Academy Place, Brook Street/Spital Lane, Brentwood	Yellow		Green	Yellow	Yellow		Green	Red	Yellow	Red	Green		Yellow				Green		Yellow						
152	Land East of Horndon Industrial Estate		Yellow					Green	Red	Green	Red	Red	Green					Green			Yellow				Yellow	Y
153	Land to South of Fryerning Lane, Ingatestone	Red						Yellow	Red	Green	Yellow	Green					Yellow	Green		Red		Red			Yellow	
154	Land off the Chase, Brentwood	Yellow	Red					Green	Green	Green	Green	Red	Green				Yellow	Green								

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156	Greenacres Riding Stables & land opposite, Beads Hall Lane, Pilgrims Hatch	Yellow			Yellow	Yellow	Green	Red	Green	Red	Red	Yellow	Green					Yellow				Red			Yellow	
157	4 Nags Head Lane, Brentwood	Yellow		Green				Yellow	Red	Green	Red	Red						Green		Yellow		Red			Yellow	
159	Land off Crow Green Lane, Pilgrims Hatch	Yellow					Green	Red	Green	Red	Red	Yellow	Green	Yellow				Yellow				Red			Yellow	
160	43-53 Ingrave Road, Brentwood	Yellow	Red					Green	Red	Green	Red	Red					Yellow	Green				Red				
161	43-57 Ingrave Road, Brentwood	Yellow	Red					Green	Red	Green	Red	Red					Yellow	Green				Red				
162	Little Warley Hall Farm, Little Warley Hall Lane, Little Warley	Yellow	Yellow		Yellow	Yellow		Yellow	Red	Red	Red	Red		Yellow				Green	Yellow		Red	Yellow			Yellow	
163	Old Mill Site, Hay Green Lane, Wyatts Green						Green	Red	Red	Red	Red	Red	Green					Red		Yellow		Red			Yellow	
164	North of Hay Green Lane, Wyatts Green						Green	Red	Red	Red	Red	Red	Green					Red		Yellow		Red			Yellow	
165	Keys Hall, Eagle Way, Brentwood		Red		Yellow	Yellow		Green	Red	Green	Red	Red					Yellow	Green		Yellow						
166	La Plata Grove, Brentwood	Yellow	Yellow				Green	Red	Red	Green	Red	Red					Yellow	Green								
167	Land adjacent Hill Cottage, Warley Road, and Mill House, Mascalls Lane, Warley		Yellow		Yellow	Yellow		Green	Red	Green	Red	Yellow		Yellow	Yellow		Yellow	Green		Red		Red			Yellow	
168	Land at Searchlight Farm, School Road, Kelvedon Hatch		Red		Yellow	Yellow		Green	Red	Green	Red	Green						Red		Yellow		Red			Yellow	
169	Land at No. 5, 7 and Brescia House, Eastfield Road, Brentwood	Yellow	Yellow				Green	Red	Green	Green	Red	Red	Green				Red	Green								
170	14-16 Westwood Avenue, Brentwood		Yellow		Yellow		Green	Red	Red	Green	Red	Red	Green					Red		Yellow		Red			Yellow	
171	Former EHS Metal Scrapyard, Coxtie Green Road						Green	Red	Red	Red	Red	Red						Red		Yellow		Red			Yellow	
172	Land rear of 131-137 Coxtie Green Road						Green	Red	Red	Red	Red	Red						Red		Yellow		Red			Yellow	
173	BP Garage & McDonald's Restaurant, A1023 Chelmsford Road (A12 J12)			Green	Yellow	Yellow		Green	Red	Yellow	Red	Yellow	Green					Green		Yellow		Red			Yellow	
174	Land south of Hook End Road, Doddinghurst		Yellow		Yellow	Yellow		Green	Red	Red	Red	Red	Green	Yellow				Red				Red	Yellow		Yellow	

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175B	Land at M25 J28, Brook Street, Brentwood (including existing buildings), and surrounding land	Red		Green	Yellow	Yellow	Green	Red	Yellow	Red	Green			Red				Green		Yellow		Red			Yellow	
175C	Land at M25 J28, Brook Street, Brentwood (including existing buildings), and surrounding land	Red		Green			Yellow	Red	Red	Red	Red							Green	Yellow	Yellow		Red			Yellow	
176	Land at former Bentley Zoo, Hulleys Lane, Brentwood						Green	Red	Yellow	Red	Red			Yellow				Green		Yellow		Red			Yellow	
178	Land at Priests Lane (east) adjacent Bishops Walk, Brentwood	Yellow	Yellow		Yellow	Yellow	Green	Red	Green	Yellow	Red							Green								Y
179	Land adjacent Wybarns Farm and Mount Pleasant Cottage, Chelmsford Road, Shenfield			Green			Green	Red	Green	Red	Red	Green						Yellow	Red			Red			Yellow	
180	Land at Brook Street & Wigley Bush Lane, Brentwood (current Vauxhall garage)	Yellow		Green	Yellow	Yellow	Green	Red	Yellow	Red	Red	Green						Green	Red	Yellow		Red			Yellow	
181	Green Keepers Cottage, Thorndon Gate, Ingrave		Red				Green	Red	Red	Red	Red	Yellow	Green		Red		Red	Yellow		Red		Red				
182	Land Adjacent To Heathlands, School Road, Kelvedon Hatch		Red		Red	Yellow	Green	Red	Green	Red	Red	Green						Red		Yellow		Red			Yellow	
183	Former sewage pumping station at Ingrave Hall, Ingrave		Yellow		Yellow	Yellow	Green	Red	Green	Red	Red	Red	Green					Yellow	Red	Red		Red			Yellow	
184	Former Saxton 4x4 garage, Rayleigh Road			Green			Green	Red	Red	Red	Red	Red						Yellow		Red		Red			Yellow	
185	Land at Rectory Chase, Doddinghurst		Yellow			Yellow	Green	Red	Red	Red	Red	Green						Red				Red			Yellow	
186	Land at Crescent Drive, Shenfield (National Blood Service buildings and grounds)	Yellow	Yellow			Yellow	Green	Red	Green	Yellow	Red	Green						Green				Red				
188	Land at Ashwells Lodge, Blackmore Road, Doddinghurst		Yellow		Yellow	Yellow	Green	Red	Yellow	Red	Red	Red	Green	Yellow				Red				Red			Yellow	
189	Former Catrina Nursery, Onger Road, Pilgrims Hatch					Yellow	Green	Red	Yellow	Red	Red	Red						Red				Red				
190	Gardeners, Ongar Road, Kelvedon Hatch		Yellow		Red	Yellow	Green	Red	Yellow	Red	Yellow							Red		Yellow		Red			Yellow	
191	Pettits, Frog Street, Kelvedon Hatch, Brentwood		Yellow		Red	Yellow	Green	Red	Yellow	Red	Yellow							Red		Yellow		Red	Yellow		Yellow	

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192	Heron Hall, Herongate, Brentwood		Yellow		Red	Red	Yellow	Green	Red	Yellow	Red	Green	Green	Red	Yellow	Red	Yellow	Yellow	Yellow	Red		Red	Yellow		Yellow	
193	Land on the north side of Church Lane, Warley Street	Yellow		Green				Green	Red	Red	Red	Red						Yellow	Yellow		Red	Red	Yellow		Yellow	
194	Brizes Corner Field, Blackmore Road, Kelvedon Hatch		Red			Yellow		Green	Red	Green	Red	Green						Red		Yellow			Yellow		Yellow	
195	Birchwood, School Road, Kelvedon Hatch		Red		Yellow	Red	Yellow	Light Green	Red	Green	Red	Green						Red		Yellow					Yellow	
196	Land to North West of Lowes Farm, Wyatts Green Road, Wyatts Green					Yellow		Light Green	Red	Red	Red	Yellow	Light Green	Yellow				Red		Yellow					Yellow	
197	Land to rear of 31-40 Nags Head Lane, Brentwood	Yellow		Green				Yellow	Red	Red	Red	Red						Light Green		Yellow					Yellow	
198	Land to South East of Doddinghurst Road, Pilgrim Hatch				Yellow			Green	Red	Yellow	Red	Red	Light Green					Yellow		Yellow			Yellow		Yellow	
199	Land to the East Of Ingatestone Road, Blackmore					Yellow		Green	Red	Green	Red	Green					Red	Red		Yellow					Yellow	
200	Entire Land East of A128, south of A127		Red		Red	Red	Yellow	Green	Red	Yellow	Red	Red	Light Green	Red				Light Green	Red	Yellow	Red				Yellow	Y
201	Land to West of Place Farm Lane, Kelvedon Hatch		Red		Yellow	Red	Yellow	Green	Red	Green	Red	Green						Red		Yellow					Yellow	
202	Land to the South of Blackmore, off Blackmore Road					Yellow	Yellow	Green	Red	Red	Red	Red	Green	Yellow			Red	Red		Yellow			Yellow	Red	Yellow	
203	Land to the West of Blackmore, off Blackmore Road					Yellow		Green	Red	Green	Red	Red	Green				Yellow	Red		Yellow				Red	Yellow	
204	Land to North of Blackmore Road, Blackmore Road, Kelvedon Hatch		Red		Yellow	Red	Yellow	Green	Red	Green	Red	Green	Light Green					Red		Yellow					Yellow	
205	Land to East of Nine Ashes Road, Nine Ashes Road, Stondon Massey		Yellow					Green	Red	Red	Red	Red		Yellow				Yellow		Yellow			Yellow		Yellow	
206	Land to North of Reeves Close, Stondon Massey		Yellow					Green	Red	Red	Red	Red						Yellow		Yellow			Yellow		Yellow	
207	Land to North of Blackmore Road, Stondon Massey		Yellow					Light Green	Red	Red	Red	Red						Red		Yellow			Yellow		Yellow	
208	Land at the West of Ongar Road, Stondon Massey, Brentwood		Yellow					Light Green	Red	Red	Red	Red						Red		Yellow			Yellow		Yellow	
209	Land to South of Blackmore Road, Doddinghurst		Yellow		Yellow	Yellow	Yellow	Green	Red	Yellow	Red	Red		Yellow				Red		Yellow			Yellow		Yellow	

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210	11-12 Church Road, Kelvedon Hatch, Brentwood		Red		Yellow	Yellow		Green	Red	Green	Red	Yellow					Red	Red	Red	Red	Red			Yellow		
211	Land and building on the West of Church Lane, Hutton			Green			Yellow	Green	Red	Yellow	Red	Green		Yellow			Red	Green				Red			Yellow	
212	Coombe Woods, Beredens Lane, Warley	Yellow			Red	Red	Yellow	Yellow	Red	Red	Red	Red		Yellow			Yellow	Yellow		Red					Yellow	
213	Land Adjoining Crescent Cottage Nines Ashes Road, Stondon Massey		Yellow			Yellow		Green	Red	Red	Red	Red						Yellow		Yellow		Red			Yellow	
214	Land North West Side of Blackmore Road, Stondon Massey		Yellow					Green	Red	Red	Red	Red						Yellow		Yellow		Yellow			Yellow	
215	7 Church Road, Kelvedon, Hatch, Brentwood		Red		Yellow	Yellow		Yellow	Red	Green	Red	Yellow					Red	Red	Red	Red	Red			Yellow		
216	Applegrove, Swallow Cross Road, Mountnessing							Red	Red	Red	Red	Red						Red	Red	Red	Red			Yellow		
217	Eagle Field, Kelvedon Hatch		Red		Yellow	Yellow		Green	Red	Green	Red	Green				Red		Red	Red	Yellow				Yellow		
218	Land East of Hall Lane, Shenfield				Yellow		Yellow	Green	Yellow	Green	Yellow	Yellow	Green					Yellow		Yellow		Red			Yellow	
219	Land to the East of Hutton Village, Hutton, Shenfield			Green				Green	Red	Green	Red	Green		Yellow			Red	Green				Red			Yellow	
220	Collins Farm, Goodwood Ave, Hutton			Green	Yellow	Yellow	Yellow	Green	Red	Yellow	Red	Yellow	Green				Yellow	Green		Yellow		Yellow			Yellow	
221	Crown Corner Country Store, Ongar Road, Kelvedon Hatch		Yellow					Green	Red	Red	Red	Red						Red	Red	Yellow				Yellow		
222	Jasmine Cottage, 141 Billericay Road, Brentwood		Yellow		Yellow	Yellow		Red	Red	Red	Red	Red	Green	Yellow				Red	Red	Red	Red				Yellow	
223	Land Adjacent to "Chitral", Wyatts Green Road, Swallows Cross, Mountnessing							Red	Red	Red	Red	Red	Green					Red	Red	Red	Red				Yellow	
224	Hermes, Brook Lane, Doddinghurst				Yellow			Green	Red	Red	Red	Green	Green					Red	Red	Yellow					Yellow	
225	The Nutshell, Stock Lane, Ingatestone	Yellow						Green	Red	Green	Green	Green	Green				Yellow	Green	Red	Red				Yellow		
226	Manor House, Hay Green Lane, Blackmore				Yellow			Red	Red	Yellow	Red	Red	Green	Yellow				Red	Red	Yellow					Yellow	
227	144 Crow Green Road, Pilgrims Hatch					Yellow	Yellow	Yellow	Red	Yellow	Red	Red						Yellow		Yellow					Yellow	
229	Land rear of Wynbarns Farm, Chelmsford Road, Shenfield			Green			Yellow	Green	Red	Green	Red	Yellow	Green					Yellow	Red	Red					Yellow	

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230	Bowmer (Waste Disposal), Magpie Lane, Little Warley		Red		Yellow	Yellow		Red	Red	Yellow	Red	Red						Green		Red				Yellow		
231	Land to the north of the A127		Red		Red	Red	Yellow	Green	Red	Yellow	Red	Red	Green		Red		Yellow	Green	Yellow	Red	Yellow			Yellow		
232	Multi-storey car park, Coptfold Road, Brentwood	Yellow	Yellow					Green	Green	Green	Green	Green	Green			Red	Red	Green								
233	Rear of Meadow View, Green Lane, Pilgrims Hatch	Yellow				Yellow		Green	Red	Green	Red	Yellow						Green								
234	Keys Hall Shopping Parade, Eagle Way		Red		Yellow	Yellow		Green	Red	Green	Green	Green		Yellow				Green		Yellow						
235	Land to the north of Alexander Lane, Shenfield			Green	Yellow	Yellow		Green	Red	Yellow	Red	Red	Green					Green				Red		Yellow		Y
236	Land at Ashwells Cottages, Pilgrims Hatch					Yellow		Yellow	Red	Yellow	Red	Red						Red				Red		Yellow		
237	Chainbridge Farm, Mountnessing			Green				Green	Red	Yellow	Red	Red	Green					Green	Red	Yellow		Red		Yellow		
238	Land between Navestock and Green Lane, Navestock		Yellow			Yellow		Green	Red	Yellow	Red	Red		Yellow				Red		Yellow		Red		Yellow		
239	Land to the rear of 109 Roman Road, Mountnessing	Yellow		Green				Green	Red	Yellow	Red	Red						Green		Red		Red		Yellow		
240	Land north of White House, Ongar Road, Kelvedon Hatch		Red		Yellow	Yellow	Yellow	Green	Red	Green	Red	Green						Red		Yellow		Red		Yellow		
241	Land to the rear of Hillcrest Nursery, off Thorndon Approach, Ingrave		Red				Yellow	Green	Red	Red	Red	Green	Green		Red			Green		Red		Red		Yellow		
242	Land at South Essex Golf Club, Brentwood Road		Red		Yellow	Yellow		Green	Red	Yellow	Red	Red	Green		Red		Yellow	Green	Red	Yellow		Red		Yellow		
243	Parklands, High Street, Ingatestone	Yellow						Green	Red	Green	Green	Green		Yellow				Green		Red		Red	Yellow		Yellow	
244	Land between Billericay Road and Heron Court, Herongate		Red			Yellow	Yellow	Green	Red	Red	Red	Green	Green	Yellow	Yellow		Red	Yellow		Red		Red		Yellow		
245	Land at Hook End Farm, Hook End		Yellow					Green	Red	Red	Red	Red		Yellow				Red		Yellow		Red		Yellow		
246	Wrightsbridge Farm, Weald Road, South Weald	Yellow		Green		Yellow		Red	Red	Red	Red	Red						Red	Red	Red		Red		Yellow		
247	Land north of Rayleigh Road, Adjacent North Drive, Hutton			Green				Green	Red	Red	Red	Red						Yellow			Red			Yellow		
248	Wyevale Garden Centre, Ongar Road							Green	Red	Red	Red	Red						Green	Red	Red		Red		Yellow		

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249	Land adjoining Lodge Cottages, Ingatestone Road, Blackmore					Yellow	Yellow	Green	Red	Green	Red	Green	Green				Red	Red	Red			Red			Yellow	
250	Post Field, Redrose Lane, Blackmore							Green	Red	Green	Red	Green	Green				Yellow	Red				Red			Yellow	
251	Land at Elm Farm, Spriggs Lane, Blackmore							Green	Red	Yellow	Red	Yellow	Green	Yellow				Red				Red			Yellow	
252	Land adjacent to Meadvale, Chelmsford Road, Blackmore							Green	Red	Yellow	Red	Yellow	Green	Yellow				Red				Red			Yellow	
253	Land north of Bakers Farm, Roman Road, Mountnessing	Yellow		Green				Green	Red	Red	Red	Red		Yellow				Yellow		Red		Red			Yellow	
254A	Land at Bennetts Farm, Weald Road, South Weald	Yellow		Green	Yellow	Yellow	Yellow	Red	Red	Red	Red	Red			Red		Red	Green			Red				Yellow	
254B	Land at Bennetts Farm, Weald Road, South Weald	Yellow		Green	Red	Red	Yellow	Red	Red	Red	Red	Yellow			Red		Red	Green			Red				Yellow	
254C	Land at Bennetts Farm, Weald Road, South Weald	Yellow		Green	Red	Red	Yellow	Red	Red	Red	Red	Green					Red	Green			Red				Yellow	
254D	Land at Bennetts Farm, Weald Road, South Weald	Red		Green	Red	Red	Green	Green	Red	Red	Red	Yellow			Yellow		Yellow	Green	Yellow		Red				Yellow	
255	Land at Broadfields, Tilbury Road, East Horndon		Red		Red	Red	Green	Green	Red	Green	Red	Red	Green		Red		Red	Green			Yellow	Red			Yellow	
256	Land adjacent Chappington House, Magpie Lane, Little Warley		Red		Yellow	Yellow		Red	Red	Red	Red	Red					Green				Red				Yellow	
257	Warley Auto Salvage, Warley Street, Great Warley	Yellow	Yellow	Green		Yellow		Green	Red	Red	Red	Red					Green				Red	Yellow			Yellow	
258	Hutton Service Station, Rayleigh Road, Hutton			Green				Green	Red	Green	Green	Yellow	Green					Yellow								
259	91-105 Hutton Road, Shenfield							Green	Red	Green	Green	Green						Yellow								
260	Leverton Hall, Dark Lane, Brentwood	Yellow			Yellow	Yellow	Yellow	Red	Red	Yellow	Red	Red		Red			Green				Red				Yellow	
261	Chindits Lane, Warley		Red		Yellow	Yellow	Green	Green	Red	Green	Green	Green					Green				Red					
262	Land adjacent to the Hirst, Church Lane, Doddinghurst		Yellow		Red	Yellow	Green	Red	Red	Red	Red	Red	Green					Red							Yellow	
263	Land east of Chelmsford Road, Shenfield			Green	Red	Red	Yellow	Green	Red	Green	Yellow	Green	Green				Green				Yellow				Yellow	
264	Land at Havering Grove Farm, Rayleigh Road, Hutton			Green	Yellow	Yellow	Green	Green	Red	Red	Red	Red		Yellow				Yellow	Yellow			Red			Yellow	

Site ID	Name / address	1. AQMA	2. SSSI	3. Local Nature Reserve	4. Ancient Woodland	5. County Wildlife Site	6. Woodland	7. Bus Stop	8. Health facility	9. Education	10. Community	11. Prot Urban Open Space	12. Overall deprivation	13. Listed Buildings	14. Reg Park / Garden	15. Scheduled Monument	16. Conservation Area	17. Employment	18. Flood Zone	19. SLA	20. Landscape Imp Area	21. Green Belt	22. Env Stewardship	23. ALC Grade 2	24. ALC Grade 3	Preferred site?
265	Clementine Farm, Murthering Lane		Red			Yellow		Red	Red	Red	Red	Red		Yellow				Red		Yellow		Red			Yellow	
266	Land adjacent Tye Lodge, Doddinghurst Road, Pilgrims Hatch				Red	Red	Yellow	Green	Red	Yellow	Red	Red	Green					Yellow				Red			Yellow	
267	Old House, Shenfield Road, Brentwood	Red	Yellow					Green	Green	Green	Green	Green		Red			Red	Green								
268A	Land to the east of Wash Road, Brentwood			Red	Red	Red	Yellow	Green	Red	Green	Red	Green	Green				Yellow	Green		Yellow		Red	Yellow		Yellow	
268B	Land to the east of Wash Road, Brentwood			Red	Yellow	Yellow		Yellow	Red	Yellow	Red	Yellow						Green	Red	Yellow		Yellow		Yellow		
269	Hartwood Hospital, Eagle Way, Warley		Yellow		Yellow	Yellow	Yellow	Green	Red	Green	Green	Green			Yellow		Yellow	Green		Red		Red				

APPENDIX III - SPATIAL STRATEGY ALTERNATIVES APPRAISAL

Introduction

As explained within ‘Part 1’ above, a focus of work has been on the development and appraisal of spatial strategy alternatives, with a view to informing determination of the preferred strategy.

The alternatives are as follows -

Option	Strategic site(s)	Windfall allowance	Total homes
1	Dunton Hills Garden Village	Medium	OAN ⁷³
2	West Horndon	Medium	OAN
3	North of Brentwood	Higher	OAN
4	Land to the East of Running Waters, Hutton	Medium	OAN
5	North of Brentwood & Dunton Hills Garden Village	Lower	OAN+ ⁷⁴
6	North of Brentwood & West Horndon	Lower	OAN+

Whilst Chapter 7 presents summary appraisal findings, this Appendix presents detailed appraisal findings.

Appraisal methodology

For each of the options, the assessment identifies / evaluates ‘likely significant effects’ on the baseline, drawing on the sustainability topics/objectives identified through scoping (see Table 4.1) as a methodological framework.⁷⁵

Green is used to indicate significant positive effects, whilst **red** is used to indicate significant negative effects. Every effort is made to predict effects accurately; however, this is inherently challenging given the high level nature of the policy approaches under consideration. The ability to predict effects accurately is also limited by understanding of the baseline (now and in the future under a ‘no plan’ scenario). In light of this, there is a need to make considerable assumptions regarding how scenarios will be implemented ‘on the ground’ and what the effect on particular receptors will be.⁷⁶ Where there is a need to rely on assumptions in order to reach a conclusion on a ‘significant effect’ this is made explicit in the appraisal text.

Where it is not possible to predict likely significant effects on the basis of reasonable assumptions, efforts are made to comment on the relative merits of the alternatives in more general terms and to indicate a **rank of preference**. This is helpful, as it enables a distinction to be made between the alternatives even where it is not possible to distinguish between them in terms of ‘significant effects’.

Finally, it is important to note that effects are predicted taking into account the criteria presented within Regulations.⁷⁷ So, for example, account is taken of the duration, frequency and reversibility of effects. Cumulative effects are also considered (i.e. where the effects of the plan in combination with the effects of other planned or on-going activity that is outside the control of the Brentwood Local Plan).

⁷³ ‘Objectively Assessed Housing Need’ which for Brentwood is 362 dwellings per annum, or 7,240 over the plan period.

⁷⁴ As explained in Table 6.1, Options 6 and 7 would involve delivering marginally (c.1%) above OAHN on the assumption that there is nil windfall development. However, in practice, there would inevitably be some windfall development, and hence it is fair to assume that either option would involve delivering ‘notably’ above OAHN. For example, 300 windfall homes would (if all other allocations are fully implemented within the plan period) mean delivering c.5% above OAHN.

⁷⁵ N.B. The framework has been modified slightly for the purposes of appraisal, as per the approach taken previously. Specifically, the ‘Climate change’ topic has been modified slightly to ensure a focus on ‘Climate change mitigation’, recognising that climate change adaptation is a cross-cutting issue that is best discussed under other topic headings (with flood risk issues being most appropriately discussed under the ‘Water’ heading). Also, ‘Economic growth’ and ‘Employment and skills’ are discussed under a single heading.

⁷⁶ Considerable assumptions are made regarding infrastructure delivery, i.e. assumptions are made regarding the infrastructure (of all types) that will come forward in the future alongside (and to some extent funded through) development.

⁷⁷ Schedule 1 of the Environmental Assessment of Plans and Programmes Regulations 2004.

Appraisal findings

Appraisal findings are presented below within 12 separate tables (each table dealing with a specific sustainability topic) with a final table drawing conclusions.

The appraisal methodology is explained above, but to reiterate: For each sustainability topic the performance of each scenario is categorised in terms of ‘significant effects (using red / green) and also ranked in order of preference. Also, ‘ = ’ is used to denote instances of all alternatives performing on a par.

Sustainability Topic: <u>Air quality</u>						
	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	2	★1	5	6	4	3
Significant effects?	No		Yes		No	
Discussion	<p>Air quality in Brentwood is generally good; with the number of designated Air Quality Management Areas (AQMAs) soon to be reduced from seven to three. Two of the AQMAs that will remain are along the A12 (one at the M25 junction, and the other at North Brentwood / Pilgrim’s Hatch), and the other is within Brentwood town centre at the A128/A1023 junction.</p> <p>With air quality issues concentrated in Brentwood, there is a strong argument for focusing growth along the A127 corridor (also recognising that there are no designated AQMAs in Basildon Borough). There would be a need to resolve a range of transport infrastructure issues along this corridor, but early indications are that there is good feasibility.</p> <p>On the basis of this discussion, Options 1 and 2 perform well, with Option 2 judged to perform marginally better, given:⁷⁸ the existing train station at West Horndon; the potential to significantly improve the village centre; and the proximity of the employment growth area to the west (albeit it is recognised that c.5 ha of employment would likely be delivered as part of any Dunton Hills Garden Village Scheme, and also that West Basildon, would be an employment destination.⁷⁹ Also, any new circular bus route, linking A127 growth locations with Brentwood Town Centre, might operate most effectively with two stops along the A127, rather than three. A final consideration relates to the possibility of a new major road in the vicinity of a new Garden Village at Dunton, linking the M25 (via the A127) to a new Lower Thames Crossing; however, this is an option that is currently not preferred by the Highways Agency.⁸⁰</p> <p>Options 5 and 6 also potentially have some merit, as there would be minimal need to permit windfall sites, and a strategic scale scheme at North Brentwood could deliver a new junction on the A12, and hence could be preferable (from a transport/travel perspective) to a smaller scale urban extension in this area (assumed under Options 1 and 2), which is in close proximity to an AQMA. There is some reason to suggest that Options 5 and 6 should be judged on a par with Options 1 and 2; however, on the assumption that there will be a good supply of windfall sites in relatively accessible locations (e.g. Key Gateways), it is judged that a strategic allocation along the A12 corridor should be avoided.</p> <p>Options 3 and 4 perform poorly, as growth would be focused at the A12 corridor area, without a strategic allocation within the A127 corridor area. As discussed, a scheme at North</p>					

⁷⁸ This is finding is a departure from appraisal findings in 2015 (Growth Options Interim SA Report) the scaling-back of ‘Dunton’ proposals (the scheme previously having been mooted as a ‘Garden Suburb’ comprising 4-6,000 homes and a railway station).

⁷⁹ For example, see Policy H10 (‘West Basildon Urban Extension’) of the Draft Basildon Local Plan at:

<http://www.basildon.gov.uk/CHttpHandler.ashx?id=6599&p=0>

⁸⁰ ‘Route 4’ is one of several options in contention at the current time, but is not the Highways Agency’s preferred option. See

<https://highwaysengland.citizenspace.com/cip/lower-thames-crossing-consultation>

Brentwood (Option 3) potentially has some merit; however, under this option there would be a need to permit a very large number of windfall developments. As for Option 4, 'Land to the East of Running Waters, Hutton' would inevitably lead to high volumes of traffic passing through the Brentwood and Shenfield urban areas, given its location away from the A12. Either option could lead to significant negative effects, with Option 4 performing worst given that possible transport solutions are difficult to envisage.

Sustainability Topic: Biodiversity

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	5	5	1	1	3	3
Significant effects?	No					

There is a large corridor of Biodiversity Action Plan (BAP) habitat to the south of Brentwood, running almost as far as the A127, much of which is publically accessible as Thorndon Country Park. Habitats comprise 'Deciduous Woodland' and/or 'Wood Pasture and Parkland', with three patches designated as nationally important SSSI' and other patches designated as Local Wildlife Sites. This whole area is identified by Essex Wildlife Trust as the Thorndon Woods 'Living Landscape' (one of 80 across the County), which does not indicate that human activity should be minimised, but does give pause for thought when considering strategic allocation options. This is particularly the case given that Natural England responded to the Growth Options consultation, stating that: "SA also needs to consider in more detail the recreational impacts upon the local SSSI network."

Under **Options 1 and 2**, strategic allocations would be to south of the A127 and would not encroach on the sensitive areas to the north of the road; however, recreational impacts are a consideration (in light of Natural England's comments).⁸¹ Other considerations are as follows -

- A strategic location at West Horndon (Option 2) would be in closer proximity (albeit possibly only marginally), and it is also the case that within the site footprint would run a (very) narrow strip of ancient woodland (known to the north as 'Straight Path Shaw' and to the south as 'Round Shaw'), following the path of a stream, that does almost join (and can be assumed to 'functionally link' with) the SSSI to the north. It is noted that Essex Wildlife Trust commented (in response to Growth Options, 2015) that: "Strategic options to the west of West Horndon would have the least harmful impact on important wildlife habitats. We would consider these options to be preferable. Strategic options to the east of West Horndon are unacceptable as they would adversely impact on priority ancient woodlands and wood pasture and parkland habitats which function as necessary linkage between Thorndon and Langdon."
- As for a Dunton Hills Garden Village scheme (Option 1), whilst the precise footprint is yet to be determined, it seems likely that it would include (or at least adjoin) another narrow strip of ancient woodland, following the path of a stream (Eastlands Spring), which links to two small patches of ancient woodland to the north. These woodlands fall outside of the Thorndon Woods Living Landscape; however, the Brentwood Borough Green Infrastructure (GI) Strategy (2015) does propose this corridor as a 'Greenway'.⁸² Also, it is noted that Natural

⁸¹ A number of the 'units' that comprise the Thorndon Park SSSI are judged to be in 'unfavourable' condition; however, Natural England's condition report does not make reference to recreational pressures, instead primarily highlighting issues around management (e.g. the need to maintain open glades, sparse tree cover and structural diversity) and invasive species. See <https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1004248&ReportTitle=THORNDON%20PARK>
⁸² See <http://www.brentwood.gov.uk/index.php?cid=966>

England has raised some concerns regarding this as a growth location, commenting in response to Growth Options (2015) that: *“Given the scale and proximity of possible development to the Thorndon Park SSSI... and Basildon Meadows SSSI [further to the southeast], further assessment of the recreational impacts... is necessary. Both [sites] located within Country Parks with existing high-levels of public recreation. Disturbance, trampling of sensitive vegetation and nutrient enrichment from dog-fouling represent some of the issues that already pose a challenge to conserving notified special interest features”*⁸³

- Whilst there is the possibility of strategic allocations incorporating GI such that the role of existing habitat patches within the landscape is enhanced, there can be little certainty. It might be suggested that strategic GI associated with a Dunton scheme (recognising that a West Basildon urban extension is also proposed) could help to functionally link Thorndon Woods to the Langdon Hills and/or the Bulphan Fen Living Landscapes to the south; however, the GI Strategy does not highlight this possibility.⁸⁴ The GI Strategy references opportunities at West Horndon (associated with the Thames Chase Community Forest) and to the west of Dunton (associated with river valleys/corridors), and identifies both as GI opportunity areas, but does not conclude stand-out biodiversity opportunities.

With regards to **Options 3 and 4**, the locations of the strategic allocations give little cause for concern (on the basis of limited analysis undertaken to date):

- A North Brentwood strategic allocation option, in particular, could be relatively unconstrained (recognising that the Havering and Brentwood Ridge Living Landscape reaches only to the western edge of Pilgrims Hatch). There would be impacts to the green ‘wedge’ entering Brentwood from the north; however, a considerable corridor would remain.
- A strategic allocation at ‘Land to the East of Running Waters, Hutton’ could encroach on one or more ancient woodland patches, and/or would be in close proximity to Thorndon Country Park (albeit the likelihood of recreational impacts would be less than under Options 1 and 2).

In considering **Options 5 and 6**, the relevant issues in relation to strategic allocations are discussed above, leaving the need to consider the implications of low windfall development. Restricting windfall development is potentially positive from a biodiversity perspective (e.g. because small windfall sites give rise to less opportunity to take a strategic approach to GI delivery); however, there is little reason to suggest that windfall development would occur in locations that are sensitive. The ‘Key Gateways’, which might be a focus of windfall development, do not give cause for concern.

In **conclusion**, it is appropriate to conclude that options involving a strategic scheme along the A127 corridor perform least well. However, there is considerable uncertainty given: A) the possibility of strategic GI enhancements; and B) the possibility that other locations under consideration for strategic allocation (e.g. North Brentwood) might prove to be sensitive on closer inspection. The need to avoid windfall developments as far as possible is a another (secondary) consideration. Significant negative effects are not predicted, given that direct impacts to important habitats cannot be assumed at this time.


Finally, it is worth noting that a separate process of Habitats Regulations Assessment (HRA) will consider the possibility of impacts to European designated habitats. Natural England, through the 2015 Growth Options consultation, stated that: *“Increased development could also lead to increased transport and road usage, especially with regards to the M25. This in turn could impact on Epping Forest Special Area of Conservation (SAC)... Brentwood is advised to consider air pollution in respect of Epping Forest SAC, to liaise with neighbouring authorities.”*

⁸³ Natural England’s concerns may be allayed by the current (i.e. since 2015) scaling back of proposals for the Dunton area.

⁸⁴ This strategic linking role was, however, highlighted by Essex Wildlife Trust, through the 2015 Growth Options consultation.

Sustainability Topic: <u>Climate change mitigation</u>						
	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	4	3	5	5	2	★1
Significant effects?	No					
Discussion	<p>There is a need to consider the performance of the alternatives both in terms of minimising both per capita greenhouse gas (GHG) emissions from transport, and also per capita GHG emissions from the built environment.</p> <ul style="list-style-type: none"> With regards to the former, work undertaken to date has established that there are considerable opportunities associated with a concentration of growth in the A127 corridor. In particular, there is the potential to achieve new homes and jobs in close proximity, deliver a new bus route linking the A127 corridor to Brentwood Town Centre, enhance walking/cycling infrastructure between key destinations (including train stations) and also increase the offer at West Horndon and Laindon local centres. As discussed above, under 'air quality', it is suggested that Option 1 performs marginally better than Option 2. As for a strategic allocation at North of Brentwood (Option 3), there would be good potential to walk/cycle to Brentwood Town Centre (c. 1 - 2km); however, traffic congestion would be an issue and residents might tend to see longer journeys by car along the A12 as a more attractive option. As for Option 4, the site of the strategic allocation is unsuitable from a transport perspective, as has been discussed. With regards to the latter, there is essentially a need to support large scale schemes where ambitious decentralised low/renewable heat and/or power generation becomes viable (e.g. a biomass fuelled heating or Combined Heat and Power (CHP) system) Also, larger schemes are more likely to deliver ambitious sustainable design/construction measures at the level of individual buildings. On this basis, Option 3 performs less well. There would be a smaller scale strategic allocation (albeit large enough to deliver some form of decentralised heat/power generation) and much reliance on windfalls. <p>In conclusion, Options 5 and 6 perform best as growth would be concentrated at well located strategic allocations. Conversely, Options 3 and 4 perform poorly as growth would either not be concentrated, or would be concentrated at a poorly located strategic allocation. It is not possible to conclude significant effects, as climate change mitigation is a global issue and the influence of the growth strategy promoted through the Local Plan will be minor.</p>					

Sustainability Topic: Community and well-being

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	3	4	5	5	1 	2
Significant effects?	No			Yes	No	
Discussion	<p>A primary consideration is sustainable access to community infrastructure (with capacity), both for new and existing residents. In this respect, the following comment made by NHS England, through the Growth Options consultation (2015) is of considerable note:</p> <p><i>“It is important to acknowledge that, dependent upon the location of the growth, existing GP practices do not have capacity to accommodate significant growth... Delivery of essential infrastructure via developer funded projects would be the most effective scenario for meeting the intended growth... Of the five options advocated [through] Sustainability Appraisal, it is suggested that a single large site necessitating the need for new facilities specific to that development would be more sustainable than dispersing growth in many settlements. Numerous smaller extensions could have impacts on existing infrastructure left unmitigated, or the level of contribution falling short of the requirements to provide adequate healthcare.”⁸⁵</i></p> <p>Access to healthcare services is not the sole consideration, but it is an important consideration and one that is potentially a differentiating factor. Other considerations relate to access to town and local centres, access to education and access to open space and sport/leisure facilities. With regards to education facilities, secondary schools locally have capacity locally; however, primary schools are generally at capacity with relatively limited opportunities for expansion (particularly within the Brentwood urban area). With regards to access to open space and sport/leisure facilities, this is generally very good across the Borough, with the needs for upgrades at the Brentwood Centre being perhaps the most pressing issue.⁸⁶</p> <p>Options 1 and 2 would involve large strategic allocations in the A127 corridor, an area where there are identified opportunities to enhance local centres / community infrastructure, and ensure new communities are able to access key destinations via public transport and walking/cycling infrastructure.</p> <ul style="list-style-type: none"> • Residents of Dunton Hills Garden Village (Option 1) would have access to a ‘Category 2’ local centre on site (to include ‘schools alongside retail and health facilities’); an improved West Horndon village centre (set to become category 2); a new local centre delivered as part of the proposed West Basildon Urban Extension (to include a GP surgery and with land reserved for the possible future delivery of a secondary school);⁸⁷ an improved Laindon Town Centre c.4-5km to the east;⁸⁸ and Brentwood Town Centre, via a new bus route. • Much the same would apply under Option 2; however, there are other ‘community’ considerations. In particular, through consultation (since 2013, when the Preferred Option was to develop West Horndon as a strategic growth location) the importance of maintaining West Horndon’s ‘village’ status and not ‘over-developing’ has been highlighted. <p>Options 3 and 4 would involve maximising growth within the A12 corridor. Such an approach might be suggested to have merit on the basis that Brentwood and/or Shenfield Town Centres</p>					

⁸⁵ N.B. Comments regarding delivery of infrastructure through developer contributions are made in light of an understanding that Brentwood does not have an adopted Community Infrastructure Levy (CIL) - see <http://www.brentwood.gov.uk/index.php?cid=2457>

⁸⁶ A Sport, Leisure & Open Space Assessment is emerging and soon to be published. A headline preliminary finding is that levels of provision of green spaces and playing pitches in Brentwood currently equate to 12.64 hectares per 1,000 population, which is good.

⁸⁷ See Policy 10 ‘West Basildon Urban Extension’ within the draft Basildon Borough Local Plan (January 2016)

⁸⁸ See Policy R3 ‘Laindon Town Centre Regeneration’ within the draft Basildon Borough Local Plan (January 2016)

would be in close proximity; however, the situation is not clear cut given capacity issues. As stated by NHS England (Growth Options, 2015): “There are GP surgeries within Brentwood and Shenfield [with capacity issues] but these are beyond reasonable walking distance. No services are available in Ingrave or Herongate on the A129. Therefore a lot of the growth sites within the 'A12 Corridor' would be unsupported by medical facilities...”

- NHS England are particularly concerned about the possibility of a strategic allocation at 'Land to the East of Running Waters, Hutton' (Option 4), stating that: “NHS England would raise concerns regarding the sustainability of this location from a healthcare perspective. Most of these sites are a significant distance from existing healthcare facilities.” It is noted that development would be in proximity to pockets of relative deprivation, which are found to the south and east of the Brentwood urban area; however, it is not clear that there are development related opportunities.
- With regards to Option 3, development would be in fairly close proximity (c.1km) to Brentwood Community Hospital, which does have capacity, and would likely surround the Brentwood Centre (which is in need of upgrade works) and its sports pitches; however, other strategic opportunities are less apparent.

In **conclusion**, a primary consideration is the need to concentrate growth, and therefore ensure that strategic consideration is given to ensuring sufficient access to community infrastructure. There are opportunities in the A127 corridor, with the option of focusing growth at Dunton Hills Garden Village preferred. Also, there are perhaps some opportunities associated with a North Brentwood Scheme, although there is uncertainty. On this basis (and also recognising that windfall development is not to be supported):

- Option 5 is preferred, with considerable opportunities noted but a prediction of significant positive effects not reached, given uncertainty in respect of North Brentwood; and
- Option 4 performs least well, with significant negative effects predicted, given the concerns raised by NHS England.

Sustainability Topic: Cultural heritage

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	1	5	1	6	1	4
Significant effects?	No			Yes	No	
Discussion	<p>Historic England - the Government’s advisor on the historic environment - made a detailed response to the Growth Options consultation (2015), and hence there is now good potential to differentiate between the alternatives.</p> <p>The first point to note is that Historic England has serious concerns regarding ‘large areas of land to the east and south east of Hutton/east of Herongate’, i.e. the area described here as ‘Land to the East of Running Waters, Hutton’ (a strategic allocation under Option 4). This site comprises three smaller site options - 028A, 028B and 028C - which Historic England raise concerns about as follows:</p> <ul style="list-style-type: none"> • “Sites 028A and 028B about the southeast built edge of Hutton. Development in this area would have implications for the setting of a number of listed buildings including Hare Hall (Grade II listed) Heatleys (Grade II) listed and Kennel House (Grade II listed). It may also have implications for the wider setting of the Thorndon Park Conservation Area and Thorndon Hall Registered Park and Garden (Grade II*), as well as longer views out from Thorndon Hall (Grade I listed).” 					

- “Site 028C is a large site that abuts the south east and southwest boundaries of the conservation area, where development is likely to result in harm to the rural character and appearance of the conservation area and would also have the potential to adversely impact on the setting of the Church of All Saints and Hutton Hall (both Grade II* listed). The western boundary of Site 028C also abuts the boundary of Heatleys, a 16th century Grade II house, and development in this area would have implications for the setting of this house.”

With regards to development in the A127 corridor (**Options 1 and 2**), Historic England has more limited concerns. A primary concern is that development at both West Horndon and Dunton would lead to cumulative effects (‘urbanisation’) and harm to ‘various heritage assets’; however, there is not outright objection to growth in this area (“an adequate buffer between West Horndon and Dunton would be expected”) and concerns from 2015 may now be somewhat allayed, given that a comprehensive Dunton Garden *Suburb* scheme is no longer being actively considered as an option. A Dunton Hills Garden Village scheme might well impact on the setting of Dunton Hills farmhouse (grade II listed), whilst a strategic allocation at West Horndon gives rise to concerns as follows:

- “Site 038B [land to the north east of West Horndon, to be developed under Option 2] includes the southern limits of the Thorndon Hall Registered Park and Garden (Grade II* listed) and Thorndon Park Conservation Area. This southerly projection is separated from the main Park and Garden and conservation area by the A127, but the issue of severance must have been considered at the time of designation (in 1987 and 1993 respectively). Housing development on the designated area would result in harm to its character and appearance, and development abutting its boundaries might also result in a degree of harm.”

Finally, with regards to the possibility of a strategic allocation at North Brentwood (**Option 3**), Historic England made no comments, reflecting the absence of listed buildings in the vicinity. There is, however, a need to consider the possibility of increased traffic congestion impacting on the Brentwood Town Centre Conservation Area.

In **conclusion**, it seems likely that Option 4 would lead to unavoidable impacts, i.e. impacts that cannot be avoided through careful siting, masterplanning, landscaping and design. Options involving a West Horndon scheme also give rise to some concerns, but it may well be the case that measures could be put in place that would ultimately satisfy Historic England.

Sustainability Topic: Economy and employment

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	3	3	5	6	★1	★1
Significant effects?	Yes		No		Yes	
Discussion	<p>The borough has low unemployment and a good economically active population; however, there is an imbalance between skills and jobs because of the population working in London. This indicates a need to support employment growth. Also, there are clear indications that delivery of new employment land in Brentwood would support the regional economy, including that of Greater London (where employment land is increasingly being lost to housing).</p> <p>Whilst employment growth in the past has focused on central locations, there are strong indications that there is now a need to focus employment land at locations that are most accessible to the strategic road network, that is the A12 and A127 corridors. However, this argument is not entirely 'cut and dry', given question marks regarding the boost that Crossrail will bring to Brentwood and Shenfield (in particular) centres. Also, there are important questions regarding the relative merits of the two corridors as locations for employment growth.</p> <p>Under all options there will be good potential to deliver required amounts of new employment land, as in many respects employment growth strategy is not dependent on housing growth strategy. Under all options there is an assumption that a strategic cluster of employment land will be supported along the A127 corridor, with the focus being on a large (c.27ha) 'Brentwood Enterprise Park' scheme on brownfield land adjacent to M25 junction 29 (as well as a small extension to the Childerditch Industrial Estate and formal designation of other existing employment land around the A127).</p> <p>Under Options 1 and 2 there will be the potential deliver additional (c.5ha) employment land as part of a strategic allocation, whether at West Horndon or Dunton Hills Garden Village. The effect could well be to strengthen the A127 corridor employment cluster, also recognising that the A127 corridor in Basildon Borough is already seen as an 'Enterprise Corridor', and that the Basildon Borough Local Plan is set to retain, diversify and expand employment here.⁸⁹</p>					

⁸⁹ Within the Draft Basildon Borough Local Plan (2016) Policy E1 'Economic Growth Strategy' requires: "The allocation of around 11ha of new employment land suitable for B1, B2 and B8 uses, in eastern and western extensions to the A127 Enterprise Corridor." The plan also states that the Ford Technical Centre and adjacent land at Dunton Fields will be retained, with land surplus to Fords operations restricted to R&D (as opposed to automotive industry R&D only). The supporting text explains that: "The A127 Enterprise Corridor is a large employment location that has enabled clusters of industries to form. It is widely acknowledged that business clusters are important to the ongoing success and growth of the economy, and consequently, it is expected that any new employment provision to the west of Basildon is well related to the existing A127 Enterprise Corridor. It is also expected that the employment provision is also well located in relation to the strategic road network in order to provide ease of access for HGVs, whilst reducing the impact of such movements on residential amenity."

However, there are some uncertainties regarding the capacity of the A127 corridor, particularly in terms of transport infrastructure. Basildon Council has undertaken transport work to support proposals in its plan, but work is ongoing (in conjunction with Essex County Council and Highways England) to explore the cumulative effects of development along the wider corridor. The County Council and Highways England did not raise major concerns during the Growth Options consultation (indeed, Highways England showed a degree of support for a focus on the A127 corridor);⁹⁰ however, Thurrock Council commented that: *“The A127 is at capacity and does not represent a better road transport alternative to the A12... There is limited public information currently available in order to consider highway capacity impacts at this stage.”*

Options 3 and 4 would involve strategic allocations along (or at least closer to) the A12 corridor. This is also an important corridor, from an economic perspective, and Thurrock Council (through their response to the Growth Options consultation) suggest that there are growth opportunities to be exploited, stating that: *“The A12 widening and delivery of Crossrail will bring about significant increased capacity and accessibility improvements to transport infrastructure for Brentwood in the A12 Broad Corridor during the later-part of the plan period. This will make the A12 Corridor broad area more suitable for development opportunities.”*⁹¹

However, Brentwood Council suggest that the balance of evidence points to road capacity constraints (at least in the short to medium term) and Crossrail related opportunities that, whilst significant, are not ‘game changing’. With regards to Crossrail impacts, there is considerable uncertainty given a lack of detailed evidence, but the general view of the Council is that whilst there will be improved service and frequency, and enhancement to the local ‘brand’, the impact will not be on a par with that set to be experienced by Crossrail centres within Greater London.

On the assumption that there are opportunities, then a strategic allocation at North Brentwood (Option 3) is seen to have some merit. The site would be c.2km from both Brentwood and Shenfield stations, and there would be the potential to deliver some employment land adjacent to the A12 (and it can be assumed that a new junction would be delivered). However, the potential to deliver employment land would be limited, given the relatively small parcel of land available and the need to retain the Brentwood Centre and its sports pitches.

As for ‘Land to the East of Running Waters, Hutton’ (Option 4), this site performs less well. The stations would not be any closer than under Option 3, and whilst there would appear to be plenty of land available for employment development, the location of this area away from the strategic road network calls into question the viability of significant employment development.

In **conclusion**, it seems fair to assume that delivery of employment land along the A12 and/or A127 corridors should be maximised, and on this basis Options 5 and 6 are preferred. Employment growth opportunities are well understood (albeit there remains uncertainty regarding deliverability, with further work required), and so it is suggested options supporting large scale additional employment land delivery will lead to significant positive effects.

N.B. Another consideration is that there could be additional issues (potentially both opportunities and constraints) for the A127 corridor should it transpire that Highways England favours the ‘northern route’ option for a road linking a new Lower Thames Crossing to the M25. However, at the current time this option is not preferred, and so this matter has not factored into the appraisal.

⁹⁰ Highway’s England stated that: *“To help inform your preferred growth strategy we are more concerned with the M25 end of the SRN, particularly Junction 28 [A12] that experiences congestion queues and delays in peak periods. By the horizon year of your emerging Local Plan we would expect additional pressures on the junction through traffic growth both from Brentwood and elsewhere. M25 Junction 29 [A127] by comparison is relatively underutilised.”*

Highways England also commented that: *“We note the location of Dunton Garden Suburb in relation to the SRN, in particular the M25 Junction 29. Given that the site would effectively form a suburb of Basildon there is the potential for transport synergy and opportunities to develop a sustainable community alongside an existing and expanded employment base with access to public transport (road and rail) and the opportunity to manage demand with the provision of further local services. We would stress the need to integrate and strengthen the transport links with the adjoining urban area and to consider measures required to manage down private motorised transport of future occupants should the site be included...”*

⁹¹ Thurrock Council expand on this statement, explaining that: *“The recently published Road Investment Strategy [December 2014] and Autumn Statement of 2014 identify the Government committed to start the widening of the A12 (north of Chelmsford) and M25/A12 junction improvements. The widening of the A12 from the M25 to Chelmsford will follow in the next Road Period. These schemes represent an increase in road capacity and the opportunity to improve road junctions and accessibility to Brentwood and the A12 Broad Location Area generally during later period of the plan.”*

Sustainability Topic: <u>Flooding</u>						
	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	=	=	=	=	=	=
Significant effects?	No					
Discussion	<p>Flood risk in Brentwood Borough is not extensive and largely limited to areas in very close proximity to local watercourses. This is evidenced by the mapped outputs of the Brentwood Strategic Flood Risk Assessment (2010) and the more recent Surface Water Management Plan (SWMP).⁹² This SWMP concludes that flooding hotspots (taking into account where existing properties are at risk) are at: West Horndon, Ingatestone and Brentwood Town Centre. This conclusion has implications for Options 2 and 6, which would involve a strategic allocation at West Horndon. Closer inspection of the SWMP modelling outputs shows that there are two areas ‘more’ susceptible to flood risk - one within the existing village and another to the east of the village (which would fall within the footprint of a strategic allocation). Also, quite extensive areas ‘less’ susceptible to flood risk extend to the north of the village, again within the footprint of a strategic allocation.</p> <p>A strategic allocation at Dunton Hills Garden Village (Options 1 and 5) would also need to address flood risk issues, given the stream that runs through the site (which notably leads to an area to the south of the site, adjacent to the railway, as being ‘more’ susceptible to flooding). The Dunton Garden Suburb consultation document (January 2015) suggested that the area in question would be left as open space; however, at the current time there is less certainty regarding precisely where built development (and in particular housing) would occur.</p> <p>A strategic allocation at either North Brentwood (Options 3, 5 and 6) or ‘Land to the East of Running Waters, Hutton’ (Option 4) would also need to work around areas susceptible to flooding; however, there would seem to good potential to do so. Within the footprint of the ‘Land to the East of Running Waters, Hutton’ there are areas ‘more’ susceptible to flooding; however, there is little reason to believe that built development might be focused here.</p> <p>In conclusion, a West Horndon (in particular) or Dunton Hills Garden Village strategic allocation could have to address flood risk constraints that are more notable than those to be addressed at the other two locations; however, there is no certainty. For a conclusion to be reached, there would be a need to know more about the siting / layout of built development. Also, windfall sites (which would be high under Option 3) are another consideration. It might be assumed that there would be good potential to apply a sequential approach - i.e. one whereby sites at flood risk are avoided as far as possible - however, heavy reliance on windfall sites to meet housing needs could lead to some risk (i.e. instances of sites at flood risk being permitted on the basis that the ‘exceptions test’ has been passed).</p> <p>Significant negative effects are not predicted, given that there will be good potential to address flood risk through masterplanning and design. This will include the adoption of Sustainable Drainage Systems (SuDS); however, it is noted that the ability to implement effective SuDS will be limited in some locations, where the geology (or surface features) limits the ability to implement infiltration measures. Notably, the entire area around West Horndon, and a large portion of the area under consideration for a Garden Village at Dunton, is identified by the SWMP as having ‘very significant constraints’.⁹³</p>					

⁹² The SWMP (2015) is available at: <http://www.brentwood.gov.uk/index.php?cid=966>. The map within Appendix D (available at: <http://www.brentwood.gov.uk/pdf/22062015120706u.pdf>) is particularly useful.

⁹³ See Appendix K of the SWMP at: <http://www.brentwood.gov.uk/pdf/22062015121842u.pdf>

Sustainability Topic: <u>Housing</u>						
	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	3	3	6	3	★1	★1
Significant effects?	Yes					
Discussion	<p>In order to meet objectively assessed housing needs (OAN), it has been determined that there is a need to deliver 362 dwelling per annum (dpa).⁹⁴ All options would involve delivering OAN, and so would lead to significant positive effects.</p> <p>There is no reason to suggest that OAN is any higher or lower, although it is recognised that the figure was reached on the basis of some evidence-base limitations (notably up-to-date forecasts of household formation⁹⁵ and London outmigration⁹⁶). Also, whilst ‘objective’ the analysis leading to the establishment of an OAN figure is inevitably open to question in certain respects. Notably, the analysis takes Brentwood Borough to be a self-contained Housing Market Area (HMA), meaning that Brentwood Borough will not be the first port of call when looking to meet housing need arising from towns outside the Borough (e.g. Romford, Basildon, Billericay, Chelmsford). Also, through analysis it is determined that, whilst it is appropriate to ‘uplift’ the OAN figure by c.30dpa (i.e. deliver c.30 dpa over and above the c.330 dpa needed to meet demographic needs) in order to reflect jobs growth potential (i.e. ensure that houses are aligned with jobs, thereby avoiding either constrained jobs growth or unsustainable in-commuting), there is not a need to uplift OAN to address poor affordability in the Borough. The decision not to uplift OAN to address affordability is made on the basis that affordability has been consistently poor over time (i.e. has tracked regional trends), despite housing delivery in the Borough having varied.</p> <p>Options 6 and 7 would involve delivering marginally (c.1%) above OAN on the assumption that there is nil windfall development. However, in practice, there would inevitably be some windfall development, and hence it is fair to assume that either option would involve delivering ‘notably’ above OAN (e.g. 300 windfall homes could mean delivering c.5% above OAN). Planning for a degree of headroom would mean that there is a useful contingency in place, should it transpire that any allocated sites are not built, or do not deliver at the scale/rate anticipated. In other words, this headroom could be useful in the future, as the Council looks to demonstrate that there is a sufficient five year land supply to meet OAN arising from within the Borough. It is, however, not the case that this level of headroom would be of any more strategic importance, i.e. lead to a situation whereby Brentwood Borough is in a position to deliver housing to meet unmet needs arising from neighbouring HMAs (and thereby ensure that housing needs are met within the wider sub-region).</p> <p>Option 3 performs poorly given the extent to which windfall developments are relied upon to deliver OAN. Windfall developments can help to meet specific housing needs; however, large developments tend to have positive implications for development viability and hence the potential to fund affordable (and potentially specialist) housing provision (albeit it is recognised that viability calculations will always be influenced by numerous site specific factors, e.g. the need to deliver other infrastructure). Also, it might also be suggested that a North Brentwood</p>					

⁹⁴ See the report - ‘Objectively Assessed Housing Needs for Brentwood: Moving towards a Housing Target’ (PBA, 2014)

⁹⁵ The PBA Report states that: “[M]ore work will be needed to confirm the final OAN once the 2012 CLG projections have been released and Essex Planning Officers Association (EPOA) have completed the final round of Essex wide analysis.”

⁹⁶ The PBA Report states that: “The most significant ‘next step’ relates to London. We have not considered London in this report; the revised London Plan is still not finalised and surrounding Boroughs / Districts are not yet able to consider the full implication of potentially higher outward migration flows from the capital.”

strategic allocation would have less potential to deliver affordable housing (i.e. a less potential to make a high proportion of housing available at below market rates for those with a demonstrable need), given the smaller site area and the likely need to fund a new junction on the A12; however, there is no certainty in this respect.

Other factors that could potentially assist with differentiating the alternatives are: variation in housing needs across the Borough; and the need to meet housing needs in the rural villages.

- In terms of the former, there is no evidence available to inform a discussion, but it seems likely that this is not a major factor given that the main urban area is central within the Borough. It should be the case that housing delivered in the A127 corridor helps to meet the needs arising from Brentwood/Shenfield and (perhaps to a lesser extent) Ingatestone.
- In terms of the latter, there is little or no potential to differentiate between the alternatives. Option 3 might be assumed to involve a scenario whereby relaxed development management supports windfall housing at rural villages; however, it is not clear that this would be the case given other locations around the urban area (e.g. Key Gateways).

Sustainability Topic: Landscape

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	4	★1	★1	5	4	★1
Significant effects?	Yes	No	No	Yes		No

Discussion

There are no nationally important designated landscapes within the Borough; however, around 89% of the Borough is designated Green Belt, which is designated in order to perform a number of ‘purposes’.⁹⁷

The January 2015 Interim SA Report concluded that options involving a strategic allocation at West Horndon (currently Option 2) or North Brentwood (currently Option 3)⁹⁸ perform relatively well, as both areas have a ‘medium’ or ‘high’ landscape capacity and make only a ‘moderate’ contribution to Green Belt purposes. Conversely, a strategic allocation at Dunton Hills Garden Village (currently Option 1) or at ‘Land East of Running Waters, Hutton’ (currently Option 4) would impact on landscapes with ‘low’ capacity to accommodate development, with Option 4 performing particularly poorly as some land here is known to make a ‘high’ contribution to Green Belt purposes⁹⁹. This analysis was based on the findings of the Mid Essex Landscape Character Assessment (2006),¹⁰⁰ and also unpublished draft findings of work to examine landscape capacity and contribution to Green Belt purposes at select sites.¹⁰¹

These findings from 2015 generally hold true at the current time. No further detailed studies have been completed, although a number of relevant comments were received through the Growth Options consultation. Perhaps most notable are Historic England’s comments in relation to ‘Land East of Running Waters, Hutton’, which highlight the value of the open

⁹⁷ Green Belt purposes are: to check the unrestricted sprawl of large built-up areas; to prevent neighbouring towns merging into one another; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns; and to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

⁹⁸ With regards to a North Brentwood strategic allocation, the conclusion reached in 2015 did not account for sensitives associated with site 089, which is a large parcel of land comprising the Brentwood Centre and its sports pitches. It is now assumed that this parcel of land would fall within a strategic allocation, although the leisure centre and its sports pitches would be retained.

⁹⁹ With regards to a scheme in the Dunton area, there was a lack of evidence in 2015 to indicate impacts to Green Belt.

¹⁰⁰ See <http://www.brentwood.gov.uk/index.php?cid=966>

¹⁰¹ Work undertaken by undertaken by Crestwood Environmental Ltd.

landscape to the setting of historic assets. Also, a number of comments were received from Thurrock Council, including the following:

- “Green Belt release along the A127 corridor in any of the proposed locations would result in harm to the openness and strategic function of the Metropolitan Green Belt. In this location the Green Belt prevents urban sprawl and prevents coalescence between Basildon and West Horndon.”
- “The fenland area around the A127 has been recognised by the Thames Chase Heritage Lottery Fund as a ‘distinctive landscape character worth conservation’ and has been identified by the CPRE as a nationally significant area of tranquillity in the metropolitan greenbelt. The urban areas are set back from view by steep slopes. It is highly likely from the outcomes of landscape capacity studies that any development greater than discreet infill plots would significantly harm the landscape character... The larger fenland landscape character area would be affected by any further development. It is considered that development of the scale of the Dunton Garden Suburb or an extension east of West Horndon will significantly harm the open rural character of the broad fenland and the setting of rolling farmland and wooded hills of Thurrock.”

In **conclusion**, it is suggested that Options 1, 4 and 5 perform least well and would lead to significant negative effects. This conclusion is in line with appraisal findings from 2015; however, there is now less certainty in respect of Options 1 and 5. This is on the basis that a Dunton Hills Garden *Village* scheme, depending on its location, has the potential to allay some of the concerns that have been raised (Growth Options consultation) in relation to a Dunton Garden *Suburb* scheme. With regards to the other options, it is difficult to differentiate. A strategic allocation North of Brentwood performs relatively well, including on the basis that it would make some use of brownfield land; however, windfall developments could well lead to the erosion of sensitive landscapes around the edge of the urban area and around villages.

Sustainability Topic: Soil and contamination

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	4	4	★ 1	4	2	2
Significant effects?	No					
Discussion	<p>All options would lead to significant loss of agricultural land, although options involving a North Brentwood strategic allocation would lead to good potential to make use of brownfield land, and it can also be assumed that windfall sites will often be brownfield (or at least non-agricultural). It is not possible to differentiate between the alternatives any further, as all would involve loss of Grade 3 agricultural land,</p> <p>The relatively low quality of agricultural land set to be lost suggests that significant effects are unlikely, although this could warrant further investigation as a sub-category of Grade 3 land ('Grade 3a') is classed by the NPPF as 'Best and Most Versatile'.</p>					

Sustainability Topic: Waste

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	N/a					
Significant effects?	N/a					
Discussion	<p>The broad spatial distribution of growth is not likely to have a bearing on waste management related objectives. It is assumed that there is sufficient capacity at waste management processing facilities in Essex to handle waste under any scenario. All new development, regardless of location and scale, would likely design-in some waste management facilities.</p>					

Sustainability Topic: Water quality and water resources

	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Hills Garden Village	Option 6 North of Brentwood & West Horndon
Rank	=	=	=	=	=	=
Significant effects?	No					
Discussion	<p>The Water Cycle Study highlights waste water capacity as an issue. Waste water treatment infrastructure in the north of the Borough (treatment works at Doddinghurst and Ingatestone) is operating at capacity and cannot accommodate any further development; whereas in the south of the Borough there is capacity. However, the restrictions on waste water treatment capacity do not affect any of the strategic growth options.</p> <p>In terms of water efficiency, larger scale developments may enable higher standards of water efficiency; however, this is uncertain. In terms of water quality, the SFRA indicates that although the Pilgrims Hatch area is underlain by a minor aquifer (as is most of the Borough) this area does have high potential for groundwater leaching. While this is not considered to be an insurmountable constraint, it is noted at this stage.</p> <p>In conclusion, whilst water quality and water resource issues are relevant to the appraisal of strategic growth options, there is insufficient evidence to enable differentiation between the alternatives at the current time, nor is there any possibility to suggest the likelihood of significant effects.</p>					

Summary spatial strategy alternatives appraisal findings

Topic	Rank of performance / categorisation of effects					
	Option 1 Dunton Hills Garden Village	Option 2 West Horndon	Option 3 North of Brentwood	Option 4 Land to the East of Running Waters, Hutton	Option 5 North of Brentwood & Dunton Garden Village	Option 6 North of Brentwood & West Horndon
Air quality	2	★1	5	6	4	3
Biodiversity	5	5	★1	★1	3	3
Climate change mitigation	4	3	5	5	2	★1
Community and well-being	3	4	5	5	★1	2
Cultural heritage	★1	5	★1	6	★1	4
Economy and employment	3	3	5	6	★1	★1
Flooding	=					
Housing	3	3	6	3	★1	★1
Landscape	4	★1	★1	5	4	★1
Soil and contamination	4	4	★1	4	2	2
Water quality / resources	=					

The primary **conclusion** to draw from the table is that, in terms of the majority of objectives, a strategic allocation at one or either of the A127 locations (West Horndon or Dunton Hills Garden Village) is to be supported. ‘Biodiversity’ objectives are a notable exception, although the appraisal is fairly marginal, i.e. it is not clear that there are major constraints to growth south of the A127.

With regards to other notable topics/objectives -

- Air quality - a (relatively) clear conclusion is reached that a focus of growth along the A127 corridor performs well, with options focusing growth instead along the A12 corridor / around the Brentwood Urban Area (and relying on windfall development) predicted to result in significant negative effects.
- Communities and wellbeing - there are notable opportunities associated with concentrating growth along the A127 corridor, although a North Brentwood scheme could also have some merit.
- Cultural heritage - appraisal findings reflect a view that West Horndon is constrained; however, in practice there may be the potential to avoid/mitigate effects.
- Economy and employment - particularly strong conclusions are reached, with the need to deliver new employment land along transport corridors being the primary consideration.
- Housing - Options 5 and 6 perform particularly well as planning for a level of growth slightly above the objectively assessed housing need (OAN) figure would provide some useful contingency / ‘headroom’.
- Landscape - appraisal findings reflect a view that a Dunton Hills Garden Village scheme would be significantly constrained; however, there is a need for much further work to investigate issues.